

MP/95

---

# Current Industrial Reports

---

## Manufacturing Profiles: 1995



---

U.S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS

## Acknowledgments

This report was prepared in the Manufacturing and Construction Division (formerly Industry Division) under the general direction of **David W. Cartwright**, Chief. **Judy Dodds**, Assistant Chief for Census and Related Programs, was responsible for the overall planning, management, and coordination of this project. Planning and the compilation of data were under the direction of **Michael Zampogna**, Chief, Manufactured Nondurables Branch assisted by **Allen Foreman, Ted McGrath, Robert Reinard, Nat Shelton, Suzanne Conard, Kim Credito, Lissene Hafenrichter, Kay Hanks, Karen Harshbarger, Walter Hunter, James Jamski, Andy Kraynak, Brenda Lukenich, John Miller, Robert Miller, Joyce Pomeroy, Steve Pope, Sue Sundermann, Ronanne Vinson, and Kristin Williams**; **Kenneth I. Hansen**, Chief, Manufactured Durables Branch, assisted by **Mike Brown, Raphael Corrado, Mendel Gayle, Milbren Thomas, Brian Appert, Carol Beasley, Chris Blackburn, Larry Blumberg, Brenda Campbell, Renee Coley, Mary Ellickson, Merry Glascoe, Indrek Grabbi, Vera Harris-Bourne, Rick Keach, Keith McKenzie, Jack Matthews, Philippe Morris, JoAnna Nguyen, Betty Pannell, Annette Ralston, Cindi Ramsey, Wanda Sledd, Ann Truffa, and Richard Wiesler**.

Coordination of the publication process was under the direction of **A. William Visnansky**, Chief, Special Reports Branch. **Lillie M. Skinner** implemented various phases of the publication process, assisted by **Dorothy L. Heaton** and **Enid Winters**.

The staff of Administrative and Customer Services Division, **Walter C. Odom**, Chief, provided publication planning, design, composition, editorial review, and printing planning and procurement. **Margaret A. Smith** coordinated and edited the publication.

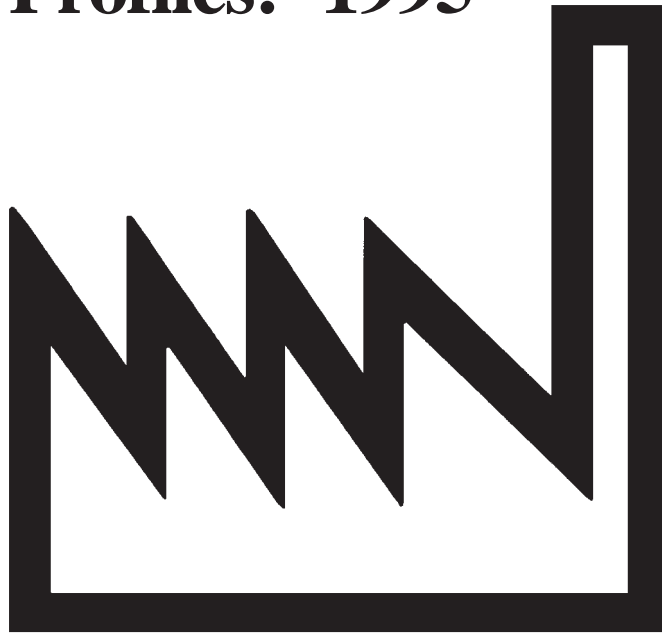
MP/95

---

# Current Industrial Reports

---

## Manufacturing Profiles: 1995



Issued June 1997



**U.S. Department of Commerce**  
William M. Daley, Secretary

**Economics and Statistics Administration**  
Lee Price, Acting Under Secretary  
for Economic Affairs

**BUREAU OF THE CENSUS**  
Martha Farnsworth Riche, Director



**Economics and Statistics  
Administration**

**Lee Price**, Acting Under Secretary  
for Economic Affairs



**BUREAU OF THE CENSUS**

**Martha Farnsworth Riche**, Director  
**Bradford R. Huther**, Deputy Director

**Paula J. Schneider**, Principal Associate  
Director for Programs

**Frederick T. Knickerbocker**, Associate  
Director for Economic Programs

**Thomas L. Mesenbourg**, Assistant Director  
for Economic Programs

**MANUFACTURING AND CONSTRUCTION  
DIVISION**

**Thomas L. Mesenbourg**, Acting Chief

---

**SUGGESTED CITATION**

U.S. Bureau of the Census, *Manufacturing Profiles: 1995*, MP/95, U.S. Government Printing Office, Washington, DC 1997.

---

# Contents

	Page
<b>INTRODUCTION</b> .....	I-1
<b>CHAPTER 1. FOOD PRODUCTS</b>	
Flour Milling Products (M20A) .....	1-1
Confectionery (MA20D) .....	1-8
Fats and Oilseed Crushings, Production, Consumption, and Stocks (M20J, M20K) .....	1-12
<b>CHAPTER 2. TEXTILES, APPAREL, AND FOOTWEAR</b>	
General Information .....	2-1
Explanation of Terms .....	2-1
Textile Machinery in Place .....	2-4
Staple Fiber Consumption .....	2-6
Consumption on the Cotton System (M22P) .....	2-7
Consumption on the Woolen System and Worsted Combing (MQ22D) .....	2-17
Yarn Production (Textured and Spun) (MA22F) .....	2-21
Fabrics Production .....	2-30
Broadwoven Fabrics (MQ22T) .....	2-30
Knit Fabrics Production (MA22K) .....	2-45
Apparel (MQ23A) .....	2-50
Gloves and Mittens (MA23D) .....	2-79
Bed and Bath Furnishings (MQ23X) (Formerly Sheets, Pillowcases, and Towels) .....	2-81
Carpet and Rugs (MA22Q) .....	2-94
Footwear (MQ31A/MA31A) .....	2-96
<b>CHAPTER 3. BUILDING MATERIALS</b>	
Lumber Production and Mill Stocks (MA24T) .....	3-1
Refractories (MA32C) .....	3-7
Clay Construction Products (MQ32D) .....	3-16
Plumbing Fixtures (MQ34E) .....	3-29
<b>CHAPTER 4. CHEMICALS AND RELATED PRODUCTS</b>	
General Information .....	4-1
Inorganic Chemicals (MA28A) and Fertilizer Materials and Related Products (MA28B) .....	4-1
Industrial Gases (MA28C) .....	4-25
Paint, Varnish, and Lacquer (MA28F) .....	4-34
Pharmaceutical Preparations, Except Biologicals (MA28G) .....	4-40
<b>CHAPTER 5. GLASS PRODUCTS</b>	
Flat Glass (MQ32A) .....	5-1
Consumer, Scientific, Technical, and Industrial Glassware (MA32E) .....	5-6
Glass Containers (M32G) .....	5-11

## CHAPTER 6. PRIMARY METALS

Iron and Steel Castings (MA33A) .....	6-1
Steel Mill Products (MA33B) .....	6-6
Aluminum Ingot and Mill Products (M33D) .....	6-17
Nonferrous Castings (MA33E) .....	6-32
Inventories of Steel Producing Mills (M33J) .....	6-34
Insulated Wire and Cable (MA33L) .....	6-37

## CHAPTER 7. ELECTRONICS

Computers and Office and Accounting Machines (MA35R) .....	7-1
Switchgear, Switchboard Apparatus, Relays, and Industrial Controls (MA36A) .....	7-10
Fluorescent Lamp Ballasts (MQ36C) .....	7-18
Wiring Devices and Supplies (MA36K) .....	7-22
Electric Lighting Fixtures (MA36L) .....	7-28
Communication Equipment (MA36P) .....	7-33
Semiconductors, Printed Circuit Boards, and Related Equipment (MA36Q) .....	7-40
Selected Instruments and Related Products (MA38B) .....	7-52
Electromedical Equipment and Irradiation Equipment (Including X-ray) (MA38R) .....	7-71

## CHAPTER 8. CONSUMER DURABLES

Electric Housewares and Fans (MA36E) .....	8-1
Major Household Appliances (MA36F) .....	8-5
Consumer Electronics (MA36M) .....	8-10

## CHAPTER 9. INDUSTRIAL EQUIPMENT

Steel Shipping Drums and Pails (MA34K) .....	9-1
Selected Industrial Air Pollution Control Equipment (MA35J) .....	9-4
Air-Conditioning and Refrigeration Equipment (MA35M) .....	9-7
Fluid Power Products, Including Aerospace (MA35N) .....	9-17
Pumps and Compressors (MA35P) .....	9-25
Antifriction Bearings (MA35Q) .....	9-36
Vending Machines (Coin-Operated) (MA35U) .....	9-41
Motors and Generators (MA36H) .....	9-44

## CHAPTER 10. HEAVY MACHINERY

Farm Machinery and Lawn and Garden Equipment (MA35A) .....	10-1
Construction Machinery (MA35D) .....	10-10
Mining Machinery and Mineral Processing Equipment (MA35F) .....	10-17
Internal Combustion Engines (MA35L) .....	10-21
Metalworking Machinery (MQ35W) .....	10-26
Truck Trailers (M37L) .....	10-36

## CHAPTER 11. AEROSPACE

Aerospace Orders (MA37D) .....	11-1
Civil Aircraft and Engines (M37G) .....	11-7

## APPENDIX

A. Survey Scope and Methodology .....	A-1
---------------------------------------	-----

---

# Introduction

---

## GENERAL

This publication presents all the data compiled in the Current Industrial Reports (CIR) program for data year 1995. These data were originally released electronically from March through December 1996. This publication replaces all of the individual reports issued in the CIR series for 1995.

Current data are released electronically on Internet for all individual surveys as they become available. Use <http://www.census.gov/econ/www/manumenu.html>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR's)," clicking on "Report Number Index"; from the "Industrial Products by Numeric Index," choose the survey of interest. Follow the menu to view the text (ASCII) file or to download the worksheet file (WK format) to your personal computer. Several years of data are presented for each individual survey. A printed "compendium" publication, including data from all of the individual surveys, will be produced at the end of the data year.

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial census of manufactures and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision-making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The census bureau updates

the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the census of manufactures. The census of manufactures provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

## FUNDING

The census bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

## RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is

limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

## DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Figures that have been revised by more than 5 percent from previously published figures are indicated by footnotes.

## DISCLOSURE

The Bureau of the Census operates under Title 13 of the United States Code, which prohibits the bureau from making "any publication whereby the data furnished by any particular establishment or individual under this title can be identified." This rule prohibits the census bureau from publishing data that enables a data user to derive detailed information about an individual respondent. Therefore, in the publication, a "D" appears in place of the sensitive data value.

## EXPLANATION OF GENERAL TERMS

**Capacity.** The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

**Consumption.** Materials used in producing or processing a product or otherwise removing the product from the inventory.

**Exports.** Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

**Gross shipments.** The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

**Interplant transfers.** Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

**Inventories.** The quantity or value of finished goods, work in progress, and materials on hand.

**Machinery in place.** The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

**Net receipts.** Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

**Production.** The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

**Quantities produced and consumed.** Quantities of each type of product produced by a company for internal consumption within that same company.

**Quantity and value of new orders.** The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

**Quantity and value of shipments.** The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

**Stocks.** Total quantity of ending finished inventory.

**Unfilled orders (backlog).** Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.



# Chapter 1.

## Food Products

### FLOUR MILLING PRODUCTS (M20A)

#### INTRODUCTION

The data on flour milling products are from a survey that covers all firms in the United States operating wheat and rye flour mills. Some very small specialty mills are only canvassed annually.

#### EXPLANATION OF TERMS

**Wheat ground for flour.** Represents the purchased weight of wheat ground, including the weight of foreign material (dockage). Includes the milling of Canadian wheat in bond. Measured in bushels of 60 pounds.

**Rye ground for flour.** Represents the purchased weight of rye ground, including the weight of foreign materials (dockage). Measured in bushels of 56 pounds.

**Millfeed.** Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

**Cwt. sacks.** Represents 100-pound sacks of flour. The actual average weight of the "100-pound sacks" is published below.

**Capacity.** Represents maximum quantity of flour that can be produced in a mill in 1 day if operating for 24 hours. Includes the capacity of idle mills until the mills are reported to be destroyed, dismantled, or abandoned.

**Stocks of flour.** Represents mill stocks in all positions, sold and unsold.

Table 1. Summary of Commercial Wheat Milling Production: 1985 to 1995

Year	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour	
				Wheat	Millfeed
1995 .....	388,689	869,296	7,144	134.2	36.8
1994 .....	392,519	884,707	7,186	135.2	36.6
1993 .....	387,419	871,408	6,963	135.0	35.9
1992 .....	370,829	833,339	6,707	134.8	36.2
1991 .....	362,311	808,966	6,436	134.0	35.5
1990 .....	354,348	788,186	6,109	133.5	34.5
1989 .....	342,762	761,021	6,072	133.2	35.4
1988 .....	344,154	769,699	6,163	134.2	35.8
1987 .....	341,565	767,507	6,260	134.8	36.7
1986 .....	326,316	737,537	5,799	135.6	35.5
1985 .....	313,815	700,151	5,556	133.9	35.4

Table 2. Commercial Wheat Milling Production by Month: 1995 and 1994

Month	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Daily (24-hour) capacity in wheat flour <sup>1</sup> (1,000 cwt. sacks)	Wheat flour mill stocks <sup>1</sup> (1,000 cwt. sacks)	Average pounds per cwt. sack of flour	
						Wheat	Millfeed
<b>1995</b>							
<b>Total .....</b>	<b>388,689</b>	<b>869,296</b>	<b>7,144,328</b>	<b>(X)</b>	<b>(X)</b>	<b>134.2</b>	<b>36.8</b>
December .....	31,178	70,014	583,253	1,413	<sup>†</sup> 6,869	134.7	37.4
November .....	33,410	74,750	619,420	(NA)	(NA)	134.2	37.1
October .....	35,071	78,376	655,356	(NA)	(NA)	134.1	37.4
September .....	32,975	74,156	617,189	1,396	6,582	134.9	37.4
August .....	34,489	77,784	649,195	(NA)	(NA)	135.3	37.6
July .....	31,041	69,794	575,081	(NA)	(NA)	134.9	37.1
June .....	32,277	71,949	588,037	1,405	6,312	133.7	36.4
May .....	33,508	74,709	605,668	(NA)	(NA)	133.8	36.2
April .....	29,919	66,591	538,419	(NA)	(NA)	133.5	36.0
March .....	34,538	76,938	623,022	1,398	6,496	133.7	36.1
February .....	29,385	65,249	527,454	(NA)	(NA)	133.2	35.9
January .....	30,898	68,986	562,234	(NA)	(NA)	134.0	36.4
<b>1994</b>							
<b>Total .....</b>	<b>392,519</b>	<b>884,707</b>	<b>7,185,908</b>	<b>(X)</b>	<b>(X)</b>	<b>135.2</b>	<b>36.6</b>
December .....	31,674	71,101	577,717	1,380	7,060	134.7	36.5
November .....	33,697	75,860	618,388	(NA)	(NA)	135.1	36.7
October .....	34,963	77,850	639,025	(NA)	(NA)	133.6	36.6
September .....	34,159	76,296	627,620	1,371	6,020	134.0	36.7
August .....	34,915	78,653	645,551	(NA)	(NA)	135.2	37.0
July .....	30,516	68,885	562,104	(NA)	(NA)	135.4	36.8
June .....	31,145	70,555	575,985	1,359	5,834	135.9	37.0
May .....	32,236	73,035	590,476	(NA)	(NA)	135.9	36.6
April .....	32,295	73,002	585,451	(NA)	(NA)	135.6	36.3
March .....	35,879	81,096	650,085	1,378	<sup>†</sup> 5,904	135.6	36.2
February .....	30,154	68,327	547,932	(NA)	(NA)	136.0	36.3
January .....	30,886	70,047	565,574	(NA)	(NA)	136.1	36.6

NA Not available. <sup>†</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Collected quarterly.

Table 3. Commercial Rye Milling Production by Month: 1995 and 1994

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Daily (24-hour) capacity <sup>1</sup> (1,000 cwt. sacks)	Stocks of rye flour <sup>1</sup> (1,000 cwt. sacks)	Average pounds ground per cwt. sack of flour	
						Rye	Millfeed
<b>1995</b>							
<b>Total</b> .....	<b>1,395</b>	<b>3,172</b>	<b>15,407</b>	<b>(X)</b>	<b>(X)</b>	<b>127.3</b>	<b>22.1</b>
December .....	<sup>1</sup> 129	<sup>1</sup> 292	(D)	11	(D)	126.8	23.1
November .....	<sup>1</sup> 125	284	(D)	(NA)	(NA)	127.2	24.6
October .....	(D)	(D)	1,578	(NA)	(NA)	(D)	(D)
September .....	(D)	(D)	(D)	11	(D)	(D)	(D)
August .....	<sup>1</sup> 122	<sup>1</sup> 286	(D)	(NA)	(NA)	131.3	23.9
July .....	<sup>1</sup> 102	<sup>1</sup> 227	(D)	(NA)	(NA)	124.6	24.1
June .....	<sup>1</sup> 109	245	(D)	11	(D)	125.9	20.1
May .....	<sup>1</sup> 108	<sup>1</sup> 246	(D)	(NA)	(NA)	127.6	21.4
April .....	<sup>1</sup> 99	228	(D)	(NA)	(NA)	129.0	19.2
March .....	<sup>1</sup> 125	<sup>1</sup> 276	(D)	11	(D)	123.6	19.6
February .....	<sup>1</sup> 116	265	(D)	(NA)	(NA)	127.9	19.3
January .....	<sup>1</sup> 123	<sup>1</sup> 272	(D)	(NA)	(NA)	123.8	21.1
<b>1994</b>							
<b>Total</b> .....	<b>1,650</b>	<b>3,583</b>	<b><sup>1</sup>16,492</b>	<b>(X)</b>	<b>(X)</b>	<b>121.6</b>	<b>20.0</b>
December .....	(D)	(D)	<sup>1</sup> 1,398	<sup>1</sup> 11	(D)	(D)	(D)
November .....	(D)	(D)	<sup>1</sup> 1,384	(NA)	(NA)	(D)	(D)
October .....	(D)	(D)	<sup>1</sup> 1,458	(NA)	(NA)	(D)	(D)
September .....	(D)	(D)	<sup>1</sup> 1,462	<sup>1</sup> 12	(D)	(D)	(D)
August .....	<sup>1</sup> 132	293	<sup>1</sup> 1,451	(NA)	(NA)	124.3	22.0
July .....	<sup>1</sup> 127	<sup>1</sup> 271	<sup>1</sup> 1,232	(NA)	(NA)	119.5	19.4
June .....	<sup>1</sup> 112	<sup>1</sup> 243	<sup>1</sup> 1,016	<sup>1</sup> 12	(D)	121.5	18.1
May .....	<sup>1</sup> 133	290	<sup>1</sup> 1,306	(NA)	(NA)	122.1	19.6
April .....	<sup>1</sup> 136	292	<sup>1</sup> 1,127	(NA)	(NA)	120.2	16.6
March .....	<sup>1</sup> 150	336	<sup>1</sup> 1,717	<sup>1</sup> 12	27	125.4	22.9
February .....	<sup>1</sup> 141	<sup>1</sup> 313	<sup>1</sup> 1,497	(NA)	(NA)	124.3	21.2
January .....	<sup>1</sup> 153	327	<sup>1</sup> 1,444	(NA)	(NA)	119.7	18.9

D Withheld to avoid disclosing data for individual companies.  
X Not applicable.

NA Not available.

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Collected quarterly.

Table 4. Summary of Commercial Wheat Milling Production by Geographic Area: 1995 and 1994

Geographic area	1995			1994		
	Total (1,000 cwt. sacks)	Wheat flour production		Total (1,000 cwt. sacks)	Wheat flour production	
		Wheat ground for flour (1,000 bushels)	Daily (24-hour) capacity <sup>1</sup> (cwt. sacks)		Wheat ground for flour (1,000 bushels)	Daily (24-hour) capacity <sup>1</sup> (cwt. sacks)
<b>United States</b> .....	<b>388,689</b>	<b>869,296</b>	<b>1,413,315</b>	<b>392,519</b>	<b>884,707</b>	<b>1,379,776</b>
California and Hawaii .....	28,158	62,458	98,880	28,145	62,509	97,780
Florida .....	8,070	18,339	31,800	8,273	18,807	27,300
Georgia .....	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	19,132	43,667	67,218	20,308	46,699	67,218
Indiana .....	(D)	(D)	(D)	(D)	(D)	(D)
Iowa .....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas .....	40,082	91,226	149,260	42,698	93,955	144,160
Michigan .....	8,031	18,120	31,800	7,831	17,926	31,700
Minnesota .....	36,244	79,128	133,680	36,693	80,991	130,830
Missouri .....	27,662	60,226	98,000	27,589	62,732	94,100
New York .....	30,401	66,857	105,702	31,082	70,706	105,888
North Carolina .....	11,346	25,036	37,725	11,037	24,400	36,720
Ohio .....	24,447	54,752	84,468	23,999	54,144	84,368
Oklahoma .....	9,403	21,774	30,500	9,589	22,360	30,500
Oregon and Washington .....	13,900	31,129	53,540	13,712	30,538	50,540
Pennsylvania .....	<sup>r</sup> 14,484	32,660	58,122	14,371	33,139	56,112
Tennessee .....	15,339	34,711	54,638	15,310	35,212	48,073
Texas .....	14,951	34,413	50,060	14,920	34,130	49,760
All other States .....	64,821	142,416	252,547	64,460	145,272	249,352

D Withheld to avoid disclosing data for individual companies.

<sup>r</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Capacity as reported for December of each year.

Table 5. Quantity of Wheat Flour Produced by Geographic Area: 1995 and 1994

[1,000 cwt. sacks]

Geographic area	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1995</b>													
<b>United States.....</b>	<b>388,689</b>	<b>30,898</b>	<b>29,385</b>	<b>34,538</b>	<b>29,919</b>	<b>33,508</b>	<b>32,277</b>	<b>31,041</b>	<b>34,489</b>	<b>32,975</b>	<b>35,071</b>	<b>33,410</b>	<b>31,178</b>
California and Hawaii .....	28,158	2,215	2,120	2,384	2,119	2,313	2,315	2,291	2,565	2,440	2,612	2,494	2,290
Florida .....	8,070	715	627	711	659	668	674	645	693	623	663	655	737
Georgia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	19,132	1,413	1,459	1,820	1,536	1,671	1,451	1,613	1,716	1,619	1,729	1,633	1,472
Indiana .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Iowa .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas .....	40,082	3,288	3,201	3,608	3,301	3,470	3,459	3,366	3,531	3,299	3,495	3,084	2,980
Michigan.....	8,031	574	587	698	543	715	750	622	755	731	782	697	577
Minnesota .....	36,244	2,726	2,588	3,233	2,763	3,224	3,017	2,793	3,131	3,191	3,417	3,218	2,943
Missouri .....	27,662	2,213	2,088	2,496	2,094	2,282	2,360	2,006	2,130	2,407	2,686	2,595	2,305
New York .....	30,401	2,494	2,272	2,700	2,280	2,734	2,620	2,486	2,700	2,601	2,611	2,498	2,405
North Carolina.....	11,346	867	850	1,012	902	973	951	908	1,007	956	997	1,023	900
Ohio .....	24,447	2,072	1,784	2,101	1,800	2,109	1,971	1,954	2,338	2,139	2,329	2,063	1,787
Oklahoma .....	9,403	716	706	826	771	806	788	767	841	790	845	794	753
Oregon and Washington...	13,900	1,103	1,064	1,246	1,055	1,217	1,147	1,137	1,246	1,177	1,251	1,169	1,088
Pennsylvania.....	14,484	1,049	992	1,246	1,031	1,261	1,217	1,132	1,368	1,233	1,358	1,343	1,254
Tennessee .....	15,339	1,218	1,244	1,483	1,275	1,296	1,217	1,175	1,334	1,226	1,322	1,316	1,233
Texas .....	14,951	1,236	1,190	1,346	1,214	1,307	1,215	1,241	1,325	1,257	1,248	1,254	1,118
All other States.....	64,821	5,256	4,975	5,696	4,951	5,608	5,360	5,152	5,779	5,361	5,659	5,576	5,448
<b>1994</b>													
<b>United States.....</b>	<b>392,519</b>	<b>30,886</b>	<b>30,154</b>	<b>35,879</b>	<b>32,295</b>	<b>32,236</b>	<b>31,145</b>	<b>30,516</b>	<b>34,915</b>	<b>34,159</b>	<b>34,963</b>	<b>33,697</b>	<b>31,674</b>
California and Hawaii .....	28,145	2,079	2,048	2,513	2,427	2,233	2,323	2,232	2,488	2,422	2,562	2,474	2,344
Florida .....	8,273	658	645	750	731	640	614	629	769	730	719	698	690
Georgia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	20,308	1,527	1,627	1,938	1,751	1,757	1,616	1,603	1,806	1,752	1,848	1,609	1,474
Indiana .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Iowa .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas .....	42,698	3,482	3,286	3,981	3,598	3,452	3,399	3,221	3,676	3,761	3,896	3,633	3,313
Michigan.....	7,831	595	593	769	618	625	665	584	722	741	720	650	549
Minnesota .....	36,693	2,890	2,826	3,472	3,117	3,011	2,881	2,772	3,108	3,048	3,342	3,171	3,055
Missouri .....	27,589	2,090	2,098	2,503	2,200	2,054	2,213	2,249	2,495	2,438	2,519	2,512	2,218
New York .....	31,082	2,573	2,396	2,821	2,414	2,586	2,578	2,417	2,771	2,655	2,656	2,648	2,567
North Carolina.....	11,037	817	797	956	857	928	931	917	1,018	967	960	954	935
Ohio .....	23,999	1,857	1,859	2,014	1,785	1,980	1,803	1,930	2,194	2,317	2,328	2,035	1,897
Oklahoma .....	9,589	765	774	878	817	774	751	757	858	814	832	801	768
Oregon and Washington...	13,712	1,099	995	1,201	1,126	1,127	1,093	1,092	1,254	1,251	1,186	1,199	1,089
Pennsylvania.....	14,371	1,019	1,094	1,332	1,177	1,234	1,222	1,143	1,314	1,282	1,254	1,196	1,104
Tennessee .....	15,310	1,229	1,159	1,418	1,256	1,260	1,167	1,174	1,400	1,317	1,293	1,358	1,279
Texas .....	14,920	1,193	1,205	1,375	1,223	1,230	1,160	1,153	1,300	1,277	1,241	1,301	1,262
All other States.....	64,460	5,239	5,040	5,923	5,400	5,505	4,925	4,894	5,701	5,398	5,592	5,498	5,345

D Withheld to avoid disclosing data for individual companies.

\*Revised by 5 percent or more from previously published data.

Note: Detail may not add to total because of independent rounding.

Table 6. Quantity of Wheat Ground for Flour by Geographic Area: 1995 and 1994

[1,000 cwt. sacks]

Geographic area	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1995</b>													
<b>United States.....</b>	<b>869,296</b>	<b>68,986</b>	<b>65,249</b>	<b>76,938</b>	<b>66,591</b>	<b>74,709</b>	<b>71,949</b>	<b>69,794</b>	<b>77,784</b>	<b>74,156</b>	<b>78,376</b>	<b>74,750</b>	<b>70,014</b>
California and Hawaii .....	62,457	4,902	4,701	5,293	4,685	5,114	5,097	5,076	5,730	5,474	5,746	5,545	5,094
Florida .....	18,339	1,628	1,424	1,617	1,489	1,493	1,509	1,435	1,616	1,424	1,499	1,503	1,702
Georgia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	43,667	3,224	3,300	4,093	3,489	3,778	3,289	3,695	3,949	3,751	3,993	3,737	3,369
Indiana .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Iowa .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas .....	91,226	7,436	7,201	8,078	7,410	7,834	7,798	7,806	8,234	7,595	7,964	7,052	6,818
Michigan.....	18,320	1,336	1,335	1,574	1,215	1,806	1,709	1,399	1,701	1,637	1,752	1,561	1,295
Minnesota .....	79,128	5,956	5,669	7,095	5,991	7,029	6,615	6,087	6,826	6,949	7,466	7,019	6,426
Missouri .....	60,226	4,812	4,541	5,408	4,548	5,164	5,130	4,390	4,661	5,197	5,792	5,589	4,994
New York .....	66,857	5,525	4,873	5,983	4,995	5,998	5,734	5,453	5,989	5,711	5,722	5,489	5,385
North Carolina.....	25,036	1,942	1,827	2,242	1,973	2,118	2,068	2,020	2,236	2,143	2,213	2,257	1,997
Ohio .....	54,752	4,654	3,984	4,687	4,006	4,706	4,372	4,378	5,207	4,776	5,276	4,643	4,063
Oklahoma .....	21,774	1,659	1,629	1,905	1,774	1,859	1,815	1,812	1,927	1,837	1,955	1,845	1,757
Oregon and Washington...	31,129	2,482	2,382	2,794	2,367	2,709	2,556	2,546	2,811	2,642	2,813	2,625	2,402
Pennsylvania.....	32,660	2,390	2,239	2,814	2,330	2,844	2,744	2,539	3,092	2,792	3,048	3,013	2,815
Tennessee .....	34,711	2,732	2,805	3,326	2,871	2,943	2,751	2,668	3,041	2,801	2,989	2,997	2,787
Texas .....	34,413	2,806	2,719	3,056	2,768	2,991	2,782	2,867	3,089	2,923	2,887	2,929	2,596
All other States.....	142,217	11,446	10,785	12,428	10,818	11,954	11,796	11,420	12,821	11,903	12,469	12,307	12,070
<b>1994</b>													
<b>United States.....</b>	<b>884,707</b>	<b>70,047</b>	<b>68,327</b>	<b>81,096</b>	<b>73,002</b>	<b>73,035</b>	<b>70,555</b>	<b>68,885</b>	<b>78,653</b>	<b>76,296</b>	<b>77,850</b>	<b>75,860</b>	<b>71,101</b>
California and Hawaii .....	62,509	4,650	4,544	5,569	5,378	5,070	5,094	4,949	5,472	5,392	5,682	5,507	5,202
Florida .....	18,807	1,478	1,486	1,707	1,650	1,463	1,407	1,443	1,750	1,648	1,633	1,591	1,551
Georgia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois .....	46,699	3,527	3,752	4,423	4,043	4,036	3,706	3,702	4,148	4,035	4,214	3,777	3,336
Indiana .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Iowa .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas .....	93,955	7,762	7,404	8,849	8,039	7,679	7,600	7,170	8,043	7,883	8,159	8,017	7,350
Michigan.....	17,926	1,405	1,360	1,743	1,421	1,434	1,514	1,311	1,668	1,688	1,652	1,497	1,233
Minnesota .....	80,991	6,334	6,153	7,705	6,863	6,751	6,509	6,143	7,005	6,638	7,282	6,934	6,674
Missouri .....	62,732	4,820	4,808	5,741	5,060	4,689	4,973	5,122	5,672	5,508	5,677	5,673	4,989
New York .....	70,706	5,887	5,482	6,432	5,498	5,979	5,837	5,486	6,288	6,011	5,988	6,010	5,808
North Carolina.....	24,400	1,830	1,775	2,137	1,918	1,993	2,077	2,053	2,265	2,138	2,072	2,120	2,022
Ohio .....	54,144	4,183	4,217	4,581	4,038	4,481	4,091	4,366	4,926	5,233	5,218	4,540	4,270
Oklahoma .....	22,360	1,797	1,802	2,053	1,907	1,810	1,765	1,774	2,002	1,887	1,923	1,862	1,778
Oregon and Washington...	30,538	2,493	2,242	2,712	2,527	2,542	2,445	2,420	2,790	2,736	2,614	2,634	2,383
Pennsylvania.....	33,139	2,345	2,545	3,070	2,703	2,857	2,839	2,626	3,030	2,942	2,881	2,753	2,548
Tennessee .....	35,212	2,816	2,677	3,263	2,908	2,903	2,683	2,705	3,205	3,002	2,975	3,125	2,950
Texas .....	34,130	2,774	2,761	3,133	2,796	2,795	2,653	2,624	2,973	2,905	2,823	2,981	2,912
All other States.....	145,272	11,884	11,378	13,304	12,118	12,306	11,254	11,033	12,777	12,176	12,562	12,406	12,074

D Withheld to avoid disclosing data for individual companies.

\*Revised by 5 percent or more from previously published data.

Table 7. **Production and Mill Stocks of Wheat Flour by Quarter: 1995 and 1994**

[1,000 cwt. sacks]

Quarter	Production	Mill stocks <sup>1</sup>
<b>1995</b>		
<b>Total</b> .....	<b>388,689</b>	<b>6,869</b>
First quarter .....	94,821	6,496
Second quarter .....	95,704	6,312
Third quarter .....	98,505	6,582
Fourth quarter .....	99,659	6,869
<b>1994</b>		
<b>Total</b> .....	<b>392,519</b>	<b>7,060</b>
First quarter .....	96,919	5,904
Second quarter .....	95,676	5,834
Third quarter .....	99,590	6,020
Fourth quarter .....	100,334	7,060

<sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Total represents end of month's stocks for fourth quarter.Table 8. **Durum Wheat Products by Month: 1995 and 1994**

Product description	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1995</b>													
Durum wheat ground.....	67,627	5,581	5,319	6,222	5,080	5,544	4,876	4,919	5,827	5,920	6,662	6,014	5,663
Straight semolina .....	30,964	2,566	2,446	2,855	2,334	2,562	2,271	2,233	2,640	2,656	3,080	2,739	2,582
Blended semolina.....	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>1994</b>													
Durum wheat ground.....	72,141	6,588	6,071	6,738	5,879	6,348	5,846	4,968	6,197	6,013	6,536	5,693	5,264
Straight semolina .....	32,631	2,943	2,761	3,066	2,658	2,858	2,608	2,234	2,843	2,721	2,969	2,584	2,386
Blended semolina.....	-	-	-	-	-	-	-	-	-	-	-	-	-

- Represents zero.

**HISTORICAL NOTE**

The current M20A series of monthly reports, with annual summaries of wheat ground and wheat milling products, originated in May 1923. Data, by States, have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Historical data may be obtained from the Current Industrial Reports (called Facts for Industry before 1959) available at

your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**FUNDING**

Since 1990, part of the cost of this survey has been paid by "Milling and Baking News" published by Sosland Publishing Company.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Ronanne Vinson 301-457-4647.

## CONFECTIONERY (MA20D)

### INTRODUCTION

The data on confectionery are from a survey that covers all manufacturers in the United States producing consumer type confectionery and chocolate products. Manufacturers of cough drops, medicated candy, roasted peanuts, unsweetened popcorn, and fountain syrup are excluded from the survey. Small firms that manufacture confectionery for sale at retail on the premises are classified in retail trade and are also excluded from this survey. Data for chewing gum were included for the first time in the 1993 survey, but were excluded from all data prior to that time.

Table 9 summarizes the quantity and value of manufacturers' shipments of total confectionery products over the last decade. It also shows the average quantity and value of confectionery consumed, on a per capita basis, in the United States. Table 10 shows the quantity and value of shipments of confectionery and nonconfectionery by the type of product. Table 11 shows the quantity and value of the materials that were consumed in the manufacturing process. Apparent consumption figures are derived in table 12 by subtracting the exports from the total manufacturers' shipments plus the imports.

### SUMMARY OF FINDINGS

The total per capita consumption of confectionery products, including chewing gum, bubble gum, and chewing gum base, increased to 25.5 million pounds in 1995, compared with 24.5 million pounds in 1994. This represents an increase of 4 percent. The total per capita consumption of these same products amounted to \$49.6 million in 1995, compared with \$47.1 million in 1994, an increase 5 percent. The total per capita consumption of confectionery products, excluding chewing gum, bubble gum, and chewing gum base, amounted to 23.4 million pounds and \$44.2 million in 1995, compared with 22.5 million pounds and \$41.8 million in 1994.

Total quantity of shipments of confectionery products, excluding chewing gum, bubble gum, and chewing gum base, for 1995, amounted to 5,964.1 million pounds, compared with 5,750.1 million pounds in 1994, an increase of 3.7 percent. Total value of shipments for these same products increased 5 percent in 1995 to \$11,409.6 million, from \$10,836.9 million in 1994. The quantity of chocolate and chocolate type confectionery products shipped increased 5.5 percent, while the quantity of nonchocolate type confectionery products increased by 1.8 percent. The value of chocolate and chocolate type confectionery products shipped increased 5.4 percent, while the value of nonchocolate confectionery products increased by 5.1 percent.

The single largest category remained chocolate enrobed or molded with candy, fruit, or nut center with a quantity shipped of 1,349.4 million pounds. The category showing

the largest pound increase was chocolate assortments and other candy, which increased 23.3 percent to 271.2 million pounds in 1995, from 220.0 million pounds in 1994.

### EXPLANATION OF TERMS

**Chocolate type products.** Products that contain, as an ingredient, either real chocolate or a chocolate compound containing substitute raw material ingredients such as cocoa butter extenders. Products that include a mixture of chocolate type and nonchocolate type pieces (such as certain boxed assortments) are included in chocolate type assortments.

*Solid.* Includes hollow molded and contains no additional foods of any kind. Examples are chocolate stars, Easter bunnies, hollow chocolate Santas, and solid chocolate candy bars.

*Solid with inclusions.* Solid chocolate mixed with other foods such as dried fruits, nuts, and rice.

*Enrobed or molded with bakery product center.* Molded or enrobed chocolate exterior with a baked cookie or wafer center. May or may not have additional confectionery layers or ingredients.

*Enrobed or molded with candy, nuts, or fruit center.* Examples are chocolate covered cherries, and candy bars covered in chocolate with centers of nougat, caramel, and peanuts.

*Panned.* Products manufactured using the panning process. Examples are bridge mix, sugar panned chocolate centers, chocolate covered nuts, and dried fruit made by the panning process.

*Assortments and others.* Products comprising an assortment of two or more of the above subcategories, and/or products that do not fall into any of the above subcategories. Examples are packages or boxes containing combinations of product types.

**Nonchocolate type products.** All other confectionery products that do not contain either real chocolate or chocolate compound as an ingredient.

*Hard candy.* Comprising a sugar mass that is processed to be nongrained, a sugar mass that is grained through serration, and brittles that frequently contain nuts. Examples are pops, lemon drops, pressed mints, dessert mints, candy canes, and sour balls.



**Chewy candy.** Comprising a plastic-textured grained or nongrained caramel that is sometimes mixed with corn or other foods, toffee that is less plastic than caramel, taffies that vary from hard chewy to soft chewy, and grained and nongrained nougats. Examples are caramel covered popcorn and caramels.

**Soft candy.** Comprising crystallized and noncrystallized creams, fudges, grained and nongrained marshmallows, soft jellies, and gums. Examples are candy corn and orange slices.

**Iced coated.** Enrobed, formed, or deposited nonchocolate confectioner's coated candies. Examples are bark, "white chocolate," and coconut bonbons.

**Panned.** Products manufactured using the panning process. Examples are jelly beans and Boston baked beans.

**Licorice and licorice-type.** Sugar and starch based (products) flavored with licorice extract and colored black. Other flavors and colors may be substituted in licorice-type. Examples are licorice twists, licorice shoelaces, and nuggets.

**Other chocolate products.** Comprised of coatings, both chocolate and compound, including baking chocolate sold in bars and chips through retail outlets; chocolate chips and other chocolate coatings sold to bakers, ice cream manufacturers, biscuit and cracker manufacturers, and other outlets; chocolate liquor, cocoa butter melted, and cocoa cake and powder.

**Chewing gum.** An emulsion consisting of a polymer base, bulk fillers, and flavors. Includes chewing gum, bubble gum, and chewing gum base.

**Milk products.** Includes all milk products such as fluid milk and cream; condensed, evaporated, and dried milk; and creamery butter.

**Fats and oils.** Includes margarine, hydrogenated shortenings, corn, cottonseed, coconut, soybean and peanut oils, etc; excludes slab oils.

**Table 9. Summary of Manufacturers' Shipments of Confectionery Products: 1984 to 1995**

[Quantity in millions of pounds. Value in millions of dollars]

Year	Total				Excluding chewing gum			
	Pounds	Value	Per capita consumption <sup>1</sup> (pounds)	Per capita consumption <sup>1</sup> (dollars)	Pounds	Value	Per capita consumption <sup>1</sup> (pounds)	Per capita consumption <sup>1</sup> (dollars)
1995.....	6,471	12,792	25.5	49.6	5,964	11,410	23.4	44.2
1994.....	6,253	12,208	24.5	47.1	5,750	10,837	22.5	41.8
1993.....	5,988	11,894	23.6	46.4	5,572	10,670	21.9	41.5
1992.....	(NA)	(NA)	(NA)	(NA)	5,387	10,428	21.5	41.1
1991.....	(NA)	(NA)	(NA)	(NA)	4,989	9,710	20.3	38.9
1990.....	(NA)	(NA)	(NA)	(NA)	4,840	9,004	20.1	36.7
1989.....	(NA)	(NA)	(NA)	(NA)	4,852	8,682	20.4	35.8
1988.....	(NA)	(NA)	(NA)	(NA)	4,570	8,278	19.2	34.4
1987.....	(NA)	(NA)	(NA)	(NA)	4,231	7,678	18.3	32.3
1986.....	(NA)	(NA)	(NA)	(NA)	4,201	7,280	18.4	31.3
1985.....	(NA)	(NA)	(NA)	(NA)	4,326	7,092	19.1	30.7
1984.....	(NA)	(NA)	(NA)	(NA)	4,265	6,610	18.9	28.9

NA Not available.

<sup>1</sup>Production plus imports minus exports divided by population, including armed forces abroad, as of July 1, 1995.

Source of population data: U.S. Bureau of the Census, U.S. Population Estimates, Series PPL-41 (July 1, 1995, population was 263,034,000).

Table 10. Quantity and Value of Shipments of Confectionery and Nonconfectionery by Type of Product: 1995 and 1994

[Quantity in thousands of pounds. Value in thousands of dollars]

Product description	1995		1994	
	Quantity	Value	Quantity	Value
<b>CONFECTIONERY</b>				
<b>Shipments</b> .....	<b>6,471,314</b>	<b>12,791,923</b>	<b>6,253,307</b>	<b>12,207,905</b>
Chocolate and chocolate-type confectionery .....	3,020,440	7,176,641	2,862,248	6,808,533
Solid .....	409,184	891,105	392,361	858,995
Solid with inclusions .....	252,284	672,455	244,626	656,473
Enrobed or molded:				
With candy, fruit, nut, or granola center .....	1,349,421	3,159,288	1,307,316	3,075,591
With bakery product center .....	195,879	455,507	183,225	428,999
Panned .....	542,430	1,151,726	514,703	1,071,934
Assortments and other .....	271,242	846,560	220,017	716,541
Chocolate type, n.s.k. ....	-	-	-	-
Nonchocolate-type confectionery .....	2,733,287	3,840,231	2,684,520	3,653,597
Hard candy .....	720,320	1,174,254	730,524	1,181,633
Chewy candy, including granola bars .....	502,928	960,275	501,279	902,977
Soft candy .....	791,815	767,059	774,104	724,617
Iced/coated .....	9,893	22,412	10,270	23,220
Panned .....	453,248	639,090	456,534	598,754
Licorice and licorice-type .....	255,083	277,141	211,809	222,396
Nonchocolate type, n.s.k. ....	-	-	-	-
Chewing gum, bubble gum, and chewing gum base .....	(S)	1,382,366	(S)	1,371,018
Confectionery, n.s.k. <sup>1</sup> .....	210,384	392,685	203,297	374,757
<b>NONCONFECTIONERY</b>				
<b>Shipments</b> .....	<b>1,525,067</b>	<b>1,498,177</b>	<b>1,477,003</b>	<b>1,439,285</b>
Chocolate products other than confectionery:				
Baking chocolate (bars or blocks) .....	11,392	20,710	13,603	22,963
Chocolate coatings (blocks, wafers, and liquid) .....	355,133	387,053	333,639	351,655
Chocolate liquor .....	45,492	49,444	46,090	50,052
Cocoa butter .....	24,208	36,996	22,988	34,432
Compound coatings (blocks, wafers, and liquid) .....	214,037	155,582	204,106	148,046
Chocolate chips and baking pieces .....	415,906	509,698	405,751	492,272
Cocoa powder, syrup/toppings, and other .....	458,899	338,694	450,826	339,865
Nonconfectionery chocolate, n.s.k. ....	-	-	-	-

- Represents zero. n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data. S Data does not meet publication standards.<sup>1</sup>Represents estimated data for small companies, typically those with fewer than five employees, that were not included on the mailing panel.

Table 11. Consumption of Selected Ingredients by the U.S. Confectionery Industry: 1995 and 1994

[Quantity in thousands of pounds. Value in thousands of dollars]

Materials	1995		1994	
	Quantity	Value	Quantity	Value
<b>Materials consumed</b> .....	<b>(X)</b>	<b>3,587,369</b>	<b>(X)</b>	<b>3,446,341</b>
Sugar (cane-beet) .....	2,843,330	745,043	2,715,255	690,955
Cocoa beans .....	546,876	372,799	536,396	344,839
Corn syrup, including HFCS and dextrose .....	1,664,369	201,973	1,619,589	195,621
Chocolate liquor, imported .....	35,026	31,767	67,776	58,285
Chocolate liquor, domestic .....	43,347	42,636	28,820	28,009
Cocoa powder composition coatings .....	35,953	17,973	33,080	16,742
Cocoa cake or powder .....	149,951	59,416	130,666	61,583
Cocoa butter .....	336,017	339,084	349,910	317,772
Chocolate coatings, milk .....	229,061	251,206	226,143	234,164
Chocolate coatings, other than milk .....	112,468	103,157	109,570	91,795
Fats and oils .....	244,878	115,947	236,002	101,126
Gum base .....	(D)	(D)	(D)	(D)
Milk and milk products .....	531,425	369,959	543,079	399,273
Peanuts, shelled basis .....	338,121	221,715	368,291	239,916
Almond kernels .....	48,611	113,173	51,419	119,515
Other nuts and nut meats (kernels) .....	22,307	53,065	23,148	52,283
Coconut meat .....	22,679	15,302	22,334	15,787
Other edible materials <sup>1</sup> .....	728,517	489,604	691,588	435,271
Materials, n.s.k. ....	(X)	(D)	(X)	(D)

D Withheld to avoid disclosing data for individual companies. n.s.k. Not specified by kind. X Not applicable.

<sup>1</sup>Includes corn starch, essential oils, eggs and egg products, fruits, jams, and other materials on which specific data were not collected.

Note: Materials such as parts and containers consumed in the manufacturing process are not reported in this survey. This information will be available in the 1992 Census of Manufactures report for industries 2064 and 2066. Specifically excluded in this report are freight charges and other direct charges incurred by the establishment, fuels consumed, parts, containers, scrap, electric energy purchases, work done by others on materials or parts furnished by other establishments (contract work), and cost of products bought and resold in the same condition.

Table 12. Shipments, Exports, Imports, and Apparent Consumption of Confectionery Products: 1995 and 1994

[Quantity in thousands of kilograms. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>2</sup>		Percent exports to manufacturers' shipments		Imports for consumption <sup>3</sup>		Apparent consumption <sup>5</sup>		Percent imports to apparent consumption		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value <sup>4</sup>	Quantity	Value	Quantity	Value	
Confectionery:														
20642, 20662	Chocolate-type confectionery . . . . .	1995 . . . . .	1,370,072	7,176,641	72,089	237,532	5.3	3.3	81,145	274,027	1,379,128	7,213,136	5.9	3.8
		1994 . . . . .	1,298,316	6,808,533	85,281	276,878	6.6	4.1	68,635	207,786	1,281,670	6,739,441	5.4	3.1
20643	Nonchocolate-type confectionery . . . . .	1995 . . . . .	1,239,819	3,840,231	65,400	167,629	5.3	4.4	145,732	344,574	1,320,151	4,017,176	11.0	8.6
		1994 . . . . .	1,217,698	3,653,597	64,821	161,647	5.3	4.4	136,073	294,897	1,288,950	3,786,847	10.6	7.8
20648	Chewing gum, sugar, and nonsugar . . . . .	1995 . . . . .	(S)	1,382,366	16,817	53,094	(S)	3.8	37,799	82,464	(S)	1,411,736	(S)	5.8
		1994 . . . . .	(S)	1,371,018	22,173	65,519	(S)	4.8	30,532	64,367	(S)	1,369,866	(S)	4.7
Nonconfectionery:														
20669 81	Cocoa butter . . . . .	1995 . . . . .	10,981	36,996	2,972	10,006	27.1	27.0	57,158	210,069	65,167	237,059	87.7	88.6
		1994 . . . . .	10,427	34,432	2,223	7,150	21.3	20.8	54,547	180,208	62,751	207,490	86.9	86.9
20661 11, 21	Chocolate coatings, blocks, wafers, or liquid confectionery . . . . .	1995 . . . . .	258,176	542,635	2,823	2,934	1.1	0.5	6,699	10,873	262,052	550,574	2.6	2.0
		1994 . . . . .	243,921	499,701	1,448	2,077	0.6	0.4	6,121	9,328	248,594	506,952	2.5	1.8
20661 14, 20669 12-13, 61	Other chocolate and cocoa products . . . . .	1995 . . . . .	422,614	918,546	49,490	105,074	11.7	11.4	147,507	205,335	520,631	1,018,807	28.3	20.2
		1994 . . . . .	415,620	905,152	46,630	96,326	11.2	10.6	212,372	288,172	581,362	1,096,998	36.5	26.3

S Does not meet publication standards.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 146, *U.S. Imports for Consumption*.

<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

<sup>5</sup>Apparent consumption is derived by subtracting exports from the total manufacturers' shipments plus imports.

Note: "Confectionery, n.s.k." is excluded from this table.

**HISTORICAL NOTE**

Data on confectionery products have been collected by the Bureau of the Census since 1926. In 1989, data tables showing the quantity and value of shipments of chocolate and nonchocolate-type confectionery, by type of product and package, were discontinued. Also discontinued in 1989 were data showing the sales and resales of confectionery by type of customer.

Starting with the 1990 report, data showing the quantity and value of shipments by type of product of other chocolate products (nonconfectionery) were added. Starting with the 1993 report, data for chewing gum were added.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at

your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**FUNDING**

Since 1990, this survey has been conducted under the sponsorship of the National Confectioners Association and the Chocolate Manufacturers Association.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Nat Shelton, 301-457-4643.

## FATS AND OILSEED CRUSHINGS, PRODUCTION, CONSUMPTION, AND STOCKS (M20J, M20K)

### INTRODUCTION

Data published in the fats and oils series were collected by mail on Bureau of the Census monthly forms: M20J, Oilseeds, Beans, and Nuts (Primary Processors); M20H, Animal and Vegetable Fats and Oils (Warehouse Stocks); M20L, Fats and Oils (Renderers); M20M, Animal and Vegetable Fats and Oils (Consumption and Stocks); and M20N, Animal and Vegetable Fats and Oils (Production, Consumption, and Stocks).

Statistics from the M20J forms show the amount of selected raw materials crushed along with the production and stocks of the byproducts extracted (crude oil and cake and meal) during the crushing process. The crushing facilities are referred to as the Primary Processors. The data are published monthly. Data on soybeans and cottonseeds are shown for selected States.

The statistics from the M20H, M20L, M20M, and M20N forms are published in the monthly report series M20K, Fats and Oils, Production, Consumption, and Stocks. This report focuses on the production and stocks of rendered animal fats, along with the production and stocks of specified primary fats and oils and end products produced during the year. Also collected are the quantities of crude oil consumed in the production of once-refined oil.

### SUMMARY OF FINDINGS

For the 1995 calendar year, soybean crushings were 42,165.2 thousand short tons. This showed an increase of 7 percent, from the 1994 figure of 39,334.5 thousand short tons. The production of crude soybean oil was 15,636.2 million pounds, and the production of refined soybean oil was 12,399.1 million pounds. This showed an increase of 9.0 percent from the 1994 figure of 14,336.2 million pounds for crude oil, and a slight increase from the 1994 figure of 12,392.6 million pounds for refined soybean oil. The consumption of soybean oil in end products was 12,354.0 million pounds, a 1-percent decrease from the 1994 figure of 12,474.1 million pounds.

At the same time, cottonseed crushings were 4,028.1 thousand short tons. This represented a 12.7-percent increase from the 1994 figure of 3,573.0 thousand pounds. The production of crude cottonseed oil was 1,291.8 million pounds, and the production of refined cottonseed oil was 978.7 million pounds in 1995. This represented a 13-percent increase from the 1994 figure of 1,143.6 million pounds for crude cottonseed oil, and a decrease of 0.1 percent from the 1994 figure of 1,018.9 million pounds for refined cottonseed oil.

The production of crude corn oil was 2,243.5 million pounds and the production of refined corn oil was 1,094.1 million pounds in 1995. This represented a 15-percent

increase from the 1994 figure of 1,951.3 million pounds for crude corn oil and a 2.2-percent increase from the 1994 figure of 1,070.8 million pounds for refined oil.

Also, for the calendar year 1995, the production of refined peanut oil decreased 22.9 percent and the production of refined coconut oil increased 3.6 percent. The production of refined rapeseed oil decreased 54.3 percent. At the same time, the consumption in end products of peanut oil decreased 40.6 percent, while the consumption in end products of coconut oil decreased 9.4 percent.

### SCOPE OF SURVEY

The data on fats and oils are from surveys that cover all plants in the United States that crush vegetable oil-bearing materials (oilseeds, beans, nuts, etc.). This survey also covers all firms producing or consuming major edible fats and oils, and warehouses storing these products. Following is a description of the types of establishments included in this survey:

1. Plants that use alkali refining or similar processes to clarify crude vegetable oils and remove excess fatty acids.
2. Plants that use animal fats or once-refined vegetable oils in the production of edible fats and oils, such as salad oil, cooking oil, shortening, margarine, hard butter, mellorine fats, monoglycerides, and diglycerides. In general, plants consuming fully-refined edible fats and oils in the further manufacture of food products are not included. In this regard, salad dressing plants that use fully-refined deodorized vegetable oils (salad oils) are not included; nor are bakeries, salad oil blending plants, or potato chip plants. Similar plants that refine their own oils are included. With minor exceptions, reporting plants are those equipped for fats and oils processing that either remove undesirable material, or on a commercial scale, alter the color, odor, or melting point.
3. Plants using crude or once refined fats and oils in such industrial products as soap, paint, varnish, plastics, or other products containing substantial amounts of fats and oils.
4. Plants that render crude material into lard, edible and inedible tallow and grease, either as their primary operation or as an adjunct to meat packing.
5. Terminals and warehouses storing fats and oils in bulk or in drums, including public and private storage. Warehouses storing only end products such as packaged salad oil, lard, and shortening are not included.

## EXPLANATION OF TERMS

**Net receipts at mills (current month).** Figures under this heading are derived by subtracting stocks held at the end of the previous month from the sum of materials crushed during the current month and stocks held at the end of the current month.

**Shipments and transfers (current month).** Figures under this heading are derived by subtracting stocks held at the end of the current month from the sum of stocks held at the end of the previous month and production during the current month.

**Linters.** The fuzz or short fibers that adhere to cottonseed after ginning.

**Hulls.** The outer covering of cottonseeds or soybeans.

**Cake and meal.** The residue left after the oil is extracted from a seed, nut, or kernel.

**Crude vegetable oils.** Oil until it has been processed by an alkali or caustic wash or by some equivalent operation.

**Lecithin.** A mixed phosphatide product obtained from soybean oil in the degumming process.

**Refined vegetable oils.** Includes oils that have undergone an alkali or caustic wash or a similar process but have not passed through a further stage of refinement.

**Salad or cooking oils.** Salad or cooking oils are vegetable oil products, completely liquid at room temperature, that have been deodorized or winterized and deodorized.

**Baking and frying fats.** Baking and frying fats, commonly known as shortening, are animal or vegetable fats or oils or combinations thereof, that have been deodorized or hydrogenated and deodorized and that are sold entirely for baking or frying purposes. They exhibit consistencies that may be fluid, plastics, or solid at room temperature.

**Margarine, soft (1-lb).** Includes margarine packaged in a cardboard sheath containing two half-pound tubs.

**Consumer (retail) products, solids or rolls.** Includes only those products packaged for sale directly to the retail (consumer) market.

Table 13. Receipts, Crushings, and Stocks of Major Raw Materials at Oil Mills: 1995

[Thousands of short tons]

Product description	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>Soybeans:</b>													
Receipts at mills .....	42,511.2	3,478.9	3,808.6	5,760.3	3,263.7	3,216.0	<sup>r</sup> 2,830.3	2,806.8	3,037.4	3,027.4	3,790.2	3,483.5	4,008.1
Crushed or used .....	42,165.2	3,753.0	3,702.3	3,618.4	3,222.7	3,284.9	3,251.4	3,167.5	3,425.2	3,583.0	3,841.7	3,495.3	3,819.8
Stocks <sup>1</sup> .....	3,599.1	3,599.1	3,873.2	3,766.9	1,625.0	1,584.0	1,652.9	2,074.0	2,434.7	2,822.5	3,378.1	3,429.6	3,441.4
<b>Cottonseed:</b>													
Receipts at mills .....	3,834.0	596.5	<sup>r</sup> 1,300.0	1,193.3	518.5	<sup>r</sup> 8.6	(17.7)	(27.7)	<sup>r</sup> 15.0	<sup>r</sup> (11.1)	<sup>r</sup> 59.1	28.9	<sup>r</sup> 170.6
Crushed or used .....	4,028.1	362.4	386.7	337.1	245.5	264.4	310.0	316.5	304.0	345.4	391.0	360.5	404.6
Stocks <sup>1</sup> .....	2,569.3	2,569.3	2,335.2	1,421.9	565.7	292.7	548.5	876.2	1,220.4	1,523.8	1,865.9	2,197.8	2,529.4
<b>Peanuts:</b>													
Receipts at mills .....	(D)	<sup>r</sup> 17.7	18.6	<sup>r</sup> 12.6	(D)	44.9	33.3	52.7	46.3	45.4	54.3	31.6	35.9
Crushed or used .....	400.3	29.3	24.0	17.4	21.2	32.3	32.5	35.2	47.1	42.9	50.5	33.9	34.0
Stocks <sup>1</sup> .....	6.8	6.8	(D)	(D)	(D)	44.6	32.0	31.2	13.7	14.5	12.0	8.2	10.5
<b>Linseed:</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Sunflower:</b>													
Receipts at mills .....	(D)	(D)	(D)	203.1	(D)	39.7	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	18.4	14.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Safflower:</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.7
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	14.4
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Rapeseed:</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies.

<sup>r</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Calculated at end of the period.

Table 14. Production, Consumption, Shipments and Transfers, and Stocks of Major Crude and Refined Animal and Vegetable Fats and Oils: 1995

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>SOYBEAN OIL</b>														
Production:														
Crude oil	Mil lb	15,636.2	1,381.6	1,359.7	1,354.2	1,208.4	1,228.1	1,204.7	1,183.2	1,275.3	1,333.4	1,419.4	1,288.6	1,399.6
Refined oil	do	12,399.1	1,018.5	1,088.8	1,119.2	1,039.8	1,076.8	940.9	993.5	1,076.9	1,010.4	1,063.6	968.2	1,002.5
Cake and meal	Mil s tons	31,066.8	2,763.9	2,738.4	2,702.9	2,362.9	2,412.9	2,389.8	2,322.8	2,519.8	2,632.5	2,844.9	2,572.7	2,803.3
Lecithin	do	83.6	8.5	7.3	7.6	6.5	6.6	6.4	6.2	6.2	6.6	7.5	6.7	7.5
Millfeed	do	2,273.4	208.3	210.6	190.3	172.9	176.9	175.6	169.3	178.1	197.3	203.6	186.3	204.2
Shipments and transfers:														
Cake and meal	do	30,911.7	2,623.2	2,699.4	2,731.0	2,338.8	2,449.4	2,364.5	2,424.6	2,560.8	2,436.0	2,898.5	2,547.6	2,837.9
Millfeed	do	2,274.4	196.3	205.2	188.5	177.4	188.6	171.4	182.6	182.2	184.2	204.0	182.0	213.0
Consumption:														
Crude in refining <sup>1</sup>	Mil lb	12,811.2	1,050.4	1,123.0	1,152.6	1,077.0	1,114.0	968.0	1,027.9	1,115.0	1,047.2	1,098.1	1,000.9	1,037.1
In end product <sup>2</sup>	do	12,354.0	1,003.6	1,068.6	1,093.0	1,043.3	1,047.1	849.7	1,021.8	1,078.4	1,008.2	1,094.7	952.2	993.4
In edible products	do	12,049.3	984.5	1,045.5	1,066.8	1,020.3	1,021.2	926.0	994.6	1,052.8	980.2	1,064.8	925.7	966.9
Baking and frying fats	do	4,673.0	387.0	414.9	437.7	407.4	421.9	355.0	386.4	406.2	358.5	401.1	342.1	356.8
Salad and cooking oil	do	5,472.7	421.0	445.2	461.2	451.5	441.9	441.7	448.5	484.3	480.4	496.0	439.6	461.4
Margarine	do	1,684.0	158.1	166.6	150.8	141.9	137.0	110.8	141.0	144.5	126.4	149.4	125.9	131.8
Other	do	219.6	18.4	18.8	17.1	19.5	20.4	18.5	18.7	17.8	16.9	18.3	18.1	17.1
In inedible products	do	304.7	19.1	23.1	26.2	23.0	25.9	23.7	27.2	25.6	28.0	29.9	26.5	26.5
Paint and varnish	do	47.0	2.4	2.7	3.0	3.6	3.6	3.1	4.4	4.8	5.1	5.2	4.6	4.5
Resins and plastics	do	122.4	5.9	9.1	10.2	9.1	10.4	10.2	11.9	10.9	13.6	12.1	9.1	9.9
Other	do	99.6	8.1	8.4	8.2	7.1	8.2	6.9	7.9	6.9	6.5	10.3	10.8	10.3
Stocks:														
Crude oil	Mil lb	1,154.3	1,154.3	908.9	990.4	905.7	895.3	906.3	885.9	893.9	860.5	838.3	876.7	880.6
Refined oil	do	254.6	254.6	223.1	205.5	231.0	204.7	235.7	225.8	236.5	229.1	221.2	252.1	236.2
Cake and meal	Mil s tons	347.5	347.5	206.8	167.8	195.9	171.8	208.3	183.0	284.8	325.8	129.3	182.9	157.8
Millfeed	do	47.7	47.7	34.7	29.3	27.5	32.0	43.7	39.5	52.8	56.9	43.8	44.2	39.9
<b>COTTONSEED OIL</b>														
Production:														
Crude oil	Mil lb	1,291.8	111.6	121.6	105.2	84.3	87.8	96.6	102.4	97.7	110.4	125.2	115.6	133.4
Refined oil	do	978.7	86.9	89.5	74.0	69.0	80.5	72.6	70.7	70.1	84.2	92.6	84.4	104.2
Cake and meal	Mil s tons	1,826.1	161.0	178.2	159.9	113.6	120.1	137.2	143.9	137.4	154.2	174.3	162.2	184.1
Hulls	do	1,080.7	96.3	99.3	82.2	60.6	71.4	91.1	83.8	81.4	94.6	110.7	100.1	109.2
Linters: <sup>1</sup>														
First cut	Mil lb	133.8	(D)	(D)	10.6	(D)	(D)	(D)	(D)	(D)	10.8	13.0	13.2	14.1
First cut	1,000 bales	213.7	(D)	(D)	16.9	(D)	(D)	(D)	(D)	(D)	17.3	20.8	21.1	22.5
Second cut	Mil lb	496.5	45.7	48.4	41.6	27.8	33.7	36.7	37.6	35.1	44.7	48.4	47.9	48.9
Second cut	1,000 bales	783.1	72.1	76.3	63.4	42.9	60.1	58.2	60.3	62.3	69.6	74.4	73.3	82.6
Mill run	Mil lb	57.9	(D)	(D)	8.8	(D)	(D)	(D)	(D)	(D)	1.2	1.5	1.9	2.2
Mill run	1,000 bales	93.1	(D)	(D)	14.1	(D)	(D)	(D)	(D)	(D)	1.9	2.4	3.1	3.5
Shipments and transfers:														
Cake and meal	Mil s tons	1,899.6	166.8	185.2	172.5	142.2	132.7	131.8	152.5	155.3	128.1	190.5	160.3	181.7
Hulls	do	1,100.6	90.2	109.0	88.7	73.0	78.6	82.8	82.9	95.8	81.7	114.2	99.7	104.0
Linters: <sup>1</sup>														
First cut	Mil lb	(D)	(D)	10.9	10.0	8.3	11.1	9.9	12.1	10.4	12.8	12.0	11.5	14.7
First cut	1,000 bales	(D)	(D)	17.4	16.0	13.3	17.7	15.8	19.3	16.6	20.1	19.2	18.4	23.6
Second cut	Mil lb	500.6	43.3	47.1	40.2	27.2	38.1	36.9	38.2	39.5	44.1	47.2	46.5	52.3
Second cut	1,000 bales	789.6	68.3	74.3	63.4	42.9	60.1	58.2	60.3	62.3	69.6	74.4	73.3	82.5
Mill run	Mil lb	(D)	(D)	8.1	7.9	5.5	0.3	7.4	9.2	12.7	(1.6)	1.9	(0.6)	2.7
Mill run	1,000 bales	(D)	(D)	13.0	12.7	8.8	0.5	11.9	14.8	20.4	(2.6)	3.1	(1.0)	4.3
Consumption:														
Crude in refining	Mil lb	1,012.9	89.7	91.8	76.1	71.6	83.3	76.0	73.4	72.8	87.2	96.2	87.1	107.7
In end product <sup>2</sup>	do	523.5	(D)	(D)	(D)	(D)	(D)	(D)	40.9	(D)	(D)	(D)	(D)	(D)
In edible products	do	518.1	35.7	40.5	46.7	49.1	44.8	42.3	40.8	45.1	43.8	47.9	38.9	42.5
Baking and frying fats	do	212.3	14.6	17.5	19.9	20.2	20.2	16.6	17.0	19.0	16.0	19.1	15.3	16.9
Salad and cooking oil	do	251.4	16.4	18.3	21.1	24.0	20.2	21.5	19.8	21.5	24.0	25.3	18.7	20.6
In inedible products	do	5.4	(D)	(D)	(D)	(D)	(D)	(D)	0.1	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	do	29.0	29.0	30.7	32.0	27.0	30.7	29.7	29.2	28.9	42.1	44.8	46.0	36.9
Refined oil	do	65.9	65.9	58.5	50.5	55.1	57.2	62.5	67.6	66.8	78.7	85.1	104.5	85.3
Cake and meal	Mil s tons	21.2	21.2	27.0	34.0	46.6	75.2	87.8	82.4	91.0	108.9	82.8	99.2	97.3
Hulls	do	20.7	20.7	14.8	24.3	30.8	43.2	50.4	42.1	41.2	55.6	42.7	46.2	45.8
Linters: <sup>1</sup>														
First cut	Mil lb	(D)	(D)	(D)	(D)	5.1	(D)	7.5	(D)	10.5	11.2	13.0	12.0	10.3
First cut	1,000 bales	(D)	(D)	(D)	(D)	8.1	(D)	12.0	(D)	16.8	17.9	20.8	19.2	16.5
Second cut	Mil lb	12.1	12.1	9.7	8.4	7.0	6.4	10.8	11.0	11.6	16.0	15.4	14.2	12.8
Second cut	1,000 bales	19.1	19.1	16.3	13.2	11.0	10.1	17.0	17.4	18.3	25.2	24.3	22.4	20.2
Hulls	Mil lb	20.7	20.7	14.6	24.3	30.8	43.2	50.4	42.1	41.2	55.6	42.7	46.2	45.8

See footnotes at end of table.

Table 14. Production, Consumption, Shipments and Transfers, and Stocks of Major Crude and Refined Animal and Vegetable Fats and Oils: 1995—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>CORN OIL</b>														
Production:														
Crude oil	Mil lb	2,243.5	184.5	173.8	179.4	190.8	182.6	193.5	193.6	194.4	190.7	231.7	165.3	163.2
Refined oil	do	1,094.1	96.7	92.1	78.7	89.8	73.9	91.4	102.4	90.4	91.9	103.7	87.1	96.0
Consumption:														
Crude in refining	do	1,158.4	102.0	97.9	82.9	95.5	78.2	97.2	108.9	95.6	97.3	109.9	92.3	100.7
In end product <sup>2</sup>	do	(D)	(D)	55.7	50.1	(D)	47.0	(D)	53.9	(D)	(D)	(D)	(D)	(D)
In edible products	do	604.5	54.4	55.6	50.0	55.3	46.9	40.6	53.8	50.1	51.8	57.2	44.7	44.1
Baking and frying fats	do	91.2	7.0	7.2	7.2	8.3	9.0	7.4	7.7	8.5	8.0	7.2	6.4	7.3
Salad and cooking oil	do	428.9	37.9	38.9	36.6	40.0	32.8	29.9	37.3	33.8	37.2	42.3	31.5	30.7
Stocks:														
Crude oil	do	150.3	150.3	172.1	184.0	182.2	130.0	114.4	109.9	128.0	106.2	106.9	65.7	59.4
Refined oil	do	46.1	46.1	29.2	41.4	58.4	60.3	50.2	47.7	68.4	39.1	47.1	39.8	35.7
<b>PEANUT OIL</b>														
Production:														
Crude oil	Mil lb	322.1	24.3	19.5	13.2	17.4	26.3	26.9	29.2	39.2	36.9	42.7	28.6	27.9
Refined oil	do	114.9	10.3	10.0	10.3	11.1	10.4	7.3	11.1	11.1	9.6	9.4	5.7	8.6
Cake and meal	Mil s tons	216.5	16.6	11.4	9.2	11.0	17.3	17.7	19.4	26.6	23.6	27.5	17.9	18.3
Shipments and transfers:														
Cake and meal	do	222.9	15.4	12.7	11.2	12.3	17.5	18.9	21.1	27.0	24.0	(D)	(D)	16.1
Consumption:														
Crude in refining	Mil lb	119.3	10.6	10.3	10.6	11.5	10.8	7.6	11.5	11.6	10.0	9.9	6.0	8.9
In end product <sup>2</sup>	do	110.0	11.4	10.0	10.5	(D)	6.8	10.7	4.4	(D)	(D)	(D)	(D)	(D)
In edible products	do	109.2	11.3	9.9	10.4	11.9	6.7	10.6	4.3	9.7	8.6	9.9	6.4	9.5
In inedible products	do	0.8	0.1	0.1	0.1	(D)	0.1	0.1	0.1	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	do	19.9	19.9	18.6	20.4	42.4	41.9	37.5	36.6	41.2	25.2	13.5	12.8	7.5
Refined oil	do	2.8	2.8	3.0	2.7	2.9	3.2	2.9	6.1	3.4	4.6	5.0	3.4	3.4
Cake and meal	Mil s tons	3.1	3.1	1.9	3.2	5.2	6.5	6.7	7.9	9.6	10.0	10.4	(D)	11.7
<b>LINSEED OIL</b>														
Production:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Refined oil	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Shipments and transfers:														
Cake and meal	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Consumption:														
Crude in refining	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In end product <sup>2</sup>	do	112.8	6.9	7.1	10.6	9.4	10.0	8.8	9.7	10.0	8.1	11.4	8.2	12.6
In inedible products	do	112.8	6.9	7.1	10.6	9.4	10.0	8.8	9.7	10.0	8.1	11.4	8.2	12.6
Paint and varnish	do	30.2	1.5	1.5	2.0	2.2	2.2	1.8	3.5	2.8	2.8	4.1	1.5	4.3
Resins and plastics	do	51.4	2.9	3.4	5.9	4.7	5.3	4.5	3.7	4.8	2.8	4.8	4.2	4.4
Other inedible products	do	31.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.4	2.5	3.8
Stocks:														
Crude oil	do	23.2	23.2	26.0	28.8	32.5	22.5	25.1	24.3	29.4	23.9	21.9	20.0	22.7
Refined oil	do	22.1	22.1	18.4	19.2	13.5	15.0	19.5	15.1	15.3	14.0	13.7	11.1	16.3
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>SUNFLOWER OIL</b>														
Production:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Refined oil	do	44.5	(D)	(D)	(D)	(D)	4.0	2.9	4.9	3.4	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Shipments and transfers:														
Cake and meal	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Consumption:														
Crude in refining <sup>1</sup>	Mil lb	45.2	(D)	(D)	(D)	(D)	4.0	2.9	5.1	3.5	(D)	(D)	(D)	(D)
In end product <sup>2</sup>	do	171.6	7.6	8.4	6.0	5.9	23.7	20.7	20.4	(D)	(D)	(D)	(D)	(D)
In edible products	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In inedible products	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	do	137.2	137.2	119.5	72.2	76.6	83.9	113.1	110.0	74.3	42.9	89.6	143.4	112.5
Refined oil	do	6.7	6.7	7.5	6.3	5.0	5.2	4.4	3.1	4.3	3.8	4.4	4.7	3.9
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.



Table 14. Production, Consumption, Shipments and Transfers, and Stocks of Major Crude and Refined Animal and Vegetable Fats and Oils: 1995—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>SAFFLOWER OIL</b>														
Production:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Refined oil	do	19.6	2.9	2.7	1.6	2.0	1.8	(D)	1.9	(D)	1.5	1.1	(D)	2.2
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Shipments and transfers:														
Cake and meal	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Consumption:														
Crude in refining <sup>1</sup>	Mil lb	20.4	3.0	2.8	1.7	2.1	1.9	(D)	2.0	(D)	1.6	1.1	(D)	2.2
In end product <sup>2</sup>	do	57.7	(D)	(D)	(D)	(D)	3.9	1.7	3.5	3.5	3.5	(D)	3.4	(D)
In edible products	do	57.7	(D)	(D)	(D)	(D)	3.8	1.6	3.4	3.4	3.4	(D)	3.3	(D)
In inedible products	do	0.6	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	0.1	0.1	0.1	0.1	0.1	0.1
Stocks:														
Crude oil	do	41.5	41.5	36.5	29.2	20.3	26.6	26.6	24.5	39.7	48.9	51.5	50.8	47.3
Refined oil	do	0.4	0.4	0.8	0.6	1.0	0.8	0.8	1.2	0.5	1.1	0.7	0.9	1.4
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.5
<b>RAPESEED OIL</b>														
Production:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Refined oil	do	144.3	12.7	12.2	12.1	12.1	15.2	11.3	9.9	13.3	8.4	11.8	13.2	12.1
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Shipments and transfers:														
Cake and meal	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Consumption:														
Crude in refining <sup>1</sup>	Mil lb	149.0	13.2	12.5	12.5	12.6	15.8	11.8	10.2	13.7	8.6	12.1	13.6	12.4
In end product <sup>2</sup>	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In edible products	do	315.8	23.8	26.9	29.5	30.4	38.8	26.0	26.4	26.3	20.4	25.6	20.9	20.8
Salad and cooking oils	do	226.7	15.8	19.6	22.3	23.3	29.7	18.9	18.0	17.9	13.1	16.7	16.2	15.2
In inedible products	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.6	(D)
Stocks:														
Crude oil	do	35.7	35.7	26.3	37.2	25.8	25.3	37.9	22.2	24.3	42.9	39.0	45.6	42.7
Refined oil	do	18.5	18.5	20.2	26.1	28.4	29.5	21.5	16.9	20.6	20.3	20.5	17.5	15.4
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>LARD</b>														
Production	Mil s tons	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Consumption:														
In end products <sup>2</sup>	do	488.7	39.3	41.4	42.6	38.4	38.4	37.4	46.9	44.7	38.7	43.7	37.2	40.0
In edible products	do	384.3	29.0	30.5	32.1	28.3	31.6	29.0	39.2	35.1	29.8	29.1	25.4	25.2
Baking and frying fats	do	325.0	25.8	27.3	29.0	25.1	28.4	26.6	36.0	31.6	26.7	25.2	21.5	21.8
In inedible products	do	124.4	10.3	10.9	10.5	10.1	6.8	8.4	7.7	9.6	8.9	14.6	11.8	14.8
Lubricants	do	27.2	2.9	3.8	3.5	3.1	1.7	2.1	1.7	1.3	2.2	2.3	1.5	1.1
Other inedible products	do	97.2	7.4	7.1	7.0	7.0	5.1	6.3	6.0	8.3	6.7	12.3	10.3	13.7
Stocks	do	38.4	38.4	21.6	19.9	24.3	30.2	22.1	25.8	27.1	36.8	43.0	46.4	50.3
<b>EDIBLE TALLOW</b>														
Production	Mil lb	1,536.3	118.3	128.6	131.5	134.1	134.9	114.0	140.2	151.3	114.1	130.0	118.9	120.4
Consumption:														
In end products <sup>2</sup>	do	557.8	48.0	47.1	51.1	48.4	48.7	44.4	49.5	52.6	39.9	48.0	36.7	43.4
In edible products	do	380.3	32.2	33.2	33.8	34.3	32.8	28.0	32.5	36.0	28.8	35.4	25.1	28.2
Baking and frying fats	do	374.0	31.5	33.0	33.4	33.1	32.7	27.6	31.6	35.4	28.3	35.0	24.5	27.9
In inedible products	do	177.5	15.8	13.9	17.3	14.1	15.9	16.4	17.0	16.6	11.1	12.6	11.6	15.2
Stocks	do	43.1	43.1	50.6	45.1	51.8	47.5	48.0	48.4	52.9	45.1	45.4	45.3	43.0
<b>COCONUT OIL</b>														
Production:														
Refined oil <sup>1</sup>	Mil lb	536.9	42.1	39.0	46.4	30.6	42.7	49.1	50.8	45.2	48.3	51.7	40.4	50.6
Consumption:														
Crude in refining	do	559.5	44.1	40.5	48.4	31.9	44.7	51.2	53.5	46.4	50.2	53.7	42.4	52.5
In end products <sup>2</sup>	do	878.1	59.9	59.8	62.1	61.6	71.4	76.5	82.0	79.7	81.0	86.4	79.5	78.2
In edible products	do	252.2	18.6	20.1	21.3	20.5	20.7	22.3	23.1	22.7	23.8	21.6	17.2	20.3
In inedible products	do	625.9	41.3	39.7	40.8	41.1	50.7	54.2	58.9	57.0	57.2	64.8	62.3	57.9
Soap	do	92.3	6.9	8.0	8.7	7.6	8.0	6.3	8.3	7.9	6.8	8.9	7.2	7.7
Resins and plastics	do	2.3	0.5	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2
Stocks:														
Crude oil	do	102.4	102.4	101.6	128.6	87.0	53.8	74.1	97.0	114.1	104.9	108.7	113.1	112.6
Refined oil <sup>2</sup>	do	62.4	62.4	86.1	71.2	75.9	70.3	62.8	66.8	69.5	43.6	55.0	55.0	61.0

See footnotes at end of table.



Table 14. Production, Consumption, Shipments and Transfers, and Stocks of Major Crude and Refined Animal and Vegetable Fats and Oils: 1995—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>PALM KERNEL OIL</b>														
Production:														
Refined oil <sup>1</sup> . . . . .	Mil lb . . . . .	147.8	13.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	10.6	10.2	14.2
Consumption:														
Crude refining . . . . .	. . .do . . . . .	153.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	11.0	10.4	14.5
In end products <sup>2</sup> . . . . .	. . .do . . . . .	222.4	18.1	18.8	25.1	22.2	18.5	17.1	18.9	18.4	15.9	19.3	14.7	15.4
In edible products . . . . .	. . .do . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In inedible products . . . . .	. . .do . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks . . . . .	. . .do . . . . .	48.7	48.7	48.8	53.5	54.7	50.1	60.4	50.3	55.3	51.3	71.6	77.0	66.9
<b>TUNG OIL</b>														
Consumption:														
In end products <sup>2</sup> . . . . .	Mil lb . . . . .	20.2	2.1	2.3	2.6	2.5	2.7	1.9	1.4	1.4	1.4	1.0	0.5	0.4
In inedible products . . . . .	. . .do . . . . .	20.2	2.1	2.3	2.6	2.5	2.7	1.9	1.4	1.4	1.4	1.0	0.5	0.4
Paint and varnish . . . . .	. . .do . . . . .	1.7	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Resins and plastics . . . . .	. . .do . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other inedible products . . . . .	. . .do . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks . . . . .	. . .do . . . . .	2.0	2.0	2.0	2.2	2.4	2.0	2.1	2.4	2.6	2.6	3.2	1.1	1.5
<b>FISH OIL</b>														
Consumption:														
In end products <sup>2</sup> . . . . .	Mil lb . . . . .	5.5	0.2	0.3	0.3	0.2	1.3	0.3	0.3	1.1	0.3	0.3	0.6	0.3
In inedible products . . . . .	. . .do . . . . .	5.5	0.2	0.3	0.3	0.2	1.3	0.3	0.3	1.1	0.3	0.3	0.6	0.3
Resins and plastics . . . . .	. . .do . . . . .	(D)	(D)	(D)	(Z)	(Z)	(D)	(D)	(D)	(Z)	(D)	(D)	(Z)	(Z)
Lubricants . . . . .	. . .do . . . . .	(D)	(Z)	(Z)	(D)	(D)	(Z)	(Z)	(D)	(D)	(D)	(Z)	(Z)	(Z)
<b>OTHER OILS</b>														
Consumption:														
In end products <sup>2</sup> . . . . .	Mil. of . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In edible products . . . . .	. . .do . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In inedible products . . . . .	. . .do . . . . .	34.7	2.7	2.8	2.7	2.2	2.4	2.4	3.1	3.9	3.2	4.0	2.0	3.3
Stocks . . . . .	. . .do . . . . .	1.5	1.5	1.7	1.9	1.7	2.1	2.6	2.1	2.6	2.0	3.1	3.7	2.5

D Withheld to avoid disclosing data for individual companies. NA Not available. n.s.k. Not specified by kind. Z Less than one-half of one percent.

<sup>1</sup>Production of refined oils covers only once-refined oils. Degummed soybean oil is reported as crude oil.  
<sup>2</sup>Includes hydrogenated fats (vegetable and animal) and other fats and oils in process (for example, refined cottonseed including stocks of stearin).  
<sup>3</sup>Production of refined tall oil and distilled tall oil containing less than 90-percent free fatty acids, not including resin acids.  
<sup>4</sup>Calculated at end of the period.

Note: Detail may not add to total because of independent rounding.

Table 15. Net Receipts, Crushings, and Stocks of Cottonseed and Soybeans at Oil Mills by Selected States: 1995

[Thousands of short tons]

State	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>COTTONSEED</b>													
Receipts at mills .....	3,834.0	596.5	<sup>1</sup> 1,300.0	1,193.3	518.5	<sup>1</sup> 8.6	(17.7)	(27.7)	<sup>1</sup> 15.0	<sup>1</sup> (11.1)	<sup>1</sup> 59.1	28.9	<sup>1</sup> 170.6
Crushed or used .....	4,028.1	362.4	386.7	337.1	245.5	264.4	310.0	316.5	304.0	345.4	391.0	360.5	404.6
Stocks <sup>1</sup> .....	2,569.3	2,569.3	2,335.2	1,421.9	565.7	292.7	548.5	876.2	1,220.4	1,523.8	1,865.9	2,197.8	2,529.4
<b>Arkansas</b>													
Crushed or used .....	602.7	55.0	59.4	57.2	27.0	30.1	56.9	56.5	43.6	53.7	60.1	51.4	51.8
Stocks <sup>1</sup> .....	396.5	396.5	412.8	293.4	62.7	(D)	41.3	94.6	155.6	191.3	251.4	297.7	325.6
<b>Pacific and Mountain States</b>													
Crushed or used .....	401.2	37.2	44.9	20.6	(D)	(D)	(D)	30.8	37.4	48.4	43.4	40.3	51.1
Stocks <sup>1</sup> .....	288.2	288.2	215.4	61.2	6.6	27.5	49.1	65.8	108.8	160.5	217.1	259.5	301.4
<b>Mississippi</b>													
Crushed or used .....	516.4	40.9	52.0	49.3	(D)	(D)	51.5	48.5	47.9	28.0	50.0	44.6	48.6
Stocks <sup>1</sup> .....	303.5	303.5	333.1	318.9	92.2	(D)	63.0	108.0	149.7	198.9	231.9	279.1	317.2
<b>Texas</b>													
Crushed or used .....	1,498.6	141.1	138.2	128.1	132.5	110.4	99.5	111.0	90.5	125.4	139.9	130.7	151.3
Stocks <sup>1</sup> .....	975.7	975.7	793.0	389.5	322.9	201.1	265.9	395.2	520.2	614.0	734.5	859.4	984.9
<b>SOYBEAN</b>													
Receipts at mills .....	42,511.2	3,478.9	3,808.6	5,760.3	3,263.7	3,216.0	<sup>1</sup> 2,830.3	2,806.8	3,037.4	3,027.4	3,790.2	3,483.5	4,008.1
Crushed or used .....	42,165.2	3,753.0	3,702.3	3,618.4	3,222.7	3,284.9	3,251.4	3,167.5	3,425.2	3,583.0	3,841.7	3,495.3	3,819.8
Stocks <sup>1</sup> .....	3,599.1	3,599.1	3,873.2	3,766.9	1,625.0	1,584.0	1,652.9	2,074.0	2,434.7	2,822.5	3,378.1	3,429.6	3,441.4
<b>Arkansas</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	1,381.8	128.1	132.3	135.6	119.2	108.5	(D)	(D)	126.4	127.8	134.3	118.4	129.5
Stocks <sup>1</sup> .....	166.3	166.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Georgia</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Illinois</b>													
Receipts at mills .....	7,733.2	544.6	574.2	1,137.8	701.3	581.6	503.0	477.5	508.2	503.7	766.1	684.0	751.2
Crushed or used .....	7,694.5	676.1	667.2	676.9	599.1	571.5	631.6	583.2	573.9	646.8	705.3	662.2	700.7
Stocks <sup>1</sup> .....	587.9	587.9	719.4	812.4	351.5	249.3	239.2	367.8	473.5	539.2	682.3	621.5	599.7
<b>Indiana</b>													
Receipts at mills .....	2,303.8	(D)	(D)	427.2	306.9	157.1	(D)	(D)	138.4	167.9	216.7	(D)	(D)
Crushed or used .....	2,528.8	218.6	229.5	222.6	199.7	176.2	207.5	186.9	213.7	212.7	228.6	200.4	232.4
Stocks <sup>1</sup> .....	300.5	300.5	(D)	381.5	176.9	69.7	88.8	(D)	179.6	254.9	299.7	311.6	(D)
<b>Iowa</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Kansas</b>													
Receipts at mills .....	1,727.1	133.3	138.3	280.2	124.4	127.0	102.9	96.6	131.2	123.9	169.0	142.7	157.6
Crushed or used .....	1,817.0	164.8	159.7	165.0	123.4	148.6	123.0	130.1	166.0	160.5	169.9	154.5	151.5
Stocks <sup>1</sup> .....	98.7	98.7	130.2	151.6	36.4	35.4	57.0	77.1	110.6	145.4	182.0	182.9	194.7
<b>Minnesota</b>													
Receipts at mills .....	2,838.0	212.7	274.8	311.5	193.7	245.2	220.5	273.3	(D)	(D)	256.7	230.7	224.8
Crushed or used .....	2,909.8	263.0	253.4	247.0	250.8	254.8	196.2	235.3	238.6	242.1	260.6	229.8	238.2
Stocks <sup>1</sup> .....	117.1	117.1	167.4	146.0	81.5	138.6	148.2	123.9	85.9	(D)	96.6	100.5	99.6
<b>Missouri</b>													
Receipts at mills .....	2,648.7	193.3	196.6	355.9	184.2	205.7	161.8	191.8	(D)	(D)	230.8	194.6	369.2
Crushed or used .....	2,482.5	223.6	207.2	220.5	190.5	190.0	171.8	201.1	201.1	214.1	218.3	209.3	235.0
Stocks <sup>1</sup> .....	166.2	166.2	196.5	207.1	71.7	78.0	62.3	72.3	81.6	(D)	132.0	119.5	134.2
<b>Ohio</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	3,148.5	276.7	277.4	267.2	240.7	267.8	270.1	257.6	218.1	262.3	279.1	252.6	278.9
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	99.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>South Carolina</b>													
Receipts at mills .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks <sup>1</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Calculated at end of the period.

Table 16. Production and Stocks of Cottonseed and Soybeans by Selected States: 1995

State	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>COTTONSEED</b>														
Production:														
Crude oil	Mil lb	1,291.8	111.6	121.6	105.2	84.3	87.8	96.6	102.4	97.7	110.4	125.2	115.6	133.4
Cake and meal	Mil s tons	1,826.1	161.0	178.2	169.9	113.6	120.1	137.2	143.9	137.4	154.2	174.3	162.2	164.1
Hulls	do	1,080.7	96.3	99.3	82.2	60.6	71.4	91.1	83.8	81.4	94.6	110.7	100.1	109.2
Linters <sup>1</sup>	1,000 bales	1,089.9	(D)	(D)	96.6	(D)	(D)	(D)	(D)	(D)	90.0	99.5	99.8	103.1
Stocks:														
Crude oil	Mil lb	29.0	29.0	30.7	32.0	27.0	30.7	29.7	29.2	28.9	42.1	44.8	46.0	36.9
Cake and meal	Mil s tons	21.2	21.2	27.0	34.0	46.6	75.2	87.8	82.4	91.0	108.9	82.8	99.2	97.3
Hulls	do	20.7	20.7	14.6	24.3	30.8	43.2	50.4	42.1	41.2	55.6	42.7	46.2	45.8
Linters <sup>1</sup>	1,000 bales	(D)	(D)	(D)	(D)	21.2	(D)	30.9	(D)	40.7	56.6	54.1	51.2	42.3
<b>Arkansas</b>														
Production:														
Crude oil	Mil lb	188.0	16.4	18.3	18.7	10.5	8.9	17.3	17.3	13.8	16.3	18.8	15.4	16.5
Cake and meal	Mil s tons	259.8	23.7	26.2	24.8	11.4	13.6	24.3	23.7	18.1	23.2	25.7	22.4	22.7
Hulls	do	158.2	14.7	15.2	15.4	7.2	8.2	15.3	14.9	11.3	13.4	16.4	13.3	12.9
Linters <sup>1</sup>	1,000 bales	192.2	17.3	18.6	18.1	7.1	8.7	17.5	17.9	13.5	16.4	21.2	16.3	17.6
Stocks:														
Crude oil	Mil lb	4.2	4.2	7.1	6.4	5.6	6.7	(D)	2.3	(D)	4.5	4.3	2.9	3.0
Cake and meal	Mil s tons	2.2	2.2	2.8	2.8	2.9	4.8	5.6	3.4	5.3	6.8	4.3	7.4	3.4
Hulls	do	2.1	2.1	(D)	(D)	5.0	9.2	(D)	(D)	(D)	(D)	6.2	6.0	6.7
Linters <sup>1</sup>	1,000 bales	3.7	3.7	(D)	(D)	1.9	1.4	5.6	3.0	4.5	(D)	5.7	5.3	5.8
<b>California</b>														
Production:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Hulls	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Linters <sup>1</sup>	1,000 bales	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Hulls	do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Linters <sup>1</sup>	1,000 bales	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Mississippi</b>														
Production:														
Crude oil	Mil lb	154.6	11.9	15.0	16.3	(D)	(D)	14.8	14.8	14.9	8.1	14.9	13.4	14.5
Cake and meal	Mil s tons	222.2	18.2	22.9	22.9	(D)	(D)	21.5	20.5	20.3	11.4	21.0	19.0	20.5
Hulls	do	143.3	10.4	12.1	8.5	(D)	(D)	14.8	13.4	13.0	9.3	16.3	14.3	14.3
Linters <sup>1</sup>	1,000 bales	142.1	12.0	15.3	16.4	(D)	(D)	15.9	16.6	17.3	7.7	5.6	13.3	7.3
Stocks:														
Crude oil	Mil lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	8.9	8.9	11.9	19.6	19.6	(D)	20.1	19.1	29.2	38.4	31.5	42.4	52.7
Hulls	do	(D)	(D)	0.7	(D)	(D)	(D)	6.4	5.1	2.7	2.1	(D)	2.7	(D)
Linters <sup>1</sup>	1,000 bales	(D)	(D)	1.3	(D)	(D)	(D)	(D)	2.5	3.6	2.8	(D)	2.7	(D)
<b>Texas</b>														
Production:														
Crude oil	Mil lb	491.9	41.9	43.8	39.6	43.7	37.5	34.0	37.1	30.1	41.7	46.1	43.9	62.5
Cake and meal	Mil s tons	699.8	61.3	66.1	63.4	62.9	51.2	45.8	52.4	44.9	56.6	65.1	59.5	70.6
Hulls	do	392.3	37.0	33.3	31.9	31.9	28.1	26.4	29.8	23.0	34.8	38.4	37.1	40.6
Linters <sup>1</sup>	1,000 bales	383.4	37.5	37.4	31.6	35.1	27.0	23.1	27.1	23.6	31.6	36.5	34.2	38.7
Stocks:														
Crude oil	Mil lb	7.5	7.5	7.3	7.5	7.7	(D)	(D)	5.6	5.4	8.0	(D)	10.4	7.3
Cake and meal	Mil s tons	8.9	8.9	11.9	19.6	19.6	(D)	20.1	19.1	29.2	38.4	31.5	42.4	62.7
Hulls	do	5.0	5.0	(D)	8.1	10.3	9.9	7.9	6.3	4.3	16.7	10.4	13.4	12.1
Linters <sup>1</sup>	1,000 bales	13.5	13.5	(D)	10.8	9.3	5.4	7.2	9.6	9.2	14.4	12.7	12.4	10.6
<b>SOYBEAN</b>														
Production:														
Crude oil	Mil lb	15,636.2	1,381.6	1,359.7	1,354.2	1,208.4	1,228.1	1,204.7	1,183.2	1,275.3	1,333.4	1,419.4	1,286.6	1,399.6
Cake and meal	Mil s tons	33,423.7	2,980.8	2,956.2	2,900.8	2,542.3	2,596.4	2,571.7	2,498.3	2,704.1	2,836.4	3,056.0	2,765.7	3,015.0
Stocks:														
Crude oil	Mil lb	585.8	585.8	429.4	480.9	429.3	424.8	452.0	425.9	444.7	458.6	427.5	475.8	498.2
Cake and meal	Mil s tons	395.2	395.2	241.5	197.1	223.4	203.8	252.0	222.6	337.6	382.7	173.1	227.1	197.7
<b>Arkansas</b>														
Production:														
Crude oil	Mil lb	506.9	46.7	47.5	49.7	44.5	40.1	(D)	(D)	46.6	46.0	48.9	43.6	48.0
Cake and meal	Mil s tons	1,090.9	102.6	105.2	108.2	95.3	85.7	(D)	(D)	101.3	101.2	107.8	93.2	102.9

See footnotes at end of table.

Table 16. Production and Stocks of Cottonseed and Soybeans by Selected States: 1995—Con.

State	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>SOYBEAN—Con.</b>														
Arkansas—Con.														
Stocks:														
Crude oil	Mil lb.	24.7	24.7	25.0	17.9	22.7	20.8	(D)	14.7	20.5	19.1	18.6	20.9	22.7
Cake and meal	Mil s tons	(D)	(D)	(D)	13.8	11.8	(D)	8.9	4.3	(D)	(D)	6.4	(D)	7.2
<b>Georgia</b>														
Production:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Illinois</b>														
Production:														
Crude oil	Mil lb.	2,936.7	249.8	248.3	258.8	230.7	221.2	241.8	225.2	221.9	249.5	271.6	251.4	266.5
Cake and meal	Mil s tons	6,047.6	527.6	526.3	540.5	469.6	446.3	493.8	465.3	448.7	506.6	562.8	521.3	548.8
Stocks:														
Crude oil	Mil lb.	112.7	112.7	66.6	72.2	52.6	46.8	67.0	54.1	52.8	73.2	78.1	85.5	81.2
Cake and meal	Mil s tons	157.2	157.2	84.5	57.8	52.2	36.5	58.5	41.5	82.6	101.3	34.8	47.6	42.4
<b>Indiana</b>														
Production:														
Crude oil	Mil lb.	928.3	80.5	83.3	84.4	76.6	65.3	76.5	68.5	78.0	76.9	82.6	72.1	84.5
Cake and meal	Mil s tons	2,014.3	175.5	185.4	181.5	149.9	139.4	164.4	148.8	170.4	170.3	184.1	160.4	184.2
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	11.8	19.4	38.4	24.0	28.4	23.6	15.8	23.6	38.2
Cake and meal	Mil s tons	14.2	14.2	6.0	6.1	9.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	17.8
<b>Iowa</b>														
Production:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Kansas</b>														
Production:														
Crude oil	Mil lb.	680.4	61.1	67.9	61.3	47.5	57.6	42.4	49.8	63.1	61.2	64.1	67.9	56.5
Cake and meal	Mil s tons	1,447.4	134.0	130.0	132.2	98.3	117.1	97.5	103.0	131.6	127.9	135.2	121.6	119.0
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	28.6	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	15.6	15.6	6.5	6.2	9.0	11.6	7.7	7.0	11.4	17.8	(D)	7.4	6.2
<b>Minnesota</b>														
Production:														
Crude oil	Mil lb.	1,066.7	97.0	93.9	93.1	93.1	94.0	70.6	86.5	86.8	89.3	93.3	83.9	85.2
Cake and meal	Mil s tons	2,316.8	209.2	201.0	199.3	198.8	203.5	156.8	187.6	186.6	192.7	208.6	183.6	189.1
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	27.7	27.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	11.7	11.7	2.9	6.5	9.4	(D)	(D)	6.6	7.0	10.3	(D)	(D)	11.4
<b>Missouri</b>														
Production:														
Crude oil	Mil lb.	947.9	81.2	72.9	85.4	74.9	73.6	66.4	76.9	79.1	84.0	83.7	90.4	89.4
Cake and meal	Mil s tons	1,965.0	180.4	169.4	176.8	151.5	147.3	132.9	155.1	156.4	167.3	172.2	163.3	182.4
Stocks:														
Crude oil	Mil lb.	74.1	74.1	45.6	66.7	(D)	(D)	(D)	52.7	53.4	(D)	55.4	61.8	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>Ohio</b>														
Production:														
Crude oil	Mil lb.	1,110.2	96.9	97.3	94.2	87.1	95.4	95.4	91.2	76.0	93.4	97.8	88.6	96.9
Cake and meal	Mil s tons	2,537.9	223.4	223.2	218.1	192.5	218.9	216.5	206.3	175.9	213.1	225.3	202.4	222.3
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
<b>South Carolina</b>														
Production:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil s tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies.

¹Thousands of bales: Linter bales vary in weight according to kind of cut: First cut, 626 lb.; second cut, 634 lb.; and mill run, 622 lb.

Table 17. Production and Stocks of Fat and Oil Products: 1995

[Millions of pounds]

Product description	Total	Dec.	Nov.	Oct.	Sep.	Aug.	July	June	May	April	March	Feb.	Jan.
<b>Baking and frying fats:</b>													
Vegetable oil:													
Production .....	5,316.1	438.1	469.1	500.8	465.6	478.6	406.1	441.0	467.6	404.3	457.9	383.0	404.0
Stocks <sup>1</sup> .....	97.6	97.6	96.1	102.4	100.5	100.6	88.6	81.6	90.1	88.8	76.7	82.4	83.5
Animal fats or blends:													
Production .....	658.4	51.3	57.6	59.9	55.7	58.3	50.4	64.1	63.0	52.1	56.5	43.4	46.1
Stocks <sup>1</sup> .....	8.2	8.2	9.0	7.9	8.9	7.8	7.0	6.8	7.4	11.4	11.3	9.9	9.7
<b>Soybean salad and cooking oils:</b>													
Production .....	5,453.0	423.7	444.0	460.5	450.0	440.4	439.2	446.9	482.2	478.0	493.6	437.5	457.0
Stocks <sup>1</sup> .....	66.7	66.7	65.1	77.9	76.6	64.0	62.5	57.8	70.5	86.3	70.5	75.2	69.8
<b>Other salad and cooking oils:</b>													
Production .....	1,271.8	95.9	103.3	97.7	113.5	118.2	106.9	107.8	109.9	103.3	117.2	91.3	106.8
Stocks <sup>1</sup> .....	32.0	32.0	28.4	37.1	35.5	34.8	30.8	27.5	27.9	31.9	28.4	28.4	27.8
<b>Margarine:</b>													
Production .....	2,489.6	237.2	249.0	224.0	210.0	199.8	162.8	209.4	217.1	187.4	217.1	186.1	189.7
Stocks <sup>1</sup> .....	57.8	57.8	65.8	79.3	72.6	75.6	74.8	71.1	68.9	69.2	67.9	67.2	66.5
<b>Glycerine crude:</b>													
Production .....	340.7	25.8	24.5	28.2	23.9	29.5	30.7	31.6	26.9	30.3	32.7	28.3	28.3
Used in refining .....	362.2	28.6	25.3	27.7	26.9	31.9	31.8	31.5	29.4	33.4	34.1	29.8	31.8
Stocks <sup>1</sup> .....	38.7	38.7	36.4	29.3	24.6	24.4	24.3	22.8	19.3	24.0	24.0	23.7	30.4
<b>Glycerine refined:</b>													
Production .....	359.7	28.5	25.2	27.4	26.6	31.8	31.6	31.2	29.2	33.2	33.9	29.6	31.5
Stocks <sup>1</sup> .....	20.1	20.1	18.2	17.5	15.6	14.6	15.9	9.9	11.7	11.8	10.2	11.5	13.9
<b>Fatty acids:</b>													
Production .....	1,740.7	135.4	151.8	143.1	135.0	150.4	147.8	142.2	155.5	151.6	149.9	133.7	144.3
Stocks <sup>1</sup> .....	118.4	118.4	117.3	119.5	119.5	125.0	122.7	111.8	121.2	113.0	108.5	104.1	107.9
<b>Meat meal and tannage:</b>													
Production .....	6,101.8	489.1	523.9	539.1	509.0	541.2	482.0	538.1	547.5	445.5	517.3	451.6	517.5
Meat and bone meal ..	4,765.4	382.7	407.4	420.9	394.9	428.4	376.1	418.4	423.8	346.5	405.6	352.3	408.4
Dry rendered tannage ..	1,281.0	101.4	110.5	112.9	108.3	108.1	101.4	114.5	119.2	94.2	108.1	96.0	106.4
Meat and bone meal, n.s.k. ....	55.4	5.0	6.0	5.3	5.8	4.7	4.5	5.2	4.5	4.8	3.6	3.3	2.7
Stocks:													
Meat and bone meal ..	50.8	50.8	51.1	44.4	46.9	49.5	55.9	55.6	54.1	46.9	41.1	39.3	39.5
Dry rendered tannage ..	9.6	9.6	12.1	10.2	11.1	11.3	14.7	14.7	14.2	13.3	12.0	11.2	10.7
<b>All other products:</b>													
Production .....	2,081.9	165.9	181.2	164.5	158.8	175.6	161.5	183.8	194.6	162.3	199.0	163.6	171.1
Stocks <sup>1</sup> .....	17.4	17.4	17.8	19.9	17.6	16.2	20.9	23.0	21.5	23.0	24.0	16.4	18.2

<sup>1</sup>Revised by 5 percent or more from previously published data. n.s.k. Not specified by kind.

<sup>1</sup>Includes only stocks located at producer plants and warehouses. Information on stocks held by consumers is not collected.

Note: Detail may not add to total because of independent rounding.

Table 18a. Selected Fats and Oils Consumed in End Products: 1995

[Millions of pounds]

Product description	Total all fats and oils	Cotton-seed	Soybean	Corn	Peanut	Safflower seed	Coconut	Linseed	Sunflower	Tall	
<b>Total .....</b>	<b>21,157.4</b>	<b>523.5</b>	<b>12,354.0</b>	<b>(D)</b>	<b>110.0</b>	<b>57.7</b>	<b>878.1</b>	<b>112.8</b>	<b>171.6</b>	<b>1,135.7</b>	
Consumption in edible products .....	15,056.3	518.1	12,049.3	604.5	109.2	57.1	252.2	-	(D)	-	
Baking and frying fats .....	6,031.3	212.3	4,673.0	91.2	-	-	(D)	-	(D)	-	
Salad or cooking oil .....	6,744.4	251.4	5,472.7	428.9	(D)	(D)	-	-	(D)	-	
Margarine .....	1,846.9	(D)	1,684.0	(D)	-	-	-	-	-	-	
Other edible products .....	433.7	(D)	219.6	(D)	(D)	(D)	(D)	-	(D)	-	
Consumption in inedible products .....	6,101.1	5.4	304.7	(D)	0.8	0.6	625.9	112.8	(D)	1,135.7	
Soap .....	593.8	(D)	(D)	-	-	-	92.3	-	-	(D)	
Paint and varnish .....	102.8	-	47.0	-	-	(D)	(D)	30.2	(D)	(D)	
Feed .....	2,340.9	-	(D)	-	-	-	-	-	-	-	
Resins and plastics .....	210.7	(D)	122.4	-	-	(D)	2.3	51.4	(D)	16.0	
Lubricants .....	141.9	(D)	-	-	-	-	(D)	-	-	7.9	
Fatty acids .....	1,963.6	-	(D)	-	-	-	(D)	-	(D)	908.5	
Other inedible products .....	747.4	(D)	99.6	(D)	0.8	(D)	(D)	31.2	(D)	(D)	
	Castor	Tung	Palm	Palm kernel	Fish	Lard <sup>1</sup>	Edible tallow <sup>1</sup>	Inedible tallow	Veg-etable oil foots	Rape-seed	Other fats and oils
<b>Total .....</b>	<b>62.6</b>	<b>20.2</b>	<b>(D)</b>	<b>222.4</b>	<b>5.5</b>	<b>488.7</b>	<b>557.8</b>	<b>3,222.8</b>	<b>99.3</b>	<b>(D)</b>	<b>(D)</b>
Consumption in edible products .....	-	-	(D)	(D)	-	364.3	380.3	-	-	315.8	(D)
Baking and frying fats .....	-	-	(D)	-	-	325.0	374.0	-	-	(D)	-
Salad or cooking oil .....	-	-	-	-	-	-	-	-	-	226.7	(D)
Margarine .....	-	-	-	-	-	(D)	(D)	-	-	(D)	-
Other edible products .....	-	-	(D)	(D)	-	(D)	(D)	-	-	-	(D)
Consumption in inedible products .....	62.6	20.2	113.3	(D)	5.5	124.4	177.5	3,222.8	99.3	(D)	34.7
Soap .....	(D)	-	-	-	-	-	(D)	263.9	-	-	-
Paint and varnish .....	(D)	(D)	-	-	-	-	-	-	-	-	(D)
Feed .....	-	-	-	-	-	-	(D)	2,166.5	86.4	-	(D)
Resins and plastics .....	1.2	6.4	-	-	(D)	-	(D)	-	-	-	(D)
Lubricants .....	2.7	-	-	-	(D)	27.2	(D)	89.7	-	-	(D)
Fatty acids .....	-	-	-	-	-	-	(D)	656.9	-	-	(D)
Other inedible products .....	40.4	(D)	113.3	(D)	-	97.2	(D)	45.8	12.9	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Includes 40.8 million pounds of lard and edible tallow consumed in margarine for 1995.



Table 18b. Total Consumption in Edible and Inedible Products: 1995

[Millions of pounds]

Product description	Total	Dec.	Nov.	Oct.	Sep.	Aug.	July	June	May	April	March	Feb.	Jan.
Consumption in edible products <sup>1</sup> . . . . .	15,056.3	1,225.8	1,297.9	1,329.7	1,285.4	1,290.1	1,165.2	1,258.0	1,320.1	1,221.0	1,330.6	1,134.2	1,198.3
Baking or frying fats . . . . .	6,031.3	494.0	531.1	565.4	526.1	542.3	462.0	510.9	534.7	461.5	519.0	431.2	453.1
Salad or cooking oil . . . . .	6,744.4	521.0	549.1	560.0	564.5	561.6	547.0	555.4	593.5	583.4	612.8	530.3	565.8
Margarine . . . . .	1,846.9	174.0	182.6	163.8	155.7	148.2	119.8	155.8	159.1	138.5	163.3	140.8	145.3
Other edible products <sup>2</sup> . . . . .	433.7	36.8	35.1	40.5	39.1	38.0	36.4	35.9	32.8	37.6	35.5	31.9	34.1
Consumption in inedible products <sup>1</sup> . . . . .	6,101.1	477.8	503.8	521.6	491.1	524.8	487.4	519.4	527.6	501.1	531.8	504.1	510.6
Soap . . . . .	593.8	46.0	50.7	55.7	51.6	50.8	39.5	50.6	50.1	42.8	57.5	47.7	50.8
Paint and varnish . . . . .	102.8	6.2	6.4	8.2	8.0	8.6	6.1	9.2	9.1	9.4	11.4	8.8	11.4
Feed . . . . .	2,340.9	190.7	204.8	217.0	199.0	200.2	187.6	191.5	206.6	182.5	193.1	183.6	184.3
Resins and plastics . . . . .	210.7	15.2	14.6	18.6	16.2	19.9	17.5	17.9	19.1	19.5	19.8	15.8	16.6
Lubricants . . . . .	141.9	11.9	13.5	12.8	12.2	11.5	11.0	10.7	11.2	11.3	12.4	11.2	12.2
Fatty acids . . . . .	1,963.6	156.4	162.2	157.3	150.1	173.4	160.3	164.9	171.3	166.9	166.7	166.4	167.7
Other inedible products . . . . .	747.4	51.4	51.6	52.0	54.0	60.4	65.4	74.6	60.2	68.7	70.9	70.6	67.6

<sup>1</sup>Includes hydrogenated fats (vegetable and animal) and other fats and oils in process.<sup>2</sup>Includes confectioner's fats.

Note: Detail may not add to total because of independent rounding.

Table 19. Shipments, Exports, Imports, and Apparent Consumption of Animal and Vegetable Fats and Oils: 1995

[Quantity in millions of kilograms]

Product description	Manufacturers' production	Exports of domestic merchandise <sup>1</sup>	Percent exports to manufacturers' production	Imports for consumption <sup>2</sup>	Apparent consumption <sup>3</sup>
Cottonseed:					
Crude . . . . .	586.0	6.7	-	-	579.3
Refined . . . . .	443.9	106.6	0.2	-	337.3
Soybean:					
Crude . . . . .	7,092.6	729.4	0.1	2.2	6,365.4
Refined . . . . .	5,624.2	34.6	-	-	5,589.6
Corn oil (crude and refined) . . . . .	1,513.9	199.8	0.1	2.1	1,316.2
Peanut:					
Crude . . . . .	150.6	41.8	0.3	2.8	111.6
Refined . . . . .	52.1	6.0	-	0.4	46.5
Edible tallow . . . . .	696.9	126.7	0.2	8.2	578.4
Inedible tallow . . . . .	1,703.0	1,216.8	0.7	14.0	500.2

- Represents zero.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 146, *U.S. Imports for Consumption*.<sup>3</sup>Apparent consumption represents new domestic supply and is derived by subtracting exports from the sum of manufacturers' shipments plus imports.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

Table 20a. **Supply and Distribution of Total Cottonseed Oil, Soybean Oil, Corn Oil, and Palm Oil: 1995**

[Millions of kilograms]

Supply and distribution	Cottonseed oil	Soybean oil	Corn oil	Palm oil
Beginning stocks .....	114.7	1,058.3	90.2	34.9
Production (crude) .....	1,291.8	15,636.2	2,243.5	(X)
Imports .....	-	2.2	2.1	8.6
A. Total supply (+) .....	1,406.5	16,696.7	2,335.8	43.5
Ending stocks .....	94.9	1,408.9	196.4	43.0
Production of foots <sup>1</sup> .....	34.2	412.1	64.3	(D)
Exports <sup>2</sup> .....	113.3	764.0	199.8	2.4
Domestic consumption <sup>3</sup> .....	523.5	12,354.0	(D)	(D)
B. Total distribution (-) .....	765.9	14,939.0	(D)	(D)
Statistical discrepancy (A-B) <sup>4</sup> .....	640.6	1,757.7	(D)	(D)
Discrepancy as a percent of total supply .....	45.5	10.5	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. X Not applicable.

<sup>1</sup>Represents difference between crude oil consumed in refining and refined oil production.<sup>2</sup>Represents crude and once-refined oil only; excludes exports of fully refined oil.<sup>3</sup>Consumption of once-refined oils plus direct consumption of crude in end products.<sup>4</sup>Represents difference between several elements of supply and distribution due to timing of production and stock reported, goods in transit, etc.Table 20b. **Supply and Distribution of Selected Fats and Oils: 1995**

[Millions of kilograms]

Supply and distribution	Cottonseed		Soybean		Inedible tallow and grease
	Crude	Once-refined <sup>1</sup>	Crude	Once-refined <sup>1</sup>	
Beginning stocks .....	33.7	81.0	826.6	231.7	348.3
Production .....	1,291.8	978.7	15,636.2	12,399.1	6,745.3
Imports .....	-	-	2.2	-	14.0
A. Total supply (+) .....	1,325.5	1,059.7	16,465.0	12,630.8	7,107.6
Ending stocks .....	29.0	65.9	1,154.3	254.6	372.8
Exports .....	6.7	106.6	729.4	34.6	1,216.8
Reported domestic consumption .....	1,012.9	523.5	12,811.2	12,354.0	3,222.8
B. Total distribution (-) .....	1,048.6	696.0	14,694.9	12,643.2	4,812.4
Statistical discrepancy (A-B) <sup>2</sup> .....	276.9	363.7	1,770.1	(12.4)	2,295.2
Discrepancy as a percent of total supply .....	20.9	34.3	10.8	-0.1	32.3

- Represents zero.

<sup>1</sup>Includes once-refined oil consumed in making salad oil, some of which is subsequently exported.<sup>2</sup>Represents difference between several elements of supply and distribution due to timing of production and stock reports, goods in transit, etc.

## HISTORICAL NOTE

Previously, the surveys M20J (Fats and Oils—Oilseed Crushings) and M20K (Fats and Oils—Production, Consumption, and Stocks) were published separately on an annual basis. Prior to 1991, data were collected on a monthly crop year basis starting from September 1 and ending on August 31. In 1991, data were collected on a quarterly calendar year basis starting on January 1 and ending on December 31. Currently, data are collected on a monthly calendar year basis starting from January 1 and ending on December 31.

Data on fats and oils have been collected by the Bureau of the Census since 1919. Historical data may be obtained from the Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Nat Shelton 301-457-4643.

## Chapter 2.

# Textiles, Apparel, and Footwear

### GENERAL INFORMATION

This chapter of the Manufacturing Profiles document contains data for textiles, apparel, and footwear. In this chapter data are provided that cover most of the major segments of the textile industry. Data on selected finished products such as shirts, pants, carpet, or towels, and data on the various stages of production are also included.

The first "step" in making most textile products is to make yarn. Staple yarn is a bunch of fibers twisted and spun together into a long, continuous strand. Staple fiber is the term used to identify lengths of fibers which require spinning and twisting in the manufacture of yarn. Staple fibers are either natural fibers or manmade fibers cut to a specific length. The Current Industrial Report entitled MA22F, Yarn Production, collects data on the quantity of yarn produced.

There are many different spinning systems used to make yarn from staple fibers. The three most common spinning systems are the cotton system, the woolen system, and the worsted system. Data are compiled on fiber staples consumed on these three systems in the following Current Industrial Reports: M22P, Consumption on the Cotton System and Stocks, and MQ22D, Consumption on the Woolen and Worsted Systems.

The next phase of the textile manufacturing process is fabric formation. Most fabric is either woven or knitted. Current Industrial Reports have two series that collect these data, MQ22T, Broadwoven Fabrics, and MA22K, Knit Fabrics.

The last major phase is to cut the fabrics and then sew the pieces together into garments or other textile products. The Current Industrial Reports have a report entitled MQ23A, Apparel, which provides data for most major garment categories. The series also has data on MA22Q, Carpet and Rugs, MA23D, Gloves and Mittens, and the MQ23X, Sheets, Pillowcases, and Towels.

### EXPLANATION OF TERMS

**Blends and mixtures.** Fabrics made from more than one fiber are classified in the same way as other fabrics, i.e., according to whether the fabrics is chiefly cotton, wool, or manmade fiber. For example, a fabrics which is 55 percent cotton and 45 percent rayon is classified in the cotton section; a fabrics which is 40 percent cotton, 30 percent rayon, and 30 percent acetate is classified in the manmade

fibers section. Blends and mixtures which are by weight 50 percent natural fiber and 50 percent manmade fiber are classified as manmade fibers fabrics.

**Canton flannel.** Fabric woven with a four-harness warp face twill with heavy, soft filling yarn, and a medium count warp. A long nap is raised on the back.

**Commission.** Includes fabrics made from yarns owned by others.

**Cotton fabrics.** Includes fabrics that are wholly or chiefly, by weight, made of cotton.

**Cotton system.** This term originally referred to the equipment and machinery used in the process of manufacturing cotton fiber into yarn. The cotton spinning system is now also used extensively for manmade fiber staple and cotton/manmade fiber blends. It includes the general operations of opening, picking, carding, drawing, roving, and ring or open end spinning.

**Denim, all other.** Includes sport denims and all other denim not included in blue denim.

**Denim, blue.** Fabrics of 3- or 4-thread twill, including broken twill, warp faced (the warp yarns which are dyed blue and the weft yarns that are unbleached, bleached, dyed gray or colored a lighter shade of blue than that of the warp yarns).

#### Distribution Channels:

*Branded retail.* Sales of company brands including premium goods, drop (closeouts), and seconds sold to domestic consumers through all types of retailers.

*Private ticket retail.* Sales with retail identification with or without a manufacturer's corporate identification, but not with a manufacturer's brand name.

*Other (institutional).* Includes domestic distribution only and includes all Federal and state contract business commercial accounts (e.g., hotels) which are sold on a contract basis, and shipments to dealers who are involved in resale to the institutional trade.

**Duck.** Fabrics weighing more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics), with average yarn number of 15 or lower, napped or not; and a plain weave where the warp or filling or both, consist of multiple (folded) or cabled yarns.

**Filament yarn fabrics.** Includes all fabrics that contain 85 percent or more filament yarns.

**Flat fabrics.** Fabrics containing yarns having less than 12 turns per inch.

**For sale.** Products which are produced for the purpose of selling them to other companies.

### **Garments, Men's and Boys':**

*Tailored uniform suits.* Includes military, guards, band, police, fire, etc. Nontailored work-type suits such as delivery drivers and gas station attendants, are included under work clothing and washable service apparel.

*Trios.* Includes tailored suits with a matching and contrasting pair of pants.

*Tailored suit-type sport coats and jackets.* Includes only tailored separate suit-type coats, including tailored uniform and separate formal jackets.

*Overcoats and top coats.* Includes only tailored items, including uniform, reversible zipper-lined, fingertip, and wool water-repellent coats. Excludes raincoats.

*Raincoats.* Includes waterproof outercoats and water-repellent coats of cotton and manmade fibers, including uniforms. Wool and chiefly wool water-repellent coats and capes are included with overcoats and top coats.

*Heavy nontailored outer jackets, including uniform.* Includes lumberjacks and mackinaws. Excludes ski jackets.

*Light nontailored outer jackets, including uniform.* Includes golf-type zip front and snorkel jackets for outdoor outerwear.

*Separate vests, including uniform.* Includes vests that are not part of suits. Excludes sweater vests.

*Separate dress and sport trousers, including uniform.* Includes all pants except jeans, jean-cut casuals, dungarees, and work pants.

*Jeans and dungarees.* Includes all pants of jean-type construction which are made from denim fabrics. Excludes waistband overalls.

*Jean-cut casual slacks.* Includes all pants of jean-type construction made from fabrics other than denim, to be worn as sportswear (e.g., corduroy).

*Dress and business shirts.* Includes open front shirts designed primarily for dress or business wear, usually with a collar band. Sleeve length may or may not be sized in inches. Neck may be sized or feature a convertible collar and may include shirts sized S-M-L-XL.

*Work pants, excluding jeans and dungarees.* Includes utility trousers in a sturdy fabrics designed for hard wear, and work pants with closed-seam construction and a

waistband in the same fabrics as the shell. Also includes waistband overalls.

*Work shirts.* Includes open front or pullover shirts in a sturdy fabrics, designed for work and ease of movement.

*Washable service apparel.* Includes nontailored washable work apparel designed for use by waiters, gas station attendants, hospital staff, and other uniformed service workers.

*Overall and work jackets.* Includes utility jackets in a sturdy fabrics, designed for hard work and ease of movement, usually with closed seam construction.

*Team sports uniform.* Clothing designed to be worn as a uniform in team athletic games such as baseball, football, soccer, and hockey.

### **Garments, Women's, Misses', and Juniors':**

*Suits.* Includes tailored suits and uniforms but excludes pantsuits, jumpsuits, and coordinate suit sets that can be purchased as separate pieces, e.g., shirt, vest, blouse, and pants. Excludes nurses', maids', and medical uniforms which are included in washable service apparel.

*Pantsuits.* Includes jumpsuits and pantsuits sold as a unit. Excludes coordinates which are sold as separates.

*Dresses.* Includes suit type dresses, formal, work, house, etc.

*Coats and capes.* Includes toppers, car coats, suburban coats, plastics coats, reversible coats, and wool water repellent coats, but excludes raincoats.

*Jeans and dungarees.* Includes all pants of jean-type construction that are made from denim fabrics.

*Slacks, including jean-cut casuals.* Includes all pants other than denim jeans, e.g., tailored pants and pants with an elastic waistband.

**Ginghams, plaids, and checks.** Yarn-dyed fabrics composed of two or more colors in the warp and two or more colors in the filling.

**Girls'.** Includes subteen and teenage girls', usually sizes 7 through 16. Also includes little girls' sizes 4 through 6x and toddler girls' sizes 2T through 4T.

**High tenacity yarn fabrics.** Fabrics made from yarns having a tenacity, expressed in centinewtons per tex (cN/tex) greater than 60 cN/tex for multiple (folded) or cabled yarns of nylon or polyester; or 27 cN/tex for multiple (folded), cabled, or singles yarns of viscose rayon.

**Infants'.** Includes all garments, sizes 0-24 months.

**Kitchen accessories.** Includes items such as terry cloth aprons, pot holders, dish cloths, and toaster covers.

**Lawns, voiles, and batistes.** Fabrics of plain weave weighing not more than 5 ounces per square yard (chiefly cotton fabrics) consisting of more than 85 warp ends and filling picks per square inch, of square construction, and of average yarn number 41 or higher, napped or not napped.

**Little boys'.** Includes little boys' sizes 4 through 7 and toddler boys' sizes 2T through 4T.

**Manmade fiber fabrics.** Includes fabrics that are wholly or chiefly, by weight, made of manmade fibers.

**Men's and junior boys'.** Includes all men's sizes and junior boys', preps' (cadets), and students' sizes. These usually include boys', junior boys', and preps' sizes 6-20, chest 22-36 and waist 23-30; and students' sizes, chest 35-42 and waist 28-36.

**Oxfords.** Fabrics weighing not more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics), napped, or not. They are woven as a plain weave fabrics except that two or more warp ends are woven as one (taped warp). Oxford cloth is not to be classified as a plain weave fabrics.

**Plain weave fabrics.** A fabrics construction in which each yarn of the weft passes alternately over and under successive yarns of the warp and each yarn of the warp passes alternately over and under successive yarns of the weft.

**Poplin and broadcloth.** Fabrics of plain weave, not of square construction, whether or not napped. These fabrics do not include the following: fabrics weighing not more than 5.9 ounces per square yard, containing 85 or less warp ends and filling picks per square inch; or fabrics weighing more than 5.9 ounces per square yard, with average yarn number of 15 or lower.

**Print cloth.** Fabrics of plain weave, weighing not more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics) with average yarn numbers of 26-40; consisting of more than 85 single yarns per square inch; and with square construction, whether or not of yarns of different colors (yarn dyed), and whether or not napped.

**Sateens.** Fabrics woven with a satin weave, whether or not napped, in which the surface of the cloth consists almost entirely of warp or filling floats; that is, in the repeat of a weave pattern, each yarn of one system passes over several yarns of the other system before interlacing.

**Sheeting.** Fabrics of plain weave, whether or not napped, of the following types: (1) Fabrics weighing not more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics), of square construction containing more than 85 warp end and filling

picks per square inch, with average yarn number of 40 or lower, but not including print cloth; (2) Fabrics weighing more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics), but not including fabrics of which the warp or filling, or both, consist of multiple (folded) or cabled yarns, with average yarn number of 15 or lower or fabrics with average yarn number of 16 or higher, not of square construction.

**Sheet sets.** Packages of at least two sheets and one pillowcase which may contain additional sheets, pillowcases, or other items.

**Shirting, jacquard or dobby.** Fabrics weighing not more than 5 ounces per square yard (chiefly manmade fiber) or 5.9 ounces per square yard (chiefly cotton fiber), whether or not napped, or woven wholly or in part with jacquard or dobby attachment.

**Spun/filament combinations.** Includes fabrics that are combinations of spun and filament yarn where neither the spun or the filament yarns exceed 85 percent.

**Spun yarn fabrics.** Includes all fabrics that contain 85 percent or more spun yarns.

**Stripes.** Yarn-dyed fabrics composed of any number of colors in the warp but only one color in the filling.

**Table damask.** Fabrics, whether or not napped, woven wholly or in part with jacquard or dobby attachment and characterized by elaborate decorative designs, usually of floral patterns. The designs are reversible and are formed by warpface satin weave. Table damask is generally all white, although it is sometimes made with colored stripes or in solid pastel shades.

**Taped warp duck.** Fabrics weighing more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics), with average yarn number of 15 or lower, whether or not napped. The fabrics have a plain weave, except that two or more warp ends are woven as one (tape warp) whether or not they contain multiple (folded) or cabled yarns.

**Textured yarns.** Yarns produced by looping, bulking, curling, or twisting to enhance the volume or elasticity. They include yarns made by the false twist principle, the conventional twist method (twist and detwist procedures), the stuffer crimp method, and the filament loop method. Yarns that are thrown only are excluded.

**Tobacco, cheese, and bandage cloth.** Fabrics of plain weave, weighing not more than 5 ounces per square yard (chiefly manmade fabrics) or 5.9 ounces per square yard (chiefly cotton fabrics) consisting of 85 or less warp ends and filling picks per square inch, whether or not napped.

**Towel blanks.** Includes towels sold for further processing elsewhere. The figure reported for finished terry woven towels includes towel blanks; thus, both sets of data are not additive.

**Twill weave fabrics.** Fabrics in which the warp and filling yarns are interlaced in such a manner as to produce a diagonal or bias effect on the face of the fabrics.

### Types of Finish

*Solids (sheets).* Includes solid color sheets with attached hems or piping.

*Fancies.* Towels include jacquards, mixed color or pattern weaves, prints, embroidered, and attached or embellished hems. Excludes solid color, white dobby, and white cam. Sheets include prints and solids with embroidery, lace, or other embellishments, except attached hems or piping.

**Women's, misses' and junior's.** Includes all women's, misses' and junior's sizes.

**Woolen system.** Refers to the machinery and processes used to produce yarn from shorter wools and manmade fiber. The fibers are carded two or three times, and then go directly to the spinning frame. The system is used widely to produce both machine and hand knitting yarns, as well as weaving yarns where softness and bulk are desired.

**Wool fabrics.** Includes fabrics that are wholly or chiefly, by weight, made of wool, reprocessed wool, or reused wool.

**Wool, reprocessed wool, and reused wool.** These terms are used in accordance with the definitions in the Wool Products Labeling Act of 1939.

**Wool tops.** Figures on top production include only first combings and exclude recombed materials. Mixed tops are classified according to chief fiber content.

**Worsted system.** Refers to the machinery and process used to manufacture yarn from medium to long wools, alpaca, and mohair, as well as manmade fibers and blends. In the worsted system, the short fibers or noils are removed by combing in order to produce a compact yarn. The three basic worsted spinning systems are Bradford, French, and American.

**Yarn dyed.** Fabrics woven from yarns that have been dyed.

### TEXTILE MACHINERY IN PLACE

There are data for three basic types of machinery in this chapter: (1) cotton system spindles, (2) weaving machines, and (3) knitting machines. Generally, the information collected is the number of machines in place and the number of hours operated during the period.

"Machines in place" are the number of machines that are in producing positions at the end of the survey period, regardless of whether they are actually operating. In the case of spindles, the data are for the number of spindles in place, not the number of spinning frames.

Where it is available, the hours of operation refer to the number of hours the equipment was actually in use during the survey period.

The information shown on spinning equipment is for cotton system spinning machinery only. This type of information is not collected for woolen, worsted, or other spinning systems.

These data are compiled from information collected on our MA22K, Knit Fabrics Production; M22P, Consumption on the Cotton System and Stocks; and MQ22T, Broadwoven Fabrics, Gray, surveys.

Table A. Textile Machinery in Place: End of Year 1995

Product description	Machines in place
Total looms .....	78,107
Shuttle type looms .....	13,200
Single shuttle cam looms .....	9,505
Single shuttle dobby looms .....	2,018
Multiple shuttle box or head motion looms .....	1,021
Double shuttle pile and plush, and jacquard looms .....	656
Shuttleless looms and weaving machines .....	64,907
Single filling insertion capability .....	36,838
Air jet looms .....	16,038
Water jet looms .....	5,073
Projectile looms .....	12,829
Rapier looms .....	2,898
Multiple filling insertion capability .....	27,243
Air jet looms .....	(D)
Water jet looms .....	(D)
Projectile looms .....	8,231
Rapier looms .....	13,659
Pile and plush looms .....	826
Cotton system spindles in place .....	6,627
Active, spinning 100 percent cotton fibers .....	2,745
Ring spindles .....	2,238
Open end position (rotors) .....	507
Active, spinning 100 percent manmade fibers .....	1,019
Ring spindles .....	985
Open end position (rotors) .....	34
Active, spinning cotton/manmade blends .....	2,315
Ring spindles .....	1,941
Open end position (rotors) .....	374
Knitting machines .....	20,179
Warp knitting machines (over 12 inches in length) .....	4,978
Pile fabrics .....	1,859
Elastic fabrics .....	907
All other warp knit fabrics .....	2,212
Warp knitting machines (12 inches or less in length) .....	602
Elastic fabrics .....	(D)
All other warp knit fabrics .....	(D)
Weft knitting machines (over 12 inches in length) .....	15,201
Pile fabrics .....	497
Elastic fabrics .....	212
Single circular knit .....	9,972
Double knit and interlock .....	2,448
Rib, other than double knit and interlock .....	2,072
Weft knitting machines (12 inches or less in length) .....	418
Elastic fabrics .....	(D)
All other weft knit fabrics .....	(D)
Knitting garment lengths, trimmings, and collars .....	3,038
Knit garment lengths, made on sweater-strip, V-bed strip, and full-fashioned machines .....	1,579
Knit trimmings and collars .....	1,459

D Withheld to avoid disclosing data for individual companies.

Table B. Textile Machines in Place and Hours Operated by Quarter: 1995

[Looms in thousands of hours units. Spindles in millions of hours units]

Product description	Hours, year-to-date	First quarter		Second quarter		Third quarter		Fourth quarter	
		Machines	Hours	Machines	Hours	Machines	Hours	Machines	Hours
Total looms . . . . .	561,356	82,326	149,581	81,221	145,767	79,987	135,806	78,107	130,202
Shuttle type looms . . . . .	94,160	16,491	27,110	15,646	24,864	14,854	22,133	13,200	20,053
Single shuttle cam looms . . . . .	70,638	11,331	19,722	11,241	18,998	10,597	16,678	9,505	15,240
Single shuttle dobby looms . . . . .	11,898	2,368	3,551	2,238	2,979	2,189	2,829	2,018	2,539
Multiple shuttle box or head motion looms . . . . .	8,218	1,952	2,873	1,440	2,032	1,344	1,852	1,021	1,461
Double shuttle pile and plush, and jacquard looms . . . . .	3,406	840	964	727	855	724	774	656	813
Shuttleless looms and weaving machines . . . . .	467,196	65,835	122,471	65,575	120,903	65,133	113,673	64,907	110,149
Single filling insertion capability . . . . .	282,106	38,242	73,147	37,781	72,733	37,637	69,537	36,838	66,689
Air jet looms . . . . .	127,298	16,123	32,603	15,989	32,065	16,090	31,708	16,038	30,922
Water jet looms . . . . .	37,872	5,818	10,226	5,612	9,770	5,596	9,063	5,073	8,813
Projectile looms . . . . .	94,548	12,710	23,792	12,752	24,735	12,813	23,573	12,829	22,448
Rapier looms . . . . .	22,388	3,591	6,526	3,428	6,163	3,138	5,193	2,898	4,506
Multiple filling insertion capability . . . . .	180,760	26,709	48,213	26,922	47,058	26,664	43,072	27,243	42,417
Air jet looms . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Water jet looms . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Projectile looms . . . . .	58,492	8,361	16,010	8,278	15,437	8,167	13,930	8,231	13,115
Rapier looms . . . . .	82,034	13,144	21,493	13,611	21,219	13,541	19,759	13,659	19,563
Pile and plush looms . . . . .	4,330	884	1,111	872	1,112	832	1,064	826	1,043
Cotton system spindles in place . . . . .	43,755	7,252	12,228	7,128	11,529	6,796	10,495	6,627	9,503
Active, spinning 100 percent cotton fibers . . . . .	20,082	2,974	5,397	2,888	5,296	2,751	4,851	2,745	4,538
Ring spindles . . . . .	15,552	2,387	4,151	2,316	4,063	2,180	3,685	2,238	3,653
Open end position (rotors) . . . . .	4,530	587	1,246	572	1,233	571	1,166	507	885
Active, spinning 100 percent manmade fibers . . . . .	6,515	1,131	1,930	1,121	1,754	1,083	1,470	1,019	1,361
Ring spindles . . . . .	6,298	1,096	1,872	1,085	1,693	1,050	1,417	985	1,316
Open end position (rotors) . . . . .	217	35	58	36	61	33	53	34	45
Active, spinning cotton/manmade blends . . . . .	17,158	2,696	4,901	2,642	4,479	2,502	4,174	2,315	3,604
Ring spindles . . . . .	14,087	2,309	3,997	2,242	3,664	2,104	3,443	1,941	2,983
Open end position (rotors) . . . . .	3,071	387	904	400	815	398	731	374	621

D Withheld to avoid disclosing data for individual companies.

## STAPLE FIBER CONSUMPTION

Staple fiber is the term used to identify lengths of fiber that require spinning and twisting in the manufacture of yarn. They are either natural fibers or manufactured fibers that are cut to a specific length. They are generally an inch to an inch and a half long.

This chapter contains information on the amount of fiber consumed on the cotton, woolen, and worsted spinning systems. These terms refer to the group of machinery used in the manufacture of spun yarn. Producing a yarn is the first step in the manufacture of textile products.

Although the vast majority of staple fiber is spun on the three systems for which data is collected, there is a small amount of fiber consumed on other spinning systems. There is also a small amount of staple fiber consumed without spinning, in processes such as felting. Neither the amount spun on other systems nor the amount consumed by other means are included in these data.

Since these data are for staple fiber consumption, they should account for nearly all of the cotton fiber and wool (or other fine animal hair) consumed in domestic manufacturing, but only a portion of the manufactured fibers such as rayon, acrylic, nylon, and polyester.

In the case of cotton in addition to information on the consumption of cotton fiber, information is provided on the consumption of cotton linters. Linters are the short fibers that adhere to the cotton seeds after the first ginning. These are removed from the cotton seed by a separate process and are used in the manufacture of some types of rayon and by the chemicals and paper industries.

The data on fiber consumption are collected in two surveys: MQ22D, Consumption on the Woolen System and Worsted Combing and M22P, Consumption on the Cotton System and Stocks. In all cases, the information in this chapter is presented for the consumption of a specific type of fiber. Additional information is presented depending on the fiber.



## CONSUMPTION ON THE COTTON SYSTEM (M22P)

### INTRODUCTION

The tables in this subsection present data on the fiber consumed in cotton system spinning. Cotton system spinning is a process of manufacturing cotton fiber into yarn. It includes the general operations of opening, picking, carding, drawing, roving, and spinning. In making combed yarns, three steps are added. The system is also used extensively for spinning manufactured fibers and blends.

The data in these tables are collected using two questionnaires; the M22P, Consumption on the Cotton System and Stocks, and the M22N, Cotton and Raw Linters in Public Storage. Much of the data shown reflect the interest in cotton as an important agricultural and export commodity.

The fiber data in these tables are shown in two basic units of measure, running bales and pounds. Bale weights do vary, but they average slightly over 500 pounds for cotton and from 610 to 620 pounds for linters. Data for stocks in public storage are collected only in bales, and data for manufactured fiber are collected only in pounds.

### EXPLANATION OF TERMS

See explanation of terms at the beginning of this chapter.

**Table 1. Summary of Daily Averages of Cotton and Manmade Fibers Consumed on the Cotton System, Spindle Hours Operated, and End-of-Month Stocks, Including Stocks Held at Public Warehouses: 1995**

[Cotton in running bales. Manmade fibers in thousand pounds. Spindle hours operated in millions]

Month	Daily average consumption						Stocks		Daily average spindle hours operated <sup>1</sup>
	Cotton			Manmade fibers			Cotton <sup>2</sup>	Manmade fiber staple	
	Total	Upland	Long staple <sup>1</sup>	Total	Cellulosic	Non-cellulosic			
<b>NOT SEASONALLY ADJUSTED</b>									
December	32,024	31,714	310	4,366	691	3,675	10,311	63,521	129
November	38,070	37,667	403	5,091	783	4,308	9,653	70,147	156
October	39,887	39,465	422	5,451	813	4,638	6,203	66,236	158
September	40,808	40,411	397	5,783	762	5,021	2,463	68,373	161
August	41,459	41,103	356	5,938	784	5,154	1,826	72,078	170
July	34,035	33,728	307	5,039	675	4,364	2,458	80,179	153
June	39,978	39,521	457	6,238	819	5,419	3,222	89,428	173
May	42,098	41,692	406	6,458	822	5,636	4,247	95,508	176
April	42,326	41,873	453	6,363	890	5,473	5,482	96,251	184
March	43,880	43,428	452	6,633	853	5,780	6,732	94,835	187
February	43,896	43,441	455	6,533	873	5,660	8,685	93,565	193
January	42,899	42,512	387	6,215	859	5,356	10,780	98,167	184
<b>SEASONALLY ADJUSTED</b>									
December	38,226	37,916	310	5,369	781	4,588	5,461	63,521	160
November	38,453	38,050	403	5,284	761	4,523	5,836	70,147	158
October	38,066	37,644	422	5,230	753	4,477	6,091	66,236	149
September	39,760	39,363	397	5,679	753	4,926	6,405	68,373	161
August	39,202	38,846	356	5,629	740	4,889	6,125	72,078	163
July	37,517	37,210	307	5,578	803	4,775	6,075	80,179	170
June	39,695	39,238	457	6,049	819	5,230	5,927	89,428	171
May	40,608	40,202	406	6,096	787	5,309	5,702	95,508	165
April	41,533	41,080	453	6,124	842	5,282	5,717	96,251	178
March	42,841	42,389	452	6,401	846	5,555	5,700	94,835	181
February	42,571	42,116	455	6,340	867	5,473	6,137	93,565	184
January	42,940	42,553	387	6,324	868	5,456	6,849	98,167	184

<sup>1</sup>Long staple cotton includes American-Pima, Egyptian, Sudanese, and all other foreign cotton.

<sup>2</sup>Cotton in 1,000 running bales.

Table 2. Supply and Distribution of Cotton 1994/1995 Crop Year

Supply and distribution	Cotton
<b>SUPPLY</b>	
Stocks, July 30, 1994 .....	3,508,562
In consuming establishments .....	650,615
In public storage and at compresses .....	2,482,947
Elsewhere .....	375,000
Net imports .....	6,212
Total imports for consumption .....	6,212
Less: Re-exports .....	-
Ginnings, crop year of 1994 during crop year 1994 to 1995 .....	19,014,400
Total ginnings, crop year of 1994 .....	19,127,300
Less: Ginnings prior to August 1, 1994 .....	112,900
Ginnings, prior to August 1, 1995, crop year of 1994 .....	16,650
Aggregate supply .....	22,545,824
<b>DISTRIBUTION</b>	
Total exports .....	9,158,400
Consumption, July 31, 1994, to July 29, 1995 .....	10,749,713
Cotton lost or destroyed .....	20,000
Stocks, July 29, 1995 <sup>1</sup> .....	2,607,625
In consuming establishments .....	712,667
In public storage .....	1,744,958
Elsewhere (partially estimated) <sup>2</sup> .....	150,000
Aggregate distribution .....	22,535,738
Excess of reported supply over distribution .....	10,086

- Represents zero.

<sup>1</sup>Cotton "carry-over" in the United States as of August 1, 1995, is 2,607,625 bales. Linters are not included in this "carry-over." In addition to stocks of cotton in warehouses and in consuming establishments, these data include a partially estimated count of cotton held elsewhere.

<sup>2</sup>Includes cotton in transit to ports, warehouses, consuming establishments, and Canada; on docks, on shipboard but not cleared, and other port stocks not in warehouses or consuming establishments; and on farms, in merchant sheds, and in other private storage.

Table 3. Consumption of Domestic and Foreign Cotton by Staple Length by Month: 1995

Month	American upland							Extra long staple and foreign
	Total	Total	Staples less than 1"	1" and 1-1/32" staples	1-1/16" and 1-3/32" staples	Staples larger than 1-3/32"	Staples not specified by kind	
Number of running bales								
<b>Total, year ending December 31, 1995.....</b>	<b>10,410,662</b>	<b>10,306,468</b>	<b>172,227</b>	<b>2,018,357</b>	<b>7,722,951</b>	<b>392,933</b>	-	<b>104,194</b>
December.....	800,605	792,859	10,523	151,316	603,917	27,103	-	7,746
November.....	761,391	753,331	11,745	150,180	565,587	25,819	-	8,060
October.....	797,739	789,303	14,577	149,693	597,418	27,615	-	8,436
September.....	1,020,212	1,010,275	16,341	202,541	753,187	38,206	-	9,937
August.....	829,188	822,059	12,939	164,575	613,397	31,148	-	7,129
July.....	680,704	674,561	11,327	147,523	485,246	30,465	-	6,143
June.....	999,461	988,030	16,775	194,307	736,948	40,000	-	11,431
May.....	841,962	833,840	13,763	163,458	625,313	31,306	-	8,122
April.....	846,518	837,464	14,903	160,602	629,904	32,055	-	9,054
March.....	1,096,985	1,085,693	17,747	206,615	819,016	42,315	-	11,292
February.....	877,917	868,821	16,981	163,582	655,234	33,024	-	9,096
January.....	857,980	850,232	14,606	163,965	637,784	33,877	-	7,748
1,000 pounds								
<b>Total, year ending December 31, 1995.....</b>	<b>5,183,462</b>	<b>5,130,999</b>	<b>85,994</b>	<b>1,003,248</b>	<b>3,845,650</b>	<b>196,107</b>	-	<b>52,463</b>
December.....	396,492	392,611	5,242	74,884	298,992	13,493	-	3,881
November.....	377,444	373,420	5,834	74,396	280,359	12,831	-	4,024
October.....	396,302	392,080	7,263	74,164	297,050	13,603	-	4,222
September.....	508,445	503,448	8,223	100,656	375,508	19,061	-	4,997
August.....	414,045	410,466	6,530	81,793	306,609	15,534	-	3,579
July.....	339,824	336,732	5,645	73,458	242,440	15,189	-	3,092
June.....	499,067	493,320	8,348	96,894	368,061	20,017	-	5,747
May.....	419,819	415,740	6,876	81,410	311,824	15,630	-	4,079
April.....	421,836	417,176	7,443	79,938	313,782	16,013	-	4,660
March.....	546,510	540,844	8,841	102,691	407,950	21,362	-	5,666
February.....	436,769	432,130	8,479	81,258	325,899	16,494	-	4,639
January.....	426,909	423,032	7,270	81,706	317,176	16,880	-	3,877

- Represents zero.

Table 4. Consumption of Domestic and Foreign Cotton by State: 1995

[Domestic cotton in running bales. Foreign cotton in equivalent 480-pound bales]

Month	Domestic and foreign total	Cotton growing States									All other States
		Total	Alabama	Georgia	North Carolina	South Carolina	Tennessee	Texas	Virginia	Other	
Number of running bales											
<b>Total, year ending December 31, 1995 ...</b>	<b>10,410,662</b>	<b>10,385,994</b>	<b>1,363,907</b>	<b>1,877,479</b>	<b>4,564,394</b>	<b>1,897,875</b>	<b>124,498</b>	<b>158,601</b>	<b>197,071</b>	<b>202,169</b>	<b>24,668</b>
December .....	800,605	798,946	102,973	149,504	349,746	146,887	11,997	11,978	14,494	11,367	1,659
November .....	761,391	759,348	93,140	142,431	330,371	142,839	9,895	13,720	14,193	12,759	2,043
October .....	797,739	795,262	90,730	143,171	356,945	149,988	10,593	13,621	16,199	14,015	2,477
September .....	1,020,212	1,017,871	136,254	188,777	446,186	177,143	14,484	15,740	19,553	19,734	2,341
August .....	829,188	827,736	111,545	151,336	358,314	150,059	11,600	12,213	15,825	16,844	1,452
July .....	680,704	679,112	82,149	127,445	296,205	125,955	7,417	12,197	15,102	12,642	1,592
June .....	999,461	996,697	134,720	177,792	436,661	181,675	11,313	14,877	19,052	20,607	2,764
May .....	841,962	840,083	108,403	149,625	371,209	154,680	10,068	11,909	17,312	16,877	1,879
April .....	846,518	843,741	110,898	147,879	377,816	151,415	9,173	14,028	15,298	17,234	2,777
March .....	1,096,985	1,095,200	152,459	193,921	480,416	199,660	11,303	15,263	18,972	23,206	1,785
February .....	877,917	874,630	120,399	154,345	382,692	161,635	8,733	12,565	15,618	18,643	3,287
January .....	857,980	857,368	120,237	151,253	377,833	155,939	7,922	10,490	15,453	18,241	612
1,000 pounds											
<b>Total, year ending December 31, 1995 ...</b>	<b>5,183,462</b>	<b>5,171,121</b>	<b>677,120</b>	<b>934,198</b>	<b>2,275,313</b>	<b>944,820</b>	<b>62,282</b>	<b>78,845</b>	<b>98,069</b>	<b>100,474</b>	<b>12,341</b>
December .....	396,492	395,662	50,792	73,874	173,619	72,732	5,982	5,892	7,171	5,600	830
November .....	377,444	376,423	45,936	70,539	164,216	70,635	4,958	6,814	7,026	6,299	1,021
October .....	396,302	395,063	44,863	70,954	177,750	74,435	5,308	6,756	8,049	6,948	1,239
September .....	508,445	507,274	67,764	93,967	222,621	88,246	7,259	7,851	9,740	9,826	1,171
August .....	414,045	413,319	55,604	75,350	179,304	74,830	5,809	6,110	7,899	8,413	726
July .....	339,824	339,027	40,996	63,674	147,892	62,774	3,720	6,124	7,523	6,324	797
June .....	499,067	497,684	67,138	89,100	217,848	90,750	5,649	7,411	9,487	10,301	1,383
May .....	419,819	418,879	53,961	74,600	185,216	77,136	5,070	5,876	8,626	8,394	940
April .....	421,836	420,447	55,082	73,655	188,417	75,567	4,580	6,965	7,623	8,558	1,389
March .....	546,510	545,616	75,654	96,544	239,654	99,575	5,635	7,580	9,450	11,524	894
February .....	436,769	435,125	59,748	76,591	190,633	80,505	4,358	6,248	7,790	9,252	1,644
January .....	426,909	426,602	59,582	75,350	188,143	77,635	3,954	5,218	7,685	9,035	307

**Table 5. Stocks of Cotton Held in Consuming Establishments and in Public Warehouses: 1995**

[Domestic cotton in running bales. Foreign cotton in equivalent 480-pound bales]

Month	Total <sup>1</sup>	In consuming establishments			In warehouses and compresses		
		Total	American upland	Other cotton <sup>2</sup>	Total	American upland	Other cotton <sup>2</sup>
December	10,311,401	551,675	549,122	2,553	9,759,726	9,618,494	141,232
November	9,652,566	526,619	524,017	2,602	9,125,947	9,003,445	122,502
October	6,202,835	522,780	519,303	3,477	5,680,055	5,637,475	42,580
September	2,462,688	531,937	527,069	4,868	1,930,751	1,905,400	25,351
August	1,826,331	614,513	609,106	5,407	1,211,818	1,175,729	36,089
July	2,457,625	712,667	706,975	5,692	1,744,958	1,694,548	50,410
June	3,221,970	731,307	725,521	5,786	2,490,663	2,425,106	65,557
May	4,246,620	757,298	751,162	6,136	3,489,322	3,401,575	87,747
April	5,482,435	766,954	761,098	5,856	4,715,481	4,593,332	122,149
March	6,732,102	708,232	702,964	5,268	6,023,870	5,874,526	149,344
February	8,685,171	665,511	660,513	4,998	8,019,660	7,815,809	203,851
January	10,780,035	639,582	634,086	5,496	10,140,453	9,872,908	267,545

<sup>1</sup>Excludes cotton in transit to ports, warehouses, consuming establishments, and Canada; on docks, on shipboard but not cleared, and other port stocks not in warehouses or consuming establishments; and on farms, in merchant sheds, and in other private storage.

<sup>2</sup>Includes foreign cotton, American-Pima, Sea Island, and other domestic cotton.

**Table 6. Stocks of Cotton Held by Consuming Establishments by State: 1995**

[Domestic cotton in running bales. Foreign cotton in equivalent 480-pound bales]

Month	Domestic and foreign total	Cotton growing States									All other States
		Total	Alabama	Georgia	North Carolina	South Carolina	Tennessee	Texas	Virginia	Other	
Number of running bales											
December	551,675	550,590	153,991	71,980	192,362	98,265	6,208	(D)	(D)	6,373	1,085
November	526,619	525,346	153,858	66,802	175,593	95,842	5,200	(D)	(D)	6,309	1,273
October	522,780	521,483	138,168	77,748	183,107	84,228	6,041	(D)	(D)	7,605	1,297
September	531,937	530,524	124,986	86,973	178,857	92,545	8,565	(D)	(D)	8,255	1,413
August	614,513	613,481	155,764	94,714	213,085	103,895	10,729	(D)	(D)	10,494	1,032
July	712,667	711,422	149,150	111,694	276,634	120,759	12,557	(D)	(D)	11,465	1,245
June	731,307	730,218	147,555	113,030	281,582	132,514	12,762	(D)	(D)	11,925	1,089
May	757,298	755,791	171,280	112,081	287,713	133,258	12,829	(D)	(D)	11,319	1,507
April	766,954	765,766	162,906	113,958	297,609	139,704	11,248	(D)	(D)	10,992	1,188
March	708,232	707,026	153,817	98,773	272,398	137,788	9,496	(D)	(D)	9,552	1,206
February	665,511	664,465	159,722	86,825	250,055	128,036	7,768	(D)	(D)	8,928	1,046
January	639,582	638,978	155,732	78,612	239,435	122,679	8,912	(D)	(D)	8,128	604
1,000 pounds											
December	273,332	272,790	75,756	35,769	95,783	48,672	3,097	(D)	(D)	3,144	542
November	260,787	260,150	75,808	33,154	87,387	47,413	2,587	(D)	(D)	3,116	637
October	259,171	258,523	68,075	38,508	91,231	41,712	3,029	(D)	(D)	3,758	648
September	264,334	263,628	61,916	43,135	89,169	45,978	4,272	(D)	(D)	4,108	706
August	306,046	305,530	77,463	47,081	106,399	51,653	5,345	(D)	(D)	5,242	516
July	354,547	353,925	74,138	55,632	138,158	59,523	6,250	(D)	(D)	5,739	622
June	364,473	363,928	73,307	56,335	140,643	65,945	6,353	(D)	(D)	5,974	545
May	377,656	376,902	85,380	55,828	143,704	66,319	6,378	(D)	(D)	5,654	754
April	381,215	380,621	80,757	56,780	147,918	69,568	5,581	(D)	(D)	5,493	594
March	353,155	352,552	76,400	49,563	136,050	68,603	4,718	(D)	(D)	4,773	603
February	331,487	330,964	79,210	43,307	125,132	63,536	3,857	(D)	(D)	4,454	523
January	318,130	317,828	77,176	39,157	119,451	60,935	4,428	(D)	(D)	4,053	302

D Withheld to avoid disclosing data for individual companies.

Table 7. Stocks of Cotton Held in Public Storage and at Compresses by State: 1995

States	December	November	October	Sep- tember	August	July	June	May	April	March	February	January
<b>Total . . . . .</b>	<b>9,759,726</b>	<b>9,125,947</b>	<b>5,680,055</b>	<b>1,930,751</b>	<b>1,211,818</b>	<b>1,744,958</b>	<b>2,490,663</b>	<b>3,489,322</b>	<b>4,715,481</b>	<b>6,023,870</b>	<b>8,019,660</b>	<b>10,140,453</b>
Alabama . . . . .	297,977	301,075	250,126	75,759	41,616	86,061	129,824	187,168	263,664	342,512	427,430	516,735
Arizona and New Mexico . . . . .	533,873	395,051	194,921	45,059	46,015	60,121	87,122	116,318	159,185	219,495	386,157	528,736
Arkansas . . . . .	855,590	954,042	746,494	129,411	69,178	129,741	189,419	274,224	386,470	521,028	710,184	894,377
California . . . . .	1,300,254	1,151,808	439,295	107,393	159,259	279,627	388,927	528,084	680,363	853,644	1,103,738	1,375,464
Florida and Georgia . . . . .	791,936	687,820	437,587	166,507	98,378	161,581	241,987	327,506	444,179	564,395	686,392	769,190
Louisiana . . . . .	958,756	1,121,380	929,963	305,531	39,889	97,711	162,758	268,562	410,932	580,111	795,442	1,003,827
Mississippi . . . . .	1,107,360	1,274,069	1,211,248	448,487	95,134	217,663	333,297	490,692	684,688	864,400	1,073,470	1,279,701
Missouri . . . . .	259,349	267,262	190,372	24,040	8,050	16,244	27,150	47,060	70,204	103,049	149,041	198,058
North Carolina . . . . .	395,313	340,249	154,567	53,769	111,558	177,290	220,120	259,529	290,289	291,434	359,026	451,358
Oklahoma and Texas . . . . .	2,493,484	1,877,856	600,010	442,923	333,763	190,946	269,835	419,955	641,251	917,605	1,448,073	2,170,735
South Carolina . . . . .	147,129	130,997	95,487	38,018	45,010	76,445	93,318	110,572	118,139	128,510	145,065	156,315
Tennessee . . . . .	618,705	624,338	429,985	93,854	163,968	251,528	346,906	459,652	566,117	637,687	735,642	795,957
Other States . . . . .	-	-	-	-	-	-	-	-	-	-	-	-

- Represents zero.

Table 8. Consumption of Manmade Fiber Staple: 1995

[Thousands of pounds]

Month	Total	Rayon and/or acetate	Total noncellulosic	Nylon	Acrylic and modacrylic	Polyester	Other manmade fiber staple
<b>Total, year ending December 31, 1995 . . . . .</b>	<b>1,517,268</b>	<b>208,086</b>	<b>1,309,182</b>	<b>36,072</b>	<b>106,200</b>	<b>1,160,350</b>	<b>6,560</b>
December . . . . .	109,164	17,282	91,882	2,605	6,732	82,033	512
November . . . . .	101,817	15,650	86,167	2,912	6,259	76,595	401
October . . . . .	109,026	16,261	92,765	2,671	6,829	82,679	586
September . . . . .	144,576	19,041	125,535	3,357	8,413	113,112	653
August . . . . .	118,741	15,671	103,070	3,049	7,970	91,374	677
July . . . . .	100,794	13,507	87,287	2,386	6,847	77,908	146
June . . . . .	155,930	20,465	135,465	3,216	11,812	119,527	910
May . . . . .	129,145	16,431	112,714	2,967	10,509	98,709	529
April . . . . .	127,269	17,802	109,467	2,301	9,999	96,683	484
March . . . . .	165,836	21,325	144,511	4,555	12,156	127,138	662
February . . . . .	130,663	17,465	113,198	2,756	9,886	99,955	601
January . . . . .	124,307	17,186	107,121	3,297	8,788	94,637	399

Table 9. Stocks of Manmade Fiber Staple: 1995

[Thousands of pounds]

Month	Total <sup>1</sup>	Rayon and/or acetate	Total noncellulosic	Nylon	Acrylic and modacrylic	Polyester	Other manmade fiber staple
December . . . . .	63,521	11,085	52,436	392	4,212	47,437	395
November . . . . .	70,147	11,260	58,887	847	4,798	52,673	569
October . . . . .	66,236	12,805	53,431	343	4,773	47,911	404
September . . . . .	68,373	12,865	55,508	688	4,883	49,609	328
August . . . . .	72,078	13,056	59,022	304	4,711	53,631	376
July . . . . .	80,179	16,493	63,686	421	4,829	57,765	671
June . . . . .	89,428	15,697	73,731	397	5,802	67,037	495
May . . . . .	95,508	15,191	80,317	927	7,289	71,753	348
April . . . . .	96,251	16,417	79,834	433	8,261	70,849	291
March . . . . .	94,835	14,989	79,846	877	7,275	71,308	386
February . . . . .	93,565	16,547	77,018	891	5,973	69,945	209
January . . . . .	98,167	16,952	81,215	1,021	5,963	74,016	215

<sup>1</sup>Stocks are only for mills with cotton system spindles.

Table 10. Cotton System Spindles in Place and Active by Type of Fiber Spun: 1995

[In thousands]

State and type	December	November	October	September	August	July	June	May	April	March	February	January
Spindles in place:												
United States .....	6,627	6,737	6,760	6,796	6,845	6,965	7,128	7,157	7,238	7,252	7,274	7,262
By State:												
Alabama .....	591	593	626	624	623	624	692	692	698	698	698	698
Georgia .....	619	602	607	622	624	616	640	643	646	647	648	647
North Carolina .....	2,567	2,657	2,662	2,676	2,680	2,690	2,730	2,750	2,829	2,848	2,860	2,831
South Carolina .....	2,337	2,356	2,344	2,347	2,393	2,508	2,527	2,535	2,533	2,529	2,535	2,564
Tennessee .....	257	258	256	258	255	255	258	257	256	256	258	256
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	169	169	163	164	166	169	178	178	173	170	174	164
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	5,680	5,775	5,789	5,768	5,817	5,939	6,104	6,136	6,217	6,229	6,257	6,256
Open-end position (i.e., rotors) .....	947	962	971	1,028	1,028	1,026	1,024	1,021	1,021	1,023	1,017	1,006
Active, 100 percent cotton:												
United States .....	2,745	2,741	2,783	2,751	2,763	2,770	2,888	2,922	2,954	2,974	2,972	2,942
By State:												
Alabama .....	316	297	340	317	320	341	390	391	407	413	410	405
Georgia .....	274	266	270	271	272	269	279	281	280	281	281	280
North Carolina .....	1,158	1,159	1,164	1,148	1,142	1,134	1,183	1,208	1,234	1,239	1,241	1,222
South Carolina .....	725	734	726	729	742	740	736	742	747	758	757	758
Tennessee .....	177	179	175	173	169	173	180	176	168	173	172	166
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	50	48	51	55	58	56	62	63	58	51	51	55
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	2,238	2,228	2,261	2,180	2,193	2,192	2,316	2,344	2,378	2,387	2,390	2,370
Open-end position (i.e., rotors) .....	507	513	522	571	570	578	572	578	576	587	582	572
Active, 100 percent manmade fibers:												
United States .....	1,019	1,091	1,105	1,083	1,090	1,127	1,121	1,121	1,110	1,131	1,118	1,160
By State:												
Alabama .....	21	22	23	25	26	24	24	24	24	24	24	24
Georgia .....	73	72	72	73	73	73	73	73	73	73	73	72
North Carolina .....	620	664	677	669	661	684	689	680	697	722	736	742
South Carolina .....	285	313	313	296	310	326	315	324	296	291	265	301
Tennessee .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	985	1,059	1,074	1,050	1,055	1,090	1,085	1,085	1,076	1,096	1,084	1,127
Open-end position (i.e., rotors) .....	34	32	31	33	35	37	36	36	34	35	34	33
Active, other fibers and blends:												
United States .....	2,315	2,388	2,422	2,502	2,547	2,599	2,642	2,647	2,677	2,696	2,760	2,773
By State:												
Alabama .....	228	242	242	251	251	237	242	250	240	242	245	250
Georgia .....	221	211	216	233	235	229	245	248	254	253	254	254
North Carolina .....	626	674	676	707	712	722	729	733	748	757	779	777
South Carolina .....	1,148	1,150	1,174	1,186	1,223	1,268	1,286	1,276	1,292	1,291	1,324	1,344
Tennessee .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	1,941	1,997	2,031	2,104	2,146	2,202	2,242	2,253	2,279	2,309	2,373	2,388
Open-end position (i.e., rotors) .....	374	391	391	398	401	397	400	394	398	387	387	385

D Withheld to avoid disclosing data for individual companies.

Table 11. Cotton System Spindle Hours by Type of Fiber Spun: 1995

[In thousands]

State and type	December	November	October	September	August	July	June	May	April	March	February	January
Spindle hours:												
United States .....	3,237	3,113	3,153	4,033	3,394	3,068	4,337	3,519	3,673	4,675	3,866	3,687
By State:												
Alabama .....	296	287	275	384	312	320	413	359	346	457	379	364
Georgia .....	361	287	288	400	320	275	409	320	326	413	334	317
North Carolina .....	1,212	1,234	1,266	1,606	1,344	1,108	1,730	1,390	1,521	1,965	1,652	1,534
South Carolina .....	1,177	1,100	1,109	1,372	1,168	1,063	1,476	1,198	1,238	1,539	1,266	1,244
Tennessee .....	96	108	114	149	133	197	175	145	138	176	140	130
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	56	45	52	58	53	51	73	60	53	58	41	47
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	2,754	2,573	2,625	3,262	2,742	2,541	3,574	2,874	2,972	3,833	3,169	3,018
Open-end position (i.e., rotors) .....	483	540	528	771	652	527	763	645	701	842	697	669
100 percent cotton:												
United States .....	1,548	1,489	1,501	1,843	1,556	1,452	1,967	1,655	1,674	2,056	1,697	1,644
By State:												
Alabama .....	143	154	138	177	157	190	223	202	197	256	221	204
Georgia .....	199	154	147	198	155	135	196	156	157	190	157	146
North Carolina .....	655	647	665	802	653	536	830	701	747	889	735	716
South Carolina .....	420	399	396	482	428	361	519	432	424	537	446	438
Tennessee .....	72	84	91	107	89	168	121	100	91	119	94	82
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	28	21	31	35	29	23	36	31	26	23	12	25
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	1,281	1,171	1,201	1,388	1,162	1,135	1,523	1,271	1,269	1,590	1,298	1,263
Open-end position (i.e., rotors) .....	267	318	300	455	394	317	444	384	405	466	399	381
100 percent manmade fibers:												
United States .....	467	443	451	571	470	429	639	550	565	738	608	584
By State:												
Alabama .....	5	5	7	9	6	6	8	9	7	11	8	9
Georgia .....	40	32	34	44	37	35	52	41	42	55	42	41
North Carolina .....	267	266	277	344	285	253	394	338	345	477	404	382
South Carolina .....	142	130	125	163	131	124	172	152	159	183	142	142
Tennessee .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	450	428	438	551	452	414	615	531	547	715	590	567
Open-end position (i.e., rotors) .....	17	15	13	20	18	15	24	19	18	23	18	17
Other fibers and blends:												
United States .....	1,222	1,181	1,201	1,619	1,368	1,187	1,731	1,314	1,434	1,881	1,561	1,459
By State:												
Alabama .....	148	128	130	198	149	124	182	148	142	190	150	151
Georgia .....	122	101	107	158	128	105	161	123	127	168	135	130
North Carolina .....	290	321	324	460	406	319	506	351	429	599	513	436
South Carolina .....	615	571	588	727	609	578	785	614	655	819	678	664
Tennessee .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Texas .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other States .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles .....	1,023	974	986	1,323	1,128	992	1,436	1,072	1,156	1,528	1,281	1,188
Open-end position (i.e., rotors) .....	199	207	215	296	240	195	295	242	278	353	280	271

D Withheld to avoid disclosing data for individual companies.





Table 13. Consumption of Linters by Type of Consumer: 1995

[Number of running bales]

Month	Total	Bleachers	Other consumers		
			Total	Pacific and Mountain States	All other States
<b>Total, year ending December 31, 1995.....</b>	<b>773,274</b>	<b>729,199</b>	<b>44,075</b>	<b>17,964</b>	<b>26,111</b>
December.....	73,143	69,843	3,300	1,447	1,853
November.....	60,678	57,579	3,099	1,357	1,742
October.....	56,571	53,359	3,212	1,383	1,829
September.....	60,745	56,847	3,898	1,657	2,241
August.....	55,866	51,897	3,969	1,568	2,401
July.....	60,605	57,009	3,596	1,478	2,118
June.....	70,919	66,768	4,151	1,644	2,507
May.....	66,488	62,787	3,701	1,474	2,227
April.....	65,853	62,309	3,544	1,431	2,113
March.....	80,113	75,883	4,230	1,656	2,574
February.....	64,770	60,988	3,782	1,483	2,299
January.....	57,523	53,930	3,593	1,386	2,207

Table 14. Stocks of Linters by Type of Establishment: 1995

[Number of running bales]

Month	All establishments	Bleachers	Other consumers			Public storage and compresses	Oil mills <sup>1</sup>
			Total	Pacific and Mountain States	All other States		
December.....	203,045	161,302	(D)	(D)	(D)	(D)	36,897
November.....	186,871	151,964	(D)	(D)	(D)	(D)	30,456
October.....	178,273	147,618	(D)	(D)	(D)	(D)	25,776
September.....	162,335	137,247	(D)	(D)	(D)	(D)	21,228
August.....	165,184	138,182	(D)	(D)	(D)	(D)	20,167
July.....	170,481	131,107	(D)	(D)	(D)	(D)	30,939
June.....	173,406	132,226	(D)	(D)	(D)	(D)	33,720
May.....	184,591	134,844	(D)	(D)	(D)	(D)	40,771
April.....	210,172	144,188	(D)	(D)	(D)	(D)	56,691
March.....	212,552	149,137	(D)	(D)	(D)	(D)	53,957
February.....	210,889	149,671	(D)	(D)	(D)	(D)	51,224
January.....	209,230	156,897	(D)	(D)	(D)	(D)	42,135

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Oil mill stocks in estimated running bales based on information reported in pounds.**HISTORICAL NOTE**

Data on cotton consumption and stocks have been collected by the Bureau of the Census since 1912. Except for 1991, which was done on a quarterly basis, the entire series is monthly. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959), available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Karen Harshbarger, 301-457-4674.

## CONSUMPTION ON THE WOOLEN SYSTEM AND WORSTED COMBING (MQ22D)

### INTRODUCTION

These data cover all establishments consuming fibers in woolen spinning and/or producing tops and noils, including commission work on materials owned by others (fibers laid in mixes for commission spinning on the woolen system, and commission top making).

Woolen and worsted spinning systems are frequently studied together since both are used to spin wool. The primary differences between the two systems are that yarns spun on the worsted system are combed in order to remove the short fibers or noils and to make the individual fibers more parallel. This produces a yarn that is more tightly twisted and of finer texture. This yarn is generally used to produce fabric that is more tightly woven, with a smoother finish and with a crisper hand.

Fabrics made from yarns spun on the woolen system are typically characterized by softness or bulk. The fabrics are frequently knitted or woven into plain or twill weaves and are generally subjected to considerable finishing to enhance the texture.

Both of these systems are used to produce yarn of manufactured fibers and blends, as well as wool. For example, while very little carpet yarn is still wool, much of it is spun on the worsted system.

### EXPLANATION OF TERMS

See explanation of terms at the beginning of this chapter.

Table 15. Summary of Fibers Consumed in Woolen Spinning and Worsted Combing: 1991 to 1995

[Thousands of pounds]

Product description	1995	1994	1993	1992	1991
All fibers <sup>1</sup> .....	953,372	1,035,750	1,008,135	926,035	836,695
Raw wool <sup>2 3</sup> .....	141,966	153,302	156,811	150,838	151,539
Apparel class. ....	129,299	138,563	141,380	136,143	137,187
Woolen system .....	57,300	61,998	67,519	59,478	58,560
Worsted combing .....	71,999	76,565	73,861	76,665	78,627
Carpet class. ....	12,667	14,739	15,431	14,695	14,352
Noils, reprocessed and reused wool, and other animal fibers <sup>4</sup> .....	19,808	18,641	22,728	20,745	21,002
Other fibers <sup>1 5</sup> .....	791,598	863,807	828,596	754,452	664,154

<sup>1</sup>Includes manmade fiber top converted from tow without combing.

<sup>2</sup>Data are shown on a scoured basis for greasy wool.

<sup>3</sup>Shorn and pulled wool of the sheep does not include raw wool consumed in cotton system spinning; withheld to avoid disclosing data for individual companies.

<sup>4</sup>Includes mohair, alpaca, vicuna, and other specialty fibers, as well as tops and noils consumed in woolen spinning and mohair consumed in worsted combing. Does not include wool tops consumed in cotton system spinning.

<sup>5</sup>Includes cotton, jute, and other vegetable fibers. Data for product code 22993 62, which were included with "Other fibers" data in previous publications, are now being included in the data for "Noils, reprocessed and reused wool, and other animal fibers."

Note: For 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were received from these companies for 1993; therefore, the information shown for years prior to 1993 may not be directly comparable. These changes represent approximately 4.7 percent of the total fibers consumed on the woolen system and worsted combing.

Table 16. Fibers Consumed in Woolen Spinning and Worsted Combing by Quarter: 1995 and 1994

[Thousands of pounds]

Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
<b>1995</b>					
All fibers <sup>1</sup> .....	953,372	250,984	243,887	233,981	224,520
Raw wool <sup>2 3</sup> .....	141,966	38,809	38,631	32,995	31,531
Apparel class .....	129,299	36,344	35,455	29,384	28,116
Woolen system .....	57,300	16,575	16,658	11,454	12,613
Worsted combing .....	71,999	19,769	18,797	17,930	15,503
Carpet class <sup>4</sup> .....	12,667	2,465	3,176	3,611	3,415
Noils, reprocessed and reused wool, and other animal fibers <sup>5</sup> .....	19,808	5,987	6,315	4,313	3,193
Other fibers <sup>1</sup> .....	791,598	206,188	198,941	196,673	189,796
Nylon .....	442,944	109,325	110,795	115,314	107,510
Polyester .....	160,372	42,791	39,313	38,127	40,141
Acrylic and modacrylic .....	161,155	46,294	41,554	36,886	36,421
Other fibers <sup>6</sup> .....	27,127	7,778	7,279	6,346	5,724
<b>1994</b>					
All fibers <sup>1</sup> .....	1,035,750	268,162	269,562	253,460	244,566
Raw wool <sup>2 3</sup> .....	153,302	40,727	39,059	36,382	37,134
Apparel class .....	138,563	36,277	35,575	32,742	33,969
Woolen system .....	61,998	16,822	16,192	13,898	15,086
Worsted combing .....	76,565	19,455	19,383	18,844	18,883
Carpet class <sup>4</sup> .....	14,739	4,450	3,484	3,640	3,165
Noils, reprocessed and reused wool, and other animal fibers <sup>5</sup> .....	18,641	5,568	5,261	4,151	3,661
Other fibers <sup>1</sup> .....	863,807	221,867	225,242	212,927	203,771
Nylon .....	522,540	132,663	136,129	133,649	120,099
Polyester .....	162,262	40,447	43,441	39,208	39,166
Acrylic and modacrylic .....	151,873	41,204	39,182	33,721	37,766
Other fibers <sup>6</sup> .....	27,132	7,553	6,490	6,349	6,740

<sup>1</sup>Includes top converted from manmade fiber tow without combing.<sup>2</sup>Data are shown on a scoured basis for greasy wool.<sup>3</sup>Shorn and pulled wool of the sheep does not include raw wool consumed in cotton system spinning.<sup>4</sup>Data for carpet and rug yarns, tops, noils, reprocessed wool, and other wool, except shorn and pulled, are included with carpet class raw wool in order to avoid disclosing data for individual companies. These data represent less than one-half of 1 percent of "Total carpet class, raw wool."<sup>5</sup>Includes mohair, alpaca, vicuna, and other specialty fibers, as well as tops and noils consumed in woolen spinning and mohair and other fibers, except wool of the sheep consumed in worsted combing. Does not include wool tops consumed in cotton system spinning, which in 1995 amounted to 3,512 thousand pounds and in 1994 amounted to 3,556 thousand pounds.<sup>6</sup>Includes cotton, jute, and other vegetable fibers. Data for product code 22993 62, which were included with "Other fibers" data in previous publications, are now being included in the data for "Noils, reprocessed and reused wool, and other animal fibers."

Table 17. Fibers Consumed in Woolen Spinning by Quarter: 1995 and 1994

[Thousands of pounds]

Product code	Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
<b>1995</b>						
	Fibers consumed in woolen spinning <sup>1</sup> . . . . .	842,006	221,481	214,555	206,164	199,806
	For yarns (except carpet and rug) . . . . .	299,530	85,907	80,234	66,636	66,753
	Shorn and pulled wool of the sheep (domestic and foreign duty-paid) . . . . .	57,300	16,575	16,658	11,454	12,613
00214 61	60S and finer . . . . .	30,211	8,035	9,203	6,276	6,697
00214 62	Coarser than 60S . . . . .	27,089	8,540	7,455	5,178	5,916
	Other wool . . . . .	12,502	3,548	4,175	2,651	2,128
02299 38	Sheep (tops, noils, etc.) . . . . .	10,756	2,962	3,746	2,268	1,780
00214 71	Other (mohair, alpaca, vicuna, etc.) . . . . .	1,746	586	429	383	348
02294 07	Reprocessed wool and reused wool . . . . .	4,836	1,663	1,469	1,193	511
	Other fibers . . . . .	224,892	64,121	57,932	51,338	51,501
02824 14	Nylon . . . . .	20,078	5,931	4,506	4,689	4,952
02824 29	Polyester . . . . .	43,825	10,940	11,295	10,583	11,007
02824 25	Acrylic and modacrylic . . . . .	134,117	39,534	34,914	29,788	29,881
00100 17	All other fibers, including rayon and acetate . . . . .	26,872	7,716	7,217	6,278	5,661
	For carpet and rug yarns . . . . .	542,476	135,574	134,321	139,528	133,053
00214 51	Shorn and pulled wool of the sheep (domestic and foreign duty-paid) . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
02299 36	Tops, noils, mohair, reused and reprocessed wool, and other wool (except shorn or pulled) . . . . .	<sup>2</sup> 12,667	<sup>2</sup> 2,465	<sup>2</sup> 3,176	<sup>2</sup> 3,611	<sup>2</sup> 3,415
	Other fibers . . . . .	529,809	133,109	131,145	135,917	129,638
02824 13	Nylon . . . . .	422,866	103,394	106,289	110,625	102,558
02824 25	Polyester . . . . .	(D)	(D)	(D)	(D)	(D)
02824 24	Acrylic and modacrylic . . . . .	(D)	(D)	(D)	(D)	(D)
00100 14	All other fibers, including rayon and acetate . . . . .	(D)	(D)	(D)	(D)	(D)
<b>1994</b>						
	Fibers consumed in woolen spinning <sup>1</sup> . . . . .	910,767	235,278	238,028	223,592	213,869
	For yarns (except carpet and rug) . . . . .	295,436	80,024	77,925	67,379	70,108
	Shorn and pulled wool of the sheep (domestic and foreign duty-paid) . . . . .	61,998	16,822	16,192	13,898	15,086
00214 61	60S and finer . . . . .	35,960	9,440	9,332	8,460	8,728
00214 62	Coarser than 60S . . . . .	26,038	7,382	6,860	5,438	6,358
	Other wool . . . . .	12,180	3,653	3,728	2,616	2,183
02299 38	Sheep (tops, noils, etc.) . . . . .	10,819	3,287	3,314	2,316	1,902
00214 71	Other (mohair, alpaca, vicuna, etc.) . . . . .	1,361	366	414	300	281
02294 07	Reprocessed wool and reused wool . . . . .	3,890	1,201	995	918	776
	Other fibers . . . . .	217,368	58,348	57,010	49,947	52,063
02824 14	Nylon . . . . .	32,433	9,840	8,783	6,966	6,844
02824 29	Polyester . . . . .	41,731	10,843	10,939	10,523	9,426
02824 25	Acrylic and modacrylic . . . . .	116,798	30,472	31,003	26,207	29,116
00100 17	All other fibers, including rayon and acetate . . . . .	26,406	7,193	6,285	6,251	6,677
	For carpet and rug yarns . . . . .	615,331	155,254	160,103	156,213	143,761
00214 51	Shorn and pulled wool of the sheep (domestic and foreign duty-paid) . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
02299 36	Tops, noils, mohair, reused and reprocessed wool, and other wool (except shorn or pulled) . . . . .	<sup>2</sup> 14,739	<sup>2</sup> 4,450	<sup>2</sup> 3,484	<sup>2</sup> 3,640	<sup>2</sup> 3,165
	Other fibers . . . . .	600,592	150,804	156,619	152,573	140,596
02824 13	Nylon . . . . .	490,107	122,823	127,346	126,683	113,255
02824 25	Polyester . . . . .	(D)	(D)	(D)	(D)	(D)
02824 24	Acrylic and modacrylic . . . . .	(D)	(D)	(D)	(D)	(D)
00100 14	All other fibers, including rayon and acetate . . . . .	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Data are shown on a scoured basis for greasy wools.<sup>2</sup>Product codes 00214 51 and 02299 36 are combined to avoid disclosing data for individual companies.

Table 18. **Production of Tops and Noils Combed and Manmade Tow Converted to Top Without Combing by Quarter: 1995 and 1994**

[Thousands of pounds]

Product code	Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
	<b>1995</b>					
	Tops and noils combed . . . . .	74,469	20,545	19,468	18,399	16,057
	Top production . . . . .	68,022	18,787	17,699	16,708	14,828
	Wool of the sheep (domestic and foreign duty-paid) . . . . .	(D)	(D)	(D)	(D)	(D)
22993 21	60S and finer . . . . .	50,225	14,855	13,369	11,060	10,941
22993 24	Coarser than 60S . . . . .	(D)	(D)	(D)	(D)	(D)
22993 31	All other fibers, including mohair . . . . .	(D)	(D)	(D)	(D)	(D)
	Noil production . . . . .	6,447	1,758	1,769	1,691	1,229
	Wool of the sheep (domestic and foreign duty-paid) . . . . .	(D)	(D)	(D)	(D)	(D)
22993 51	60S and finer . . . . .	4,755	1,387	1,347	1,138	883
22993 54	Coarser than 60S . . . . .	(D)	(D)	(D)	(D)	(D)
22993 62	All other fibers, including mohair . . . . .	(D)	(D)	(D)	(D)	(D)
	Manmade tow converted to top without combing . .	36,897	8,958	9,864	9,418	8,657
22993 75	Polyester . . . . .	(D)	(D)	(D)	(D)	(D)
22993 73	Acrylic fibers . . . . .	(D)	(D)	(D)	(D)	(D)
22993 76	Manmade fibers (except polyester or acrylic) . .	(D)	(D)	(D)	(D)	(D)
	<b>1994</b>					
	Tops and noils combed . . . . .	79,136	20,169	19,921	19,461	19,585
	Top production . . . . .	71,604	18,417	18,062	17,489	17,636
	Wool of the sheep (domestic and foreign duty-paid) . . . . .	(D)	(D)	(D)	(D)	(D)
22993 21	60S and finer . . . . .	54,217	15,138	14,244	11,664	13,171
22993 24	Coarser than 60S . . . . .	(D)	(D)	(D)	(D)	(D)
22993 31	All other fibers, including mohair . . . . .	(D)	(D)	(D)	(D)	(D)
	Noil production . . . . .	7,532	1,752	1,859	1,972	1,949
	Wool of the sheep (domestic and foreign duty-paid) . . . . .	(D)	(D)	(D)	(D)	(D)
22993 51	60S and finer . . . . .	5,382	1,364	1,456	1,200	1,362
22993 54	Coarser than 60S . . . . .	(D)	(D)	(D)	(D)	(D)
22993 62	All other fibers, including mohair . . . . .	(D)	(D)	(D)	(D)	(D)
	Manmade tow converted to top without combing . .	45,847	12,715	11,613	10,407	11,112
22993 75	Polyester . . . . .	(D)	(D)	(D)	(D)	(D)
22993 73	Acrylic fibers . . . . .	(D)	(D)	(D)	(D)	(D)
22993 76	Manmade fibers (except polyester or acrylic) . .	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies.

**HISTORICAL NOTE**

Data on the consumption of staple fibers on the woolen and worsted systems have been collected by the Bureau of the Census since 1919. Prior to 1990, the survey was conducted on a monthly basis. Beginning in 1991, the survey became quarterly. Historical data may be obtained from Current Industrial Reports available at your local

Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Kristin Williams, 301-457-4698.

## YARN PRODUCTION (TEXTURED AND SPUN) (MA22F)

### INTRODUCTION

Yarn production is the first stage in the textile manufacturing process. Yarn is a continuous strand of textile fibers and is the basic material that is made into fabrics, thread, twine, or cable. It can be woven, knitted, crocheted, braided, etc.

There are two basic classes of yarn: spun yarn or continuous filament yarn. This subsection of the report provides data on spun yarn and textured filament yarn. Textured yarn has been either bulked, crimped, heat set, or

subjected to some other process intended to give the yarn fullness, stretch, etc. Data are not included that relate to the production of flat filament yarn, which is generally considered to be a chemical manufacturing process.

The data are presented by end use, by fiber, and by spinning system.

### EXPLANATION OF TERMS

See explanation of terms at the beginning of this chapter.

Table 19. Summary of Yarn Production: 1983 to 1995

[Millions of pounds]

Year	Spun yarn			Textured, crimped, or bulked yarn		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
1995.....	7,936.7	2,862.6	5,074.1	3,918.2	2,300.0	1,618.2
1994.....	8,145.2	2,818.9	5,326.3	3,947.5	2,294.1	1,653.4
1993.....	7,566.6	2,510.6	5,056.0	3,564.6	2,149.1	1,415.5
1992.....	7,444.6	2,555.3	4,889.3	3,223.8	2,019.1	1,204.7
1991.....	6,875.1	2,332.6	4,542.5	2,999.7	1,996.9	1,002.8
1990.....	6,493.3	2,190.0	4,303.3	2,811.6	1,874.8	936.8
1989.....	6,759.3	2,289.7	4,469.6	2,789.7	1,898.7	891.0
1988.....	6,636.4	2,287.8	4,348.6	2,617.5	1,849.8	767.7
1987.....	6,731.4	2,303.3	4,428.1	2,470.9	1,790.2	680.7
1986.....	6,154.1	2,095.8	4,058.4	2,273.5	1,682.2	591.3
1985.....	5,704.3	1,836.5	3,867.8	2,403.1	1,758.1	645.0
1984.....	5,832.2	1,884.5	3,947.7	2,333.5	1,703.9	629.6
1983.....	6,079.1	2,037.7	4,041.4	2,426.7	1,730.7	696.0

Note: For 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were received from these establishments for 1992; therefore, the information shown for years prior to 1992 may not be directly comparable. These changes represent approximately 1.2 percent of the total spun yarn production, and 3.5 percent for textured, crimped, or bulked filament yarn.

Table 20. Summary of Spun Yarn Production by Fiber and End Use of Distribution: 1995 and 1994

[Thousands of pounds]

Principal fiber	1995			1994		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
<b>Spun yarn</b> .....	<b>7,936,662</b>	<b>2,862,589</b>	<b>5,074,073</b>	<b>8,145,223</b>	<b>2,818,879</b>	<b>5,326,344</b>
Cotton .....	4,419,844	1,901,949	2,517,895	4,349,808	1,799,799	2,550,009
Carded .....	3,937,187	1,598,239	2,338,948	3,878,785	1,528,378	2,350,407
85 percent or more cotton .....	3,543,470	1,382,489	2,160,981	3,466,035	1,291,243	2,174,792
Other chiefly cotton blends .....	393,717	215,750	177,967	412,750	237,135	175,615
Combed .....	482,657	303,710	178,947	471,023	271,421	199,602
85 percent or more cotton .....	382,905	248,109	134,796	364,129	(D)	(D)
Other chiefly cotton blends .....	99,752	55,601	44,151	106,894	(D)	(D)
Wool and chiefly wool blends .....	128,480	24,969	103,511	139,788	29,403	110,385
Woolen .....	72,432	15,897	56,535	83,637	19,955	63,682
Worsted .....	56,048	9,072	46,976	56,151	9,448	46,703
Cellulosic (rayon and/or acetate) <sup>1</sup> .....	208,145	81,673	126,472	223,366	82,090	141,276
85 percent or more rayon and/or acetate .....	155,110	64,152	90,958	170,151	64,610	105,541
Other chiefly rayon and/or acetate blends .....	53,035	17,521	35,514	53,215	17,480	35,735
Noncellulosic .....	3,180,193	853,998	2,326,195	3,432,261	907,587	2,524,674
85 percent or more acrylic .....	221,361	154,976	66,385	240,514	175,234	65,280
Other chiefly acrylic blends:						
Mixed with cotton .....	6,801	(D)	(D)	6,296	(D)	(D)
Mixed with wool .....	1,073	337	736	2,546	478	2,068
Mixed with other fibers .....	6,073	(D)	(D)	4,469	(D)	(D)
85 percent or more nylon .....	801,371	129,292	672,079	877,806	149,513	728,293
Other chiefly nylon blends .....	10,214	(D)	(D)	10,575	(D)	(D)
85 percent or more polyester .....	550,329	277,691	272,638	607,737	304,337	303,400
Other chiefly polyester blends:						
Mixed with cotton .....	1,366,788	180,558	1,186,230	1,484,122	186,125	1,297,997
Mixed with wool .....	12,020	(D)	(D)	19,438	(D)	(D)
Mixed with other fibers .....	83,585	24,133	59,452	68,957	20,483	48,474
All other manmade fibers <sup>2</sup> .....	120,578	76,285	44,293	109,801	57,082	52,719

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>For 1995, cellulosic yarns include data for lyocell as well as rayon and acetate. The amount of lyocell included in the total is not known. In 1996, lyocell will be collected separately.<sup>2</sup>"Silk and other natural fibers" are combined with "All other manmade fibers" to avoid disclosing data for individual companies.



Table 21. Production of Spun Yarn by Fiber and End Use of Distribution: 1995 and 1994

[Thousands of pounds]

Principal fiber	1995			1994		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
<b>Weaving yarn (except carpet) . . . . .</b>	<b>3,749,530</b>	<b>484,379</b>	<b>3,265,151</b>	<b>3,863,123</b>	<b>474,926</b>	<b>3,388,197</b>
Cotton . . . . .	2,196,526	249,486	1,947,040	2,202,389	224,888	1,977,501
Carded . . . . .	2,038,769	220,647	1,818,122	2,043,248	212,890	1,830,358
85 percent or more cotton . . . . .	1,929,548	216,418	1,713,130	1,921,811	207,267	1,714,544
Other chiefly cotton blends . . . . .	109,221	4,229	104,992	121,437	5,623	115,814
Combed . . . . .	157,757	28,839	128,918	159,141	11,998	147,143
85 percent or more cotton . . . . .	111,739	(D)	(D)	104,817	(D)	(D)
Other chiefly cotton blends . . . . .	46,018	(D)	(D)	54,324	(D)	(D)
Wool and chiefly wool blends . . . . .	102,166	13,939	88,227	111,859	17,993	93,866
Woolen . . . . .	55,661	(D)	(D)	64,711	(D)	(D)
Worsted . . . . .	46,505	(D)	(D)	47,148	(D)	(D)
Cellulosic (rayon and/or acetate) <sup>1</sup> . . . . .	189,377	65,593	123,784	208,887	71,592	137,295
85 percent or more rayon and/or acetate . . . . .	140,642	51,519	89,123	159,767	57,188	102,579
Other chiefly rayon and/or acetate blends . . . . .	48,735	14,074	34,661	49,120	14,404	34,716
Noncellulosic . . . . .	1,261,461	155,361	1,106,100	1,339,988	160,453	1,179,535
85 percent or more acrylic . . . . .	52,994	21,319	31,675	48,151	19,117	29,034
Other chiefly acrylic blends:						
Mixed with cotton . . . . .	2,703	(D)	(D)	2,733	(D)	(D)
Mixed with wool . . . . .	(D)	(D)	(D)	2,164	(D)	(D)
Mixed with other fibers . . . . .	4,861	(D)	(D)	4,090	(D)	(D)
85 percent or more nylon . . . . .	12,275	(D)	(D)	(D)	(D)	(D)
Other chiefly nylon blends . . . . .	7,338	(D)	(D)	(D)	(D)	(D)
85 percent or more polyester . . . . .	181,442	98,946	82,496	178,592	99,326	79,266
Other chiefly polyester blends:						
Mixed with cotton . . . . .	884,455	18,348	866,107	957,055	14,619	942,436
Mixed with wool . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
Mixed with other fibers . . . . .	63,495	4,906	58,589	53,628	6,089	47,539
All other manmade fibers <sup>2</sup> . . . . .	40,116	5,398	34,718	50,108	6,889	43,219
<b>Machine knitting yarn (except carpet) . . . . .</b>	<b>2,937,459</b>	<b>1,992,941</b>	<b>944,518</b>	<b>2,944,508</b>	<b>1,960,406</b>	<b>984,102</b>
Cotton . . . . .	2,147,211	(D)	(D)	2,074,522	(D)	(D)
Carded . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
85 percent or more cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly cotton blends . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
Combed . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
85 percent or more cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly cotton blends . . . . .	(D)	(D)	(D)	(D)	(D)	-
Wool and chiefly wool blends . . . . .	9,262	7,509	1,753	9,537	7,362	2,175
Woolen . . . . .	3,416	(D)	(D)	4,160	(D)	(D)
Worsted . . . . .	5,846	(D)	(D)	5,377	(D)	(D)
Cellulosic (rayon and/or acetate) <sup>1</sup> . . . . .	12,064	(D)	(D)	16,176	(D)	(D)
85 percent or more rayon and/or acetate . . . . .	11,559	(D)	(D)	15,790	(D)	(D)
Other chiefly rayon and/or acetate blends . . . . .	505	(D)	(D)	386	(D)	(D)
Noncellulosic . . . . .	768,922	384,969	383,953	854,273	435,168	419,105
85 percent or more acrylic . . . . .	129,677	(D)	(D)	158,551	(D)	(D)
Other chiefly acrylic blends:						
Mixed with cotton . . . . .	3,111	(D)	(D)	1,951	(D)	(D)
Mixed with wool . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
Mixed with other fibers . . . . .	1,081	(D)	(D)	(D)	(D)	-
85 percent or more nylon . . . . .	32,662	(D)	(D)	32,696	(D)	(D)
Other chiefly nylon blends . . . . .	(D)	(D)	-	(D)	(D)	-
85 percent or more polyester . . . . .	141,901	112,151	29,750	149,951	121,922	28,029
Other chiefly polyester blends:						
Mixed with cotton . . . . .	449,604	139,864	309,740	498,623	152,425	346,198
Mixed with wool . . . . .	(D)	(D)	-	(D)	(D)	-
Mixed with other fibers . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
All other manmade fibers <sup>2</sup> . . . . .	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 21. Production of Spun Yarn by Fiber and End Use of Distribution: 1995 and 1994—Con.

[Thousands of pounds]

Principal fiber	1995			1994		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
<b>Carpet and rug yarns</b> .....	<b>1,067,839</b>	<b>233,072</b>	<b>834,767</b>	<b>1,184,172</b>	<b>258,655</b>	<b>925,517</b>
Cotton .....	(D)	(D)	(D)	(D)	(D)	(D)
Carded .....	(D)	(D)	(D)	(D)	(D)	(D)
85 percent or more cotton .....	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly cotton blends .....	-	-	-	-	-	-
Combed .....	(D)	-	(D)	-	-	-
85 percent or more cotton .....	(D)	-	(D)	-	-	-
Other chiefly cotton blends .....	-	-	-	-	-	-
Wool and chiefly wool blends .....	16,010	(D)	(D)	16,960	(D)	(D)
Woolen .....	(D)	(D)	(D)	(D)	(D)	(D)
Worsted .....	(D)	(D)	(D)	(D)	(D)	(D)
Cellulosic (rayon and/or acetate) <sup>1</sup> .....	(D)	(D)	-	(D)	(D)	-
85 percent or more rayon and/or acetate .....	-	-	-	-	-	-
Other chiefly rayon and/or acetate blends .....	(D)	(D)	-	(D)	(D)	-
Noncellulosic .....	1,013,023	192,365	820,658	1,128,528	216,840	911,688
85 percent or more acrylic .....	(D)	-	(D)	19,388	(D)	(D)
Other chiefly acrylic blends:						
Mixed with cotton .....	-	-	-	-	-	-
Mixed with wool .....	-	-	-	-	-	-
Mixed with other fibers .....	-	-	-	-	-	-
85 percent or more nylon .....	756,434	120,301	636,133	822,661	131,970	690,691
Other chiefly nylon blends .....	(D)	(D)	(D)	7,769	(D)	(D)
85 percent or more polyester .....	212,131	(D)	(D)	263,168	(D)	(D)
Other chiefly polyester blends:						
Mixed with cotton .....	(D)	(D)	(D)	234	(D)	(D)
Mixed with wool .....	-	-	-	-	-	-
Mixed with other fibers .....	11,964	(D)	(D)	5,598	(D)	(D)
All other manmade fibers <sup>2</sup> .....	8,890	(D)	(D)	9,710	(D)	(D)
<b>Hand knitting yarns</b> .....	<b>25,121</b>	<b>(D)</b>	<b>(D)</b>	<b>18,596</b>	<b>(D)</b>	<b>(D)</b>
Cotton .....	(D)	(D)	-	(D)	(D)	-
Carded .....	(D)	(D)	-	(D)	(D)	-
85 percent or more cotton .....	(D)	(D)	-	(D)	(D)	-
Other chiefly cotton blends .....	(D)	(D)	-	(D)	(D)	-
Combed .....	(D)	(D)	-	(D)	(D)	-
85 percent or more cotton .....	(D)	(D)	-	-	-	-
Other chiefly cotton blends .....	(D)	(D)	-	(D)	(D)	-
Wool and chiefly wool blends .....	431	431	-	817	817	-
Woolen .....	(D)	(D)	-	(D)	(D)	-
Worsted .....	(D)	(D)	-	(D)	(D)	-
Cellulosic (rayon and/or acetate) <sup>1</sup> .....	(D)	(D)	-	(D)	(D)	-
85 percent or more rayon and/or acetate .....	-	-	-	-	-	-
Other chiefly rayon and/or acetate blends .....	(D)	(D)	-	(D)	(D)	-
Noncellulosic .....	20,624	(D)	(D)	15,065	(D)	(D)
85 percent or more acrylic .....	(D)	(D)	-	(D)	(D)	-
Other chiefly acrylic blends:						
Mixed with cotton .....	(D)	(D)	-	(D)	(D)	-
Mixed with wool .....	-	-	-	(D)	(D)	-
Mixed with other fibers .....	(D)	(D)	-	-	-	-
85 percent or more nylon .....	-	-	-	-	-	-
Other chiefly nylon blends .....	-	-	-	-	-	-
85 percent or more polyester .....	-	-	-	-	-	-
Other chiefly polyester blends:						
Mixed with cotton .....	-	-	-	-	-	-
Mixed with wool .....	-	-	-	-	-	-
Mixed with other fibers .....	-	-	-	-	-	-
All other manmade fibers <sup>2</sup> .....	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 21. Production of Spun Yarn by Fiber and End Use of Distribution: 1995 and 1994—Con.

[Thousands of pounds]

Principal fiber	1995			1994		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
<b>All other spun yarns.....</b>	<b>156,713</b>	<b>(D)</b>	<b>(D)</b>	<b>'134,824</b>	<b>(D)</b>	<b>(D)</b>
Cotton .....	33,493	21,134	12,359	'31,791	(D)	(D)
Carded.....	27,274	(D)	(D)	'25,530	(D)	(D)
85 percent or more cotton.....	20,137	(D)	(D)	'20,287	(D)	(D)
Other chiefly cotton blends.....	7,137	(D)	(D)	'5,243	(D)	(D)
Combed.....	6,219	(D)	(D)	6,261	(D)	(D)
85 percent or more cotton.....	6,219	(D)	(D)	(D)	(D)	(D)
Other chiefly cotton blends.....	-	-	-	(D)	(D)	-
Wool and chiefly wool blends.....	611	(D)	(D)	615	(D)	(D)
Woolen.....	(D)	(D)	(D)	(D)	(D)	(D)
Worsted.....	(D)	(D)	-	(D)	(D)	(D)
Cellulosic (rayon and/or acetate) <sup>1</sup> .....	6,446	(D)	(D)	'8,011	(D)	(D)
85 percent or more rayon and/or acetate.....	2,909	(D)	(D)	4,594	(D)	(D)
Other chiefly rayon and/or acetate blends.....	3,537	(D)	(D)	3,417	(D)	(D)
Noncellulosic.....	116,163	(D)	(D)	94,407	(D)	(D)
85 percent or more acrylic.....	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly acrylic blends:						
Mixed with cotton.....	(D)	(D)	-	(D)	(D)	-
Mixed with wool.....	-	-	-	-	-	-
Mixed with other fibers.....	(D)	(D)	-	(D)	(D)	-
85 percent or more nylon.....	-	-	-	(D)	(D)	-
Other chiefly nylon blends.....	-	-	-	-	-	-
85 percent or more polyester.....	14,855	(D)	(D)	16,026	(D)	(D)
Other chiefly polyester blends:						
Mixed with cotton.....	(D)	(D)	(D)	28,210	(D)	(D)
Mixed with wool.....	-	-	-	-	-	-
Mixed with other fibers.....	(D)	(D)	(D)	(D)	(D)	(D)
All other manmade fibers <sup>2</sup> .....	68,372	(D)	(D)	47,266	(D)	(D)

- Represents zero.    D Withheld to avoid disclosing data for individual companies.    'Revised by 5 percent or more from previously published data.

<sup>1</sup>For 1995, cellulosic yarns include data for lyocell as well as rayon and acetate. The amount of lyocell included in the total is not known. In 1996, lyocell will be collected separately.

<sup>2</sup>"Silk and other natural fibers" are combined with "All other manmade fibers" to avoid disclosing data for individual companies.

Table 22. Production of Spun Yarn by State: 1995 and 1994

[Thousands of pounds]

State	1995	1994
<b>United States</b> .....	<b>7,936,662</b>	<b>8,145,223</b>
Alabama .....	720,154	822,017
Georgia .....	1,845,484	1,863,505
Kentucky .....	(D)	(D)
Maine .....	46,397	48,416
Massachusetts .....	8,490	12,195
Mississippi .....	(D)	(D)
North Carolina .....	2,992,146	3,025,794
Pennsylvania .....	(D)	45,321
South Carolina .....	1,573,856	1,628,758
Tennessee .....	173,463	<sup>1</sup> 176,698
Texas .....	78,806	77,791
Virginia .....	225,896	<sup>1</sup> 190,174
All other States .....	78,404	87,895

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Revised by 5 percent or more from previously published data.

Table 23. Production of Spun Yarn by Spinning System and End Use: 1995 and 1994

[Thousands of pounds]

System of spinning	1995			1994		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
<b>Production, all systems</b> .....	<b>7,936,662</b>	<b>2,862,589</b>	<b>5,074,073</b>	<b>8,145,223</b>	<b>2,818,879</b>	<b>5,326,344</b>
Cotton system .....	6,540,204	2,459,331	4,080,873	6,637,237	2,398,990	4,238,247
Weaving (except carpet) .....	3,510,845	417,114	3,093,731	3,597,893	398,475	3,199,418
Machine knitting (except carpet) .....	2,807,099	1,891,066	916,033	2,795,330	1,839,872	955,458
Carpet and rug .....	135,787	(D)	(D)	160,105	(D)	(D)
Hand knitting .....	3,553	3,553	-	(D)	(D)	-
All other uses .....	82,920	(D)	(D)	(D)	(D)	(D)
Woolen system .....	190,089	23,309	166,780	<sup>1</sup> 222,233	30,154	<sup>1</sup> 192,079
Weaving (except carpet) .....	73,601	(D)	(D)	83,662	(D)	(D)
Machine knitting (except carpet) .....	29,691	(D)	(D)	<sup>1</sup> 30,678	(D)	(D)
Carpet and rug .....	82,030	(D)	(D)	102,290	7,749	94,541
Hand knitting .....	(D)	(D)	(D)	962	(D)	(D)
All other uses .....	(D)	(D)	(D)	4,641	(D)	(D)
Worsted system .....	998,522	263,083	735,439	1,089,319	285,062	804,257
Weaving (except carpet) .....	107,702	29,028	78,674	121,565	30,547	91,018
Machine knitting (except carpet) .....	83,224	(D)	(D)	97,003	(D)	(D)
Carpet and rug .....	784,094	131,306	652,788	852,726	<sup>1</sup> 143,565	709,161
Hand knitting .....	(D)	(D)	-	15,103	<sup>1</sup> 15,103	-
All other uses .....	(D)	(D)	(D)	<sup>1</sup> 2,922	(D)	(D)
Other systems .....	207,847	116,866	90,981	196,434	104,673	91,761
Weaving (except carpet) .....	57,382	(D)	(D)	<sup>1</sup> 60,003	(D)	(D)
Machine knitting (except carpet) .....	17,445	17,445	-	<sup>1</sup> 21,497	<sup>1</sup> 21,497	-
Carpet and rug .....	65,928	(D)	(D)	69,051	(D)	(D)
Hand knitting .....	-	-	-	(D)	(D)	-
All other uses .....	67,092	67,092	-	(D)	(D)	-

- Represents zero.

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Revised by 5 percent or more from previously published data.

Table 24. Production of Textured, Crimped, or Bulked Filament Yarns by Fiber and End Use: 1995 and 1994

Product description	1995			1994		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
All yarn .....	3,918,140	2,299,957	1,618,183	3,947,499	2,294,130	1,653,369
Nylon .....	2,314,783	1,445,326	869,457	2,395,170	1,461,407	933,763
Polyester .....	1,046,223	731,855	314,368	1,000,743	688,299	312,444
Rayon and acetate .....	2,376	1,475	901	1,860	1,026	834
Other yarns .....	554,758	121,301	433,457	549,726	143,398	406,328
Weaving yarn (except carpet) .....	547,446	290,338	257,108	541,472	280,272	261,200
Nylon .....	88,686	(D)	(D)	94,656	(D)	(D)
Polyester .....	405,861	(D)	(D)	385,474	(D)	(D)
Rayon and acetate .....	1,707	(D)	(D)	1,265	(D)	(D)
Other yarns .....	51,192	22,975	28,217	60,077	26,874	33,203
Knitting yarn (except carpet) .....	818,556	698,969	119,587	814,654	687,093	127,561
Nylon .....	188,073	182,991	5,082	218,398	212,746	5,652
Polyester .....	607,179	(D)	(D)	565,884	(D)	(D)
Rayon and acetate .....	(D)	(D)	(D)	(D)	(D)	(D)
Other yarns .....	(D)	(D)	(D)	(D)	(D)	(D)
Carpet and rug yarn .....	2,403,563	1,175,898	1,227,665	2,435,813	1,186,965	1,248,848
Nylon .....	1,933,366	1,088,673	844,693	1,974,779	1,070,154	904,625
Polyester .....	(D)	(D)	(D)	(D)	(D)	(D)
Rayon and acetate .....	-	-	-	-	-	-
Other yarns .....	(D)	(D)	(D)	(D)	(D)	(D)
All other uses .....	148,575	134,752	13,823	155,560	139,800	15,760
Nylon .....	104,658	(D)	(D)	107,337	(D)	(D)
Polyester .....	(D)	(D)	(D)	(D)	(D)	(D)
Rayon and acetate .....	(D)	(D)	(D)	(D)	(D)	(D)
Other yarns .....	(D)	(D)	(D)	(D)	(D)	(D)

- Represents zero.

D Withheld to avoid disclosing data for individual companies.

\*Revised by 5 percent or more from previously published data.

Table 25. Domestic Production, Imports, and Exports of Yarn: 1995 and 1994

[Quantity in thousands of kilograms. Value in thousands of dollars]

Product description and year	Total production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to domestic production		Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup>		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value	Quantity	Value <sup>3</sup>	Quantity	Value	Quantity	Value
<b>1995</b>											
<b>Spun yarn</b> . . . . .	<b>3,600,070</b>	<b>74,749</b>	<b>300,381</b>	<b>2.1</b>	<b>(NA)</b>	<b>91,543</b>	<b>430,495</b>	<b>3,616,864</b>	<b>(NA)</b>	<b>2.5</b>	<b>(NA)</b>
Cotton . . . . .	2,004,841	43,067	150,003	2.1	(NA)	42,702	209,844	2,004,476	(NA)	2.1	(NA)
85 percent or more cotton . . . . .	1,781,004	41,316	140,206	2.3	(NA)	37,543	188,134	1,777,231	(NA)	2.1	(NA)
Carded . . . . .	1,607,318	29,555	96,543	1.8	(NA)	22,892	106,269	1,600,655	(NA)	1.4	(NA)
Combed . . . . .	173,686	11,761	43,663	6.8	(NA)	14,651	81,865	176,576	(NA)	8.3	(NA)
Other chiefly cotton blends . . . . .	223,838	1,751	9,797	0.8	(NA)	5,159	21,710	227,246	(NA)	2.3	(NA)
Carded . . . . .	178,590	1,426	8,157	0.8	(NA)	1,407	6,977	178,571	(NA)	0.8	(NA)
Combed . . . . .	45,248	325	1,640	0.7	(NA)	3,752	14,733	48,675	(NA)	7.7	(NA)
Wool spun yarn . . . . .	58,279	794	11,769	1.4	(NA)	4,314	53,786	61,799	(NA)	7.0	(NA)
Woolen . . . . .	32,855	91	637	0.3	(NA)	1,273	10,317	34,037	(NA)	3.7	(NA)
Worsted . . . . .	25,423	703	11,132	2.8	(NA)	3,041	43,469	27,761	(NA)	11.0	(NA)
Manmade spun yarn . . . . .	1,536,950	30,888	138,609	2.0	(NA)	44,527	166,865	1,550,589	(NA)	2.9	(NA)
Cellulosic . . . . .	94,415	5,563	38,222	5.9	(NA)	13,225	51,719	102,077	(NA)	13.0	(NA)
Noncellulosic . . . . .	1,442,536	25,325	100,387	1.8	(NA)	31,302	115,146	1,448,513	(NA)	2.2	(NA)
Polyester . . . . .	912,971	13,598	47,697	1.5	(NA)	6,124	26,505	905,497	(NA)	0.7	(NA)
85 percent or more polyester . . . . .	249,629	3,227	15,704	1.3	(NA)	5,369	22,836	251,771	(NA)	2.1	(NA)
Other chiefly polyester blends . . . . .	663,341	10,371	31,993	1.6	(NA)	755	3,669	653,725	(NA)	0.1	(NA)
Acrylic . . . . .	106,736	1,141	5,127	1.1	(NA)	10,370	49,671	115,965	(NA)	8.9	(NA)
85 percent or more acrylic . . . . .	100,409	927	3,987	0.9	(NA)	9,595	46,080	109,077	(NA)	8.8	(NA)
Other chiefly acrylic blends . . . . .	6,326	214	1,140	3.4	(NA)	775	3,591	6,887	(NA)	11.3	(NA)
Nylon . . . . .	368,135	4,213	22,040	1.1	(NA)	683	5,954	364,605	(NA)	0.2	(NA)
All other, including silk and other natural fibers . . . . .	54,694	6,373	25,523	11.7	(NA)	14,125	33,016	62,446	(NA)	22.6	(NA)
Manmade textured, bulked, or crimped filament yarn . . . . .	1,777,268	87,436	297,655	4.9	(NA)	61,096	191,138	1,495,612	(NA)	4.1	(NA)
Polyester . . . . .	474,567	54,860	152,960	11.6	(NA)	11,361	33,092	431,068	(NA)	2.6	(NA)
Nylon . . . . .	1,049,986	28,920	130,930	2.8	(NA)	43,479	138,724	1,064,545	(NA)	4.1	(NA)
Other . . . . .	252,716	3,656	13,765	1.4	(NA)	6,256	19,322	255,316	(NA)	2.5	(NA)
<b>1994</b>											
<b>Spun yarn</b> . . . . .	<b>3,694,673</b>	<b>52,797</b>	<b>212,804</b>	<b>1.4</b>	<b>(NA)</b>	<b>92,932</b>	<b>477,584</b>	<b>3,734,808</b>	<b>(NA)</b>	<b>2.5</b>	<b>(NA)</b>
Cotton . . . . .	1,973,073	26,940	92,609	1.4	(NA)	45,654	209,041	1,991,787	(NA)	2.3	(NA)
85 percent or more cotton . . . . .	1,737,362	25,534	84,014	1.5	(NA)	36,659	173,039	1,748,487	(NA)	2.1	(NA)
Carded . . . . .	1,572,193	16,846	51,605	1.1	(NA)	26,893	115,151	1,582,240	(NA)	1.7	(NA)
Combed . . . . .	165,169	8,688	32,409	5.3	(NA)	9,766	57,888	166,247	(NA)	5.9	(NA)
Other chiefly cotton blends . . . . .	235,711	1,406	8,595	0.6	(NA)	8,995	36,002	243,300	(NA)	3.7	(NA)
Carded . . . . .	187,223	927	6,215	0.5	(NA)	1,275	6,155	187,571	(NA)	0.7	(NA)
Combed . . . . .	48,487	479	2,380	1.0	(NA)	7,720	29,847	55,728	(NA)	13.9	(NA)
Wool spun yarn . . . . .	63,408	633	7,418	1.0	(NA)	4,375	48,905	67,150	(NA)	6.5	(NA)
Woolen . . . . .	37,938	9	145	-	(NA)	1,691	12,601	39,620	(NA)	4.3	(NA)
Worsted . . . . .	25,470	624	7,273	2.4	(NA)	2,684	36,304	27,530	(NA)	9.7	(NA)
Manmade spun yarn . . . . .	1,658,192	25,224	112,777	1.5	(NA)	42,903	219,638	1,675,871	(NA)	2.6	(NA)
Cellulosic . . . . .	101,319	4,874	29,290	4.8	(NA)	13,009	54,559	109,454	(NA)	11.9	(NA)
Noncellulosic . . . . .	1,556,874	20,350	83,487	1.3	(NA)	29,894	165,079	1,566,418	(NA)	1.9	(NA)
Polyester . . . . .	988,963	7,189	26,314	0.7	(NA)	9,427	42,279	991,201	(NA)	1.0	(NA)
85 percent or more polyester . . . . .	275,670	2,540	9,795	0.9	(NA)	5,846	27,240	278,976	(NA)	2.1	(NA)
Other chiefly polyester blends . . . . .	713,294	4,649	16,519	0.7	(NA)	3,581	15,039	712,226	(NA)	0.5	(NA)
Acrylic . . . . .	115,135	2,890	10,858	2.5	(NA)	10,094	84,271	122,339	(NA)	8.3	(NA)
85 percent or more acrylic . . . . .	109,097	2,637	9,379	2.4	(NA)	9,212	47,861	115,672	(NA)	8.0	(NA)
Other chiefly acrylic blends . . . . .	6,038	253	1,479	4.2	(NA)	882	36,410	6,667	(NA)	13.2	(NA)
Nylon . . . . .	402,970	4,381	23,384	1.1	(NA)	307	4,467	398,896	(NA)	0.1	(NA)
All other, including silk and other natural fibers . . . . .	49,806	5,890	22,931	11.8	(NA)	10,066	34,062	53,982	(NA)	18.6	(NA)

See footnotes at end of table.

Table 25. **Domestic Production, Imports, and Exports of Yarn: 1995 and 1994—Con.**

[Quantity in thousands of kilograms. Value in thousands of dollars]

Product description and year	Total production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to domestic production		Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup>		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value	Quantity	Value <sup>3</sup>	Quantity	Value	Quantity	Value
<b>1994—Con.</b>											
<b>Manmade textured, bulked, or crimped filament yarn</b>	<b>1,790,586</b>	<b>84,849</b>	<b>255,299</b>	<b>4.7</b>	<b>(NA)</b>	<b>45,726</b>	<b>171,440</b>	<b>1,501,647</b>	<b>(NA)</b>	<b>3.0</b>	<b>(NA)</b>
Polyester.....	453,937	52,477	120,654	11.6	(NA)	9,932	30,131	411,392	(NA)	2.4	(NA)
Nylon.....	1,086,449	27,746	117,380	2.6	(NA)	31,552	124,909	1,090,255	(NA)	2.9	(NA)
Other.....	250,199	4,626	17,265	1.8	(NA)	4,242	16,400	249,815	(NA)	0.3	(NA)

- Represents zero. NA Not available.

<sup>1</sup>Source: Bureau of Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry into the United States plus U.S. import duties.<sup>4</sup>Apparent consumption is equal to domestic production plus imports minus exports.

Note: Detail may not add to total because of independent rounding.

**HISTORICAL NOTE**

Data on the production of spun, textured, bulked, and crimped yarns have been collected by the Bureau of the Census since 1960. Historical data may be obtained from Current Industrial Reports at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100. Additional information (employment, payroll, cost of materials, capital

expenditures, inventories, etc.) on these yarns is available in both the census of manufactures and the annual survey of manufactures.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Kristin Williams, 301-457-4698.

## FABRICS PRODUCTION

### GENERAL

Although there are a number of ways to manufacture fabrics, the two most common are knitting and weaving. The data collected on fabrics production are for knitted and broadwoven fabrics.

#### Quantity of Knit and Broadwoven Fabrics Produced: 1991 to 1995

[Millions of pounds]

Year	Woven fabrics produced	Knit fabrics produced
1995.....	4,882	2,173
1994.....	4,926	2,230
1993.....	4,825	2,188
1992.....	4,826	2,179
1991.....	4,563	1,963

Note: Data for broadwoven fabrics were collected in thousands of square yards. Data shown here in pounds are based upon conversion ratios derived from the MC22T survey, Average Weight and Width of Broadwoven Fabrics, issued February 1993.

The table in the preceding column is a summary of knit fabrics production and broadwoven fabrics production for the last 5 years.

Knitting is a method of constructing fabrics by interlocking a series of loops of one or more yarns. The two main types of machine knitting are weft and warp. Data are presented, by fiber, for both types.

The data for woven fabrics are only for broadwoven fabrics. Broadwoven fabrics are at least 12 inches wide. Although this is the majority of the fabrics produced, it does exclude the narrow fabrics used for items such as seat belts, webbing, bindings, zippers, and labels. At one time, the Current Industrial Report series included narrow fabrics, but that survey was canceled in the late 1980's. The data on broadwoven fabrics are collected by type of weave and type of fiber. The categories for this, as with much of the textile data, are structured to be as compatible as possible with the data collected on imports and exports.

## BROADWOVEN FABRICS (MQ22T)

### INTRODUCTION

The data shown in the following tables were collected in the MQ22T, Broadwoven Fabrics, survey. The survey covers all companies manufacturing broadwoven fabrics (gray) in the United States, except those very small companies (generally with less than five employees) for which census of manufactures data were derived from administrative records.

### EXPLANATION OF TERMS

See explanation of terms and definitions of specific fabrics at the beginning of this chapter.



Table 26. Summary of Production of Broadwoven Gray Fabrics by Type of Fabrics: 1991 to 1995

[Fabrics in millions of square yards. Tire cord in millions of pounds]

Quarter and year	Chiefly cotton fabrics	Manmade fiber fabrics, including silk and manmade/wool blends	Chiefly wool fabrics	Tire cord and tire cord fabrics
<b>1995</b>				
Fourth quarter . . . . .	1,093.4	2,769.6	34.3	230.1
Third quarter . . . . .	1,089.5	2,793.0	35.2	240.0
Second quarter . . . . .	1,136.8	3,068.4	45.9	245.7
First quarter . . . . .	1,168.7	3,123.1	46.8	241.8
<b>1994</b>				
Fourth quarter . . . . .	1,143.1	3,105.6	39.0	231.6
Third quarter . . . . .	1,130.7	2,897.7	39.4	218.0
Second quarter . . . . .	1,125.4	2,955.8	51.1	207.4
First quarter . . . . .	1,073.3	2,960.7	49.1	220.9
<b>1993</b>				
Fourth quarter . . . . .	1,038.6	2,953.0	42.8	188.8
Third quarter . . . . .	1,070.9	2,819.4	43.9	196.3
Second quarter . . . . .	1,143.5	2,925.1	48.9	209.2
First quarter . . . . .	1,150.1	2,940.2	48.4	203.3
<b>1992</b>				
Fourth quarter . . . . .	1,143.9	2,893.4	39.5	189.6
Third quarter . . . . .	1,129.8	2,827.1	43.9	190.3
Second quarter . . . . .	1,172.1	2,843.7	47.2	192.7
First quarter . . . . .	1,153.8	2,762.2	45.7	190.3
<b>1991</b>				
Fourth quarter . . . . .	1,093.3	2,751.1	41.5	186.2
Third quarter . . . . .	1,081.6	2,644.7	41.4	175.1
Second quarter . . . . .	1,147.9	2,675.6	48.7	180.8
First quarter . . . . .	1,080.7	2,543.2	38.0	178.6

Table 27. Summary of Production and Loom Assignments of Broadwoven Gray Fabrics: 1995

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
2211B 00	Cotton and chiefly cotton fabrics mixed mainly or solely with manmade fibers . . . . .	22,622	4,488,498	23,755	1,168,721	22,829	1,136,832	22,487	1,089,497	22,622	1,093,448
2211C 00	Plain weaves . . . . .	9,898	1,983,331	9,693	519,184	9,603	493,352	9,582	473,478	9,898	497,317
2211D 00	Twill weaves . . . . .	7,353	1,595,253	7,283	405,243	7,295	403,217	7,298	398,273	7,353	388,520
2211E 00	All other weaves (except pile) . . . . .	2,665	412,519	2,670	109,846	2,617	107,765	2,673	96,384	2,665	98,524
2211F 00	Pile fabrics . . . . .	2,706	497,395	4,109	134,448	3,314	132,498	2,934	121,362	2,706	109,087
	Chiefly cotton fabrics mixed mainly or solely with other than manmade fibers . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221B 00	Manmade fiber and silk gray broadwoven fabrics . . . . .	46,127	11,754,137	49,956	3,123,122	49,558	3,068,425	48,319	2,793,026	46,127	2,769,564
2221C 00	85 percent or more filament rayon and/or acetate fabrics . . . . .	3,737	566,650	4,034	152,587	4,064	151,579	3,966	132,517	3,737	129,967
2221D 00	85 percent or more filament fabrics (except rayon and/or acetate) . . . . .	13,950	5,506,963	14,276	1,408,765	14,359	1,429,700	14,387	1,348,657	13,950	1,319,841
2221E 00	85 percent or more spun yarn fabrics (except wool blends) . . . . .	21,139	3,966,261	23,145	1,078,411	22,854	1,032,759	22,190	919,628	21,139	935,463
2221F 00	Plain weave (except pile) . . . . .	15,941	3,136,990	17,027	853,968	16,782	816,458	16,370	718,980	15,941	747,584
2221G 00	Twill weave (except pile) . . . . .	2,398	484,705	2,773	126,780	3,091	129,597	2,926	119,266	2,398	109,062
2221H 00	All other weaves (except pile) . . . . .	2,800	344,566	3,345	97,663	2,981	86,704	2,894	81,382	2,800	78,817
2221H 10	Spun/filament yarn combinations . . . . .	6,212	1,608,488	7,462	454,894	7,182	429,051	6,686	366,866	6,212	357,677
2221H 2X	Pile fabrics . . . . .	525	52,418	533	13,510	531	12,609	514	12,462	525	13,837
2221H 01	All other chiefly manmade fiber fabrics, including chiefly manmade fiber blends with wool . . . . .	522	52,806	465	14,828	531	12,594	532	12,757	522	12,627
	Silk fabrics . . . . .	42	551	41	127	37	133	44	139	42	152
	Woolen and worsted fabrics . . . . .	1,929	162,197	2,138	46,824	2,129	45,854	2,000	35,201	1,929	34,318

D Withheld to avoid disclosing data for individual companies.

Table 28. Summary of Production of Broadwoven Fabrics by Textile Category: 1995

[Thousands of square yards]

Product description	Production				
	Total	First quarter	Second quarter	Third quarter	Fourth quarter
Blue denim .....	879,631	222,263	224,607	219,888	212,873
All other yarn dyed fabrics .....	554,776	147,878	148,584	128,854	129,460
Plain weave .....	97,176	26,957	26,403	23,880	19,936
Twill weave .....	219,067	53,088	57,912	51,978	56,089
All other weave .....	238,533	67,833	64,269	52,996	53,435
Cheesecloth and batistes .....	1,003,874	261,769	241,394	243,043	257,668
Duck .....	51,508	14,134	13,318	12,006	12,050
Oxfords .....	91,658	21,031	20,964	26,018	23,645
Pile fabrics .....	549,813	147,958	145,107	133,824	122,924
Special weave fabrics .....	364,119	99,050	94,218	84,768	86,083
Other fabrics, chiefly cotton fiber:					
Print cloth .....	270,039	76,370	72,186	56,709	64,774
Poplin and broadcloth .....	38,742	10,196	12,530	8,911	7,105
Sheeting .....	721,595	188,121	183,531	173,070	176,873
Twills .....	511,945	133,384	124,877	130,194	123,490
Sateens .....	39,531	12,929	10,204	7,544	8,854
Other fabrics, chiefly manmade fiber:					
Manmade/wool blends .....	52,825	14,828	12,605	12,765	12,627
85 percent or more filament yarn fabrics:					
Typewriter fabrics .....	90,157	24,736	24,718	21,054	19,649
Other nylon .....	419,273	113,086	112,715	101,316	92,156
Rayon and acetate .....	566,650	152,587	151,579	132,517	129,967
Polyester .....	751,755	199,591	190,009	180,007	182,148
Glass fiber .....	458,650	118,424	114,458	114,080	111,688
All other .....	3,816,262	959,370	992,217	940,913	923,762
85 percent or more spun yarn fabrics:					
Print cloth .....	562,847	165,116	148,859	120,845	128,027
Poplin and broadcloth .....	519,660	134,479	129,629	118,450	137,102
Sheeting .....	1,871,212	501,199	486,366	438,675	444,972
Twills and sateens .....	493,071	130,138	130,735	121,887	110,311
Spun/filament combinations (except blue denim):					
Print cloth .....	521,604	144,901	141,283	125,745	109,675
Poplin and broadcloth .....	464,967	130,705	124,179	100,566	109,517
Sheeting .....	66,486	22,450	17,873	15,226	10,937
Twills and sateens .....	92,647	32,186	25,699	17,421	17,341
Other .....	455,080	122,248	117,983	106,108	108,741
Wool fabrics .....	162,197	46,824	45,854	35,201	34,318
Silk fabrics .....	551	127	133	139	152

Table 29. **Production and Loom Assignment of 85 Percent or More Spun Yarn Fabrics and Spun/Filament Combinations, Chiefly Cotton or Manmade Fibers, Excluding Blends of Wool, Silk, and Chiefly Cotton/Other Vegetable Fibers and Pile Fabrics: 1995**

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
2211B 02	Tobacco, cheese, and bandage cloth . . . . .	2,264	1,071,039	2,091	277,409	1,968	258,878	2,057	258,838	2,264	275,914
2221D 03	More than 50 percent cotton . . . . .	1,893	897,255	1,740	228,380	1,589	211,522	1,735	222,057	1,893	235,296
2221D 04	Chiefly spun polyester mixed with cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 05	Chiefly spun rayon and/or acetate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 05	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 05	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 04	Chiefly cotton . . . . .	-	-	-	-	-	-	-	-	-	-
2221G 04	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 12	Print cloth . . . . .	7,190	1,354,496	8,496	386,391	8,235	362,329	7,863	303,299	7,190	302,477
2221D 13	More than 50 percent cotton . . . . .	3,090	270,045	3,234	76,374	3,324	72,187	3,289	56,709	3,090	64,775
2221D 15	Chiefly spun polyester mixed with cotton . . . . .	2,480	530,664	3,153	149,374	3,015	143,478	2,724	116,188	2,480	121,624
2221D 16	Chiefly spun polyester mixed with rayon . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 18	Chiefly spun rayon and/or acetate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 18	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 14	Spun/filament combinations . . . . .	1,494	521,604	1,861	144,901	1,742	141,283	1,685	125,745	1,494	109,675
2221G 07	Chiefly cotton . . . . .	-	-	-	-	-	-	-	-	-	-
2221G 07	Chiefly manmade . . . . .	1,494	521,604	1,861	144,901	1,742	141,283	1,685	125,745	1,494	109,675
2211B 21	Poplin and broadcloth . . . . .	5,519	1,071,981	6,013	290,123	5,946	280,400	5,733	239,499	5,519	261,959
2211B 25	More than 50 percent cotton . . . . .	194	43,344	232	12,259	254	13,188	209	10,047	194	7,850
2211B 30	Weighing 5.9 ounces or less per square yard . . . . .	(D)	(D)	216	10,110	(D)	(D)	(D)	(D)	(D)	(D)
2211B 30	Carded . . . . .	102	25,721	128	6,259	142	7,726	117	6,972	102	4,764
2211B 30	Combed . . . . .	(D)	(D)	88	3,851	(D)	(D)	(D)	(D)	(D)	(D)
2221D 23	Weighing more than 5.9 ounces per square yard . . . . .	(D)	(D)	16	2,149	(D)	(D)	(D)	(D)	(D)	(D)
2221D 25	Chiefly spun polyester mixed with cotton . . . . .	3,367	479,415	3,130	120,840	3,303	123,168	3,322	112,139	3,367	123,268
2221D 25	Weighing 5.0 ounces or less per square yard . . . . .	3,247	447,390	3,018	111,778	3,198	117,073	3,180	103,930	3,247	114,609
2221D 25	Carded . . . . .	2,649	315,224	2,437	74,618	2,629	80,728	2,676	76,792	2,649	83,086
2221D 25	Combed . . . . .	598	132,166	581	37,160	569	36,345	504	27,138	598	31,523
2221D 27	Weighing more than 5.0 ounces per square yard . . . . .	120	32,025	112	9,062	105	6,095	142	8,209	120	8,659
2221D 31	Carded . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 33	Combed . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 34	Chiefly spun rayon and/or acetate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 35	All other fabrics, 85 percent or more spun yarn . . . . .	118	14,237	228	3,482	232	3,606	204	3,588	118	3,561
2221G 19	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 19	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 19	Chiefly manmade . . . . .	1,355	464,967	1,844	130,705	1,746	124,179	1,535	100,566	1,355	109,517

See footnotes at end of table.

Table 29. **Production and Loom Assignment of 85 Percent or More Spun Yarn Fabrics and Spun/Filament Combinations, Chiefly Cotton or Manmade Fibers, Excluding Blends of Wool, Silk, and Chiefly Cotton/Other Vegetable Fibers and Pile Fabrics: 1995—Con.**

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
2211B 41	Lawns, voiles, and batistes . . .	144	8,279	114	2,070	128	2,265	112	1,980	144	1,964
	More than 50 percent cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 41	Chiefly spun polyester mixed with cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 44	Chiefly spun rayon and/or acetate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 42	All other fabrics, 85 percent or more spun yarn . . . . .	-	-	-	-	-	-	-	-	-	-
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 43	Chiefly cotton . . . . .	-	-	-	-	-	-	-	-	-	-
2221G 28	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Duck, including taped warp duck . . . . .	417	60,258	462	16,358	489	15,540	440	14,153	417	14,207
2211B 71	More than 50 percent cotton . . . . .	155	28,457	165	8,227	154	7,359	158	6,176	155	6,695
2221D 89	Chiefly spun polyester mixed with cotton . . . . .	82	5,963	103	1,649	102	1,736	91	1,340	82	1,238
2221D 91	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 75	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221B 77	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Bedsheeting . . . . .	10,158	1,962,331	10,354	513,346	10,316	503,448	10,130	475,633	10,158	469,904
2211B 45	More than 50 percent cotton . . . . .	2,824	429,729	2,671	109,148	2,663	106,293	2,504	103,814	2,824	110,474
	Chiefly spun polyester mixed with cotton . . . . .	6,894	1,414,625	7,129	367,377	7,141	366,455	7,125	343,489	6,894	337,304
2221D 43	Carded . . . . .	2,091	542,476	2,184	143,856	2,387	152,644	2,164	125,007	2,091	120,969
2221D 45	Combed . . . . .	4,803	872,149	4,945	223,521	4,754	213,811	4,961	218,482	4,803	216,335
2221D 46	Chiefly spun rayon and/or acetate . . . . .	-	-	-	-	-	-	-	-	-	-
2221D 47	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 47	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 33	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	All other sheeting, including osnaburgs . . . . .	3,607	744,716	3,632	210,634	3,486	196,394	3,528	163,378	3,607	174,310
2211B 61	More than 50 percent cotton . . . . .	1,396	247,557	1,302	65,097	1,290	65,659	1,343	58,935	1,396	57,866
	Weighing 5.9 ounces or less per square yard . . . . .	1,065	162,452	944	42,485	925	41,712	930	37,230	1,065	41,025
	Weighing more than 5.9 ounces per square yard . . . . .	331	85,105	358	22,612	365	23,947	413	21,705	331	16,841
2211B 63	Blanketing . . . . .	196	46,190	224	12,504	203	12,463	237	11,678	196	9,545
2211B 65	All other fabrics . . . . .	135	38,915	134	10,108	162	11,484	176	10,027	135	7,296

See footnotes at end of table.

Table 29. **Production and Loom Assignment of 85 Percent or More Spun Yarn Fabrics and Spun/Filament Combinations, Chiefly Cotton or Manmade Fibers, Excluding Blends of Wool, Silk, and Chiefly Cotton/Other Vegetable Fibers and Pile Fabrics: 1995—Con.**

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
	All other sheeting, including osnaburgs—Con.										
	85 percent or more spun polyester . . . . .	136	22,189	171	6,701	160	5,856	132	4,897	136	4,735
2221D 63	Blanketing . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 65	All other fabrics . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Chiefly spun polyester mixed with cotton . . . . .	1,280	328,934	1,299	97,123	1,273	90,433	1,224	65,864	1,280	75,514
2221D 73	Weighing 5.0 ounces or less per square yard . . . . .	1,016	315,510	1,179	93,672	1,207	87,483	1,129	63,059	1,016	71,296
2221D 75	Weighing more than 5.0 ounces per square yard.	264	13,424	120	3,451	66	2,950	95	2,805	264	4,218
	Chiefly spun acrylic . . . . .	203	45,159	210	10,188	212	11,670	266	12,809	203	10,492
2221D 81	Blanketing . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 83	All other fabrics . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 84	Chiefly spun rayon and/or acetate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 85	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 67	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 45	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)	(D)
	Blue denim . . . . .	3,657	879,631	3,593	222,263	3,604	224,607	3,658	219,888	3,657	212,873
	More than 50 percent cotton . . . . .	3,520	857,899	3,493	216,181	3,490	218,890	3,576	215,431	3,520	207,397
2211C 01	Weighing 10.7 ounces or less per square yard . . . . .	390	88,270	362	22,750	381	24,728	449	23,549	390	17,243
2211C 03	Weighing more than 10.7 ounces per square yard.	3,130	769,629	3,131	193,431	3,109	194,162	3,127	191,882	3,130	190,154
2221E 03	Chiefly spun polyester mixed with cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211G 05	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 46	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	All other denim . . . . .	1,035	208,776	810	45,612	890	50,769	906	54,454	1,035	57,941
	More than 50 percent cotton . . . . .	1,022	203,782	782	43,984	874	49,663	883	53,327	1,022	56,808
2211C 11	Weighing 10.7 ounces or less per square yard . . . . .	125	13,956	57	2,902	77	2,529	86	2,750	125	5,775
2211C 13	Weighing more than 10.7 ounces per square yard.	897	189,826	725	41,082	797	47,134	797	50,577	897	51,033
2221E 13	Chiefly spun polyester mixed with cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211C 15	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 18	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211C 21	Canton flannels . . . . .	(D)	(D)	362	5,108	(D)	(D)	(D)	(D)	(D)	(D)
	All other twill weaves . . . . .	5,078	1,052,670	5,741	285,704	5,970	273,405	5,640	254,803	5,078	238,758
	More than 50 percent cotton . . . . .	2,358	497,967	2,553	134,745	2,485	125,342	2,422	122,046	2,358	115,834
2211C 31	Weighing 5.9 ounces or less per square yard . . . . .	696	108,075	743	26,292	658	27,635	640	27,210	696	26,938
2211C 33	Weighing more than 5.9 ounces per square yard.	1,662	389,892	1,810	108,453	1,827	97,707	1,782	94,836	1,662	88,896
2221E 21	85 percent or more spun polyester . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 29. **Production and Loom Assignment of 85 Percent or More Spun Yarn Fabrics and Spun/Filament Combinations, Chiefly Cotton or Manmade Fibers, Excluding Blends of Wool, Silk, and Chiefly Cotton/Other Vegetable Fibers and Pile Fabrics: 1995—Con.**

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
2221E 23	All other twill weaves—Con. Chiefly spun polyester mixed with cotton . . . . .	1,808	368,670	2,008	91,542	2,116	95,861	2,096	95,104	1,808	86,163
2221E 25	Weighing 5.0 ounces or less per square yard . . .	267	47,452	298	7,736	373	13,586	323	13,762	267	12,368
2221E 26	Weighing more than 5.0 ounces per square yard.	1,541	321,218	1,710	83,806	1,743	82,275	1,773	81,342	1,541	73,795
2221E 27	Chiefly spun rayon and/or acetate . . . . .	254	37,642	399	9,585	657	11,773	582	9,407	254	6,877
2211C 35	All other fabrics, 85 percent or more spun yarn . . . . .	193	23,209	235	8,985	173	6,375	133	3,319	193	4,530
2221C 39	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 39	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 39	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 05	Sateens . . . . .	546	83,013	648	26,861	582	21,538	560	17,262	546	17,352
2221F 05	More than 50 percent cotton . . . . .	191	39,263	217	12,877	195	10,129	189	7,436	191	8,821
2221F 06	Chiefly spun polyester mixed with cotton . . . . .	107	10,984	114	3,818	75	1,277	107	3,028	107	2,861
2221F 07	Chiefly spun rayon and/or acetate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 07	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 05	Spun/filament combinations . . . . .	108	23,082	183	7,991	169	7,174	117	4,198	108	3,719
2221G 05	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 05	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 11	Oxfords . . . . .	1,152	186,060	1,086	45,679	1,087	47,965	1,215	47,418	1,152	44,998
2221F 11	More than 50 percent cotton . . . . .	529	110,638	481	27,466	498	30,120	554	26,938	529	26,114
2221F 17	Chiefly spun polyester mixed with cotton . . . . .	266	15,811	296	4,303	277	4,492	289	3,853	266	3,163
2211D 13	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 68	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 68	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 68	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 31	Birdseye diaper cloth . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 35	Huck and crash toweling . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 45	Table damask . . . . .	307	72,426	352	22,313	270	16,845	333	16,428	307	16,840
2221F 32	More than 50 percent cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221F 37	Chiefly spun polyester mixed with cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 07	All other fabrics, 85 percent or more spun yarn . . . . .	-	-	-	-	-	-	-	-	-	-
2221G 82	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 82	Chiefly cotton . . . . .	-	-	-	-	-	-	-	-	-	-
2221G 82	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 51	Jacquard and dobby shirting fabrics . . . . .	694	53,502	1,007	17,486	850	14,516	645	11,374	694	10,126
2221F 41	More than 50 percent cotton . . . . .	46	6,918	81	1,982	36	1,680	45	1,643	46	1,613
2221F 41	Chiefly spun polyester mixed with cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 29. **Production and Loom Assignment of 85 Percent or More Spun Yarn Fabrics and Spun/Filament Combinations, Chiefly Cotton or Manmade Fibers, Excluding Blends of Wool, Silk, and Chiefly Cotton/Other Vegetable Fibers and Pile Fabrics: 1995—Con.**

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
2221F 43	Jacquard and dobby shirting fabrics—Con.										
	All other fabrics, 85 percent or more spun yarn . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spun/filament combinations . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 53	Chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 84	Chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	All other weaves . . . . .	4,947	707,507	5,304	192,640	5,179	184,381	5,084	163,169	4,947	167,317
	More than 50 percent cotton . . . . .	1,359	190,154	1,314	50,927	1,331	49,206	1,361	43,589	1,359	46,432
2211D 62	Weighing 5.9 ounces or less per square yard . .	178	33,123	164	9,092	172	9,165	174	8,273	178	6,593
2211D 64	Weighing more than 5.9 ounces per square yard.	1,181	157,031	1,150	41,835	1,159	40,041	1,187	35,316	1,181	39,839
2221F 52	85 percent or more spun polyester . . . . .	67	17,946	218	5,909	215	5,814	179	5,044	67	1,179
	Chiefly spun polyester mixed with cotton . . . . .	496	54,940	473	13,652	488	13,663	487	13,509	496	14,116
2221F 54	Weighing 5.0 ounces or less per square yard . . .	179	14,633	155	4,087	172	3,615	184	3,213	179	3,718
2221F 56	Weighing more than 5.0 ounces per square yard.	317	40,307	318	9,565	316	10,048	303	10,296	317	10,398
2221F 58	All other fabrics, 85 percent or more spun yarn . . . . .	735	97,497	830	25,307	732	25,624	704	21,743	735	24,823
	Spun/filament combinations . . . . .	2,290	346,970	2,469	96,845	2,413	90,074	2,353	79,284	2,290	80,767
2211D 66	Chiefly cotton . . . . .	96	10,552	150	2,551	124	2,586	118	2,354	96	3,061
2221G 87	Chiefly manmade . . . . .	2,194	336,418	2,319	94,294	2,289	87,488	2,235	76,930	2,194	77,706

- Represents zero. D Withheld to avoid disclosing data for individual companies.

Table 30. Production and Loom Assignment of 85 Percent or More Filament Yarn Fabrics: 1995

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
	85 percent or more filament yarn fabrics .....	17,836	6,102,747	18,426	1,567,794	18,508	1,585,696	18,521	1,489,887	17,836	1,459,370
2221B 02	High tenacity yarn fabrics . . .	507	100,040	496	26,981	545	26,974	511	24,545	507	21,540
	100 percent and chiefly rayon .....	136	15,414	179	4,746	184	5,491	134	2,370	136	2,807
2221C 02	100 percent and chiefly nylon .....	247	53,547	195	13,948	244	13,290	283	14,540	247	11,769
2221C 04	100 percent and chiefly polyester .....	124	31,079	122	8,287	117	8,193	94	7,635	124	6,964
2221C 07	85 percent or more filament yarn fabrics obtained from strip-like rayon and/or acetate .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	85 percent or more acetate or triacetate filament yarn fabrics .....	3,130	505,195	3,205	133,373	3,190	131,598	3,260	119,895	3,130	120,329
	Weighing not more than 5 ounces per square yard ..	2,685	455,031	2,713	118,379	2,748	118,152	2,819	109,352	2,685	109,148
2221B 11	Plain weave .....	1,714	308,762	2,007	87,192	1,945	83,951	1,921	70,951	1,714	66,668
2221B 13	Other weaves .....	971	146,269	706	31,187	803	34,201	898	38,401	971	42,480
	Weighing more than 5 ounces per square yard ..	445	50,164	492	14,994	442	13,446	441	10,543	445	11,181
2221B 15	Plain weave .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221B 17	Other weaves .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Other chiefly rayon and/or acetate filament yarn fabrics .....	471	46,041	650	14,468	690	14,490	572	10,252	471	6,831
2221B 32	Weighing not more than 5 ounces per square yard ..	271	27,030	383	8,448	417	8,981	353	6,776	271	2,825
2221B 34	Weighing more than 5 ounces per square yard ..	200	19,011	267	6,020	273	5,509	219	3,476	200	4,006
	85 percent or more nylon filament yarn fabrics .....	2,837	452,262	3,048	123,128	2,972	122,854	3,015	106,977	2,837	99,303
2221C 11	Typewriter and other impression fabrics .....	694	90,157	740	24,736	737	24,718	762	21,054	694	19,649
	Other 85 percent or more nylon filament yarn fabrics .....	2,143	362,105	2,308	98,392	2,235	98,136	2,253	85,923	2,143	79,654
	Weighing not more than 5 ounces per square yard .....	1,932	300,545	2,045	79,767	1,982	79,752	2,032	72,189	1,932	68,837
2221C 14	Flat, nontextured .....	1,746	270,922	1,797	70,123	1,790	72,008	1,838	65,431	1,746	63,360
2221C 16	All other .....	186	29,623	248	9,644	192	7,744	194	6,758	186	5,477
	Weighing more than 5 ounces per square yard .....	211	61,560	263	18,625	253	18,384	221	13,734	211	10,817
2221C 22	Flat, nontextured .....	(D)	(D)	173	8,174	(D)	(D)	(D)	(D)	(D)	(D)
2221C 24	All other .....	(D)	(D)	90	10,451	(D)	(D)	(D)	(D)	(D)	(D)
	Other chiefly nylon filament fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 32	Weighing not more than 5 ounces per square yard ..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 14	Weighing more than 5 ounces per square yard ..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.



Table 30. **Production and Loom Assignment of 85 Percent or More Filament Yarn Fabrics: 1995—Con.**

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
	85 percent or more filament yarn fabrics—Con.										
	85 percent or more polyester filament yarn fabrics . . . . .	4,552	709,156	4,868	187,910	4,813	178,816	4,766	169,639	4,552	172,791
	Textured . . . . .	3,256	508,691	3,386	132,152	3,309	126,069	3,358	121,802	3,256	128,668
	Weighing not more than 5 ounces per square yard <sup>1</sup> . . . . .	1,389	258,924	1,715	74,656	1,551	65,484	1,603	60,700	1,389	58,084
2221C 42	Flat . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 44	Other . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 45	Weighing more than 5 ounces per square yard <sup>1</sup> . . . . .	1,867	249,767	1,671	57,496	1,758	60,585	1,755	61,102	1,867	70,584
	Nontextured . . . . .	1,296	200,465	1,482	55,758	1,504	52,747	1,408	47,837	1,296	44,123
2221C 50	Weighing not more than 5 ounces per square yard <sup>1</sup> . . . . .	774	97,889	934	27,528	948	24,383	826	23,461	774	22,517
2221C 55	Weighing more than 5 ounces per square yard <sup>1</sup> . . . . .	522	102,576	548	28,230	556	28,364	582	24,376	522	21,606
2221C 62	Other chiefly polyester filament fabrics . . . . .	130	11,520	150	3,394	151	3,000	137	2,733	130	2,393
2221C 72	Glass fiber fabrics . . . . .	2,434	458,650	2,399	118,424	2,462	114,458	2,460	114,080	2,434	111,688
	Woven roving and screening . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 74	All other glass fiber fabrics . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	All other 85 percent or more filament yarn fabrics, including saran and olefin . . . . .	3,569	3,787,128	3,445	952,928	3,543	987,800	3,571	932,200	3,569	914,200
2221C 80	Carpet backing . . . . .	2,883	3,529,234	2,870	894,277	2,903	924,777	2,861	860,238	2,883	849,942
	Woven synthetic, including olefin . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 83	Jute and other backing . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221C 84	All other . . . . .	686	257,894	575	58,651	640	63,023	710	71,962	686	64,258

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Classified on a finished weight basis.

Table 31. Production and Loom Assignment of Pile Fabrics, Including Yarn Dyed Fabrics: 1995

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
	Pile fabrics .....	3,231	549,813	4,642	147,958	3,845	145,107	3,448	133,824	3,231	122,924
	Corduroy .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	More than 50 percent cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211E 01	Finewales and pinwales .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211E 03	Midwales .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211E 06	Widewales and other ..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 01	Chiefly manmade fiber ...	-	-	-	-	-	-	-	-	-	-
	Velvets, plushes, and other pile fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211E 21	More than 50 percent cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 11	Chiefly manmade fiber ...	525	52,418	533	13,510	531	12,609	514	12,462	525	13,837
	Terry cloth and terry toweling .....	2,247	447,288	3,422	119,422	2,804	114,872	2,605	111,040	2,247	101,954
2211E 32	Terry toweling .....	2,194	439,340	3,351	116,805	2,735	112,686	2,547	109,336	2,194	100,513
2211E 34	Terry cloth .....	53	7,948	71	2,617	69	2,186	58	1,704	53	1,441

- Represents zero. D Withheld to avoid disclosing data for individual companies.

Table 32. Production and Loom Assignment of Woolen and Worsted Fabrics, Including Chiefly Manmade/Wool Blends and Chiefly Cotton/Wool Blends: 1995

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
	Woolen and worsted fabrics, 36 percent or more wool (except felts) <sup>1</sup> ...	1,929	162,197	2,138	46,824	2,129	45,854	2,000	35,201	1,929	34,318
	Apparel fabrics, including government orders .....	1,828	155,416	2,045	45,260	2,019	43,954	1,901	33,688	1,828	32,514
22312 01	Worsteds fabrics .....	1,179	100,096	1,317	29,301	1,305	27,925	1,223	20,375	1,179	22,495
	Weighing not more than 5.9 ounces per square yard .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312 02	Weighing more than 5.9 ounces per square yard .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Woolen fabrics .....	649	55,320	728	15,959	714	16,029	678	13,313	649	10,019
22312 21	Weighing not more than 9 ounces per square yard ...	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312 23	Weighing more than 9 ounces per square yard .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Nonapparel fabrics, including government orders (except felts) ..	101	6,781	93	1,564	110	1,900	99	1,513	101	1,804
22312 62	Blanketing, including thermal ...	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312 61	Upholstery fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312 85	All other fabrics .....	27	953	28	280	37	336	31	175	27	162
22312 92	Woven felts (thousands of pounds) ..	123	3,941	133	1,136	127	1,117	121	844	123	844
	Chiefly manmade/wool blend and chiefly cotton/wool blend fabrics ...	522	52,825	465	14,828	532	12,605	533	12,765	522	12,627

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Includes fabrics 36 percent or more wool or reprocessed wool by weight. 1986 and prior years include fabrics 50 percent or more wool or reprocessed wool by weight.

Table 33. Production and Loom Assignment of Upholstery Fabrics: 1995

[Looms operating in numbers. Production in thousands of square yards]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Looms operating end of year	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production	Looms operating	Production
	Upholstery fabrics .....	4,276	506,008	4,332	134,289	4,180	120,710	4,147	116,802	4,276	134,207
	85 percent or more spun yarn and spun/filament combinations .....	3,411	402,001	3,439	104,353	3,327	95,645	3,279	94,810	3,411	107,193
2211E 41	Pile woven .....	759	86,534	739	22,738	744	20,576	732	21,004	759	22,216
	All cotton and chiefly cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 41	All manmade and chiefly manmade .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211X 01	Flat woven .....	2,652	315,467	2,700	81,615	2,583	75,069	2,547	73,806	2,652	84,977
	All cotton and chiefly cotton .....	1,155	136,620	1,093	33,256	1,071	32,051	1,099	33,444	1,155	37,869
	All manmade and chiefly manmade .....	1,497	178,847	1,607	48,359	1,512	43,018	1,448	40,362	1,497	47,108
2221X 01	Olefin .....	484	66,143	495	15,427	458	16,401	486	15,931	484	18,384
2221X 03	All other flat woven manmade fiber fabrics .....	1,013	112,704	1,112	32,932	1,054	26,617	962	24,431	1,013	28,724
	85 percent or more filament yarn .....	865	104,007	893	29,936	853	25,065	868	21,992	865	27,014
2221X 01	All polyester and chiefly polyester .....	277	36,950	321	12,185	286	9,438	276	6,075	277	9,252
2221X 03	All nylon and chiefly nylon .....	54	1,080	41	253	41	260	55	256	54	311
2221X 05	All olefin and chiefly olefin .....	449	63,191	454	16,765	445	14,749	456	14,963	449	16,714
2221X 07	All other filament fiber fabrics .....	85	2,786	77	733	81	618	81	698	85	737

D Withheld to avoid disclosing data for individual companies.

Table 34. Production of Tire Cord and Tire Cord Fabrics: 1995

[Thousands of pounds]

Product code	Product description	Production				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter
22960 00	Tire cord and tire cord fabrics .....	957,656	241,836	245,654	240,023	230,143
22960 12	Cotton tire cord and tire cord fabrics .....	(D)	(D)	(D)	(D)	(D)
22960 32	Rayon tire cord and tire cord fabrics .....	(D)	(D)	(D)	(D)	(D)
22960 35	Nylon tire cord and tire cord fabrics .....	134,981	35,408	35,210	33,145	31,218
22960 37	Polyester tire cord and tire cord fabrics .....	287,343	71,025	73,116	73,515	69,687
22960 38	Glass tire cord and tire cord fabrics .....	(D)	(D)	(D)	(D)	(D)
22960 45	Steel tire cord .....	518,808	131,082	132,942	129,272	125,512
22960 49	All other tire cord and tire cord fabrics, including chafer .....	15,059	3,995	4,045	3,651	3,368

D Withheld to avoid disclosing data for individual companies.

Table 35. Looms in Place and Loom Hours Operated in Broadwoven Fabrics Mills: 1995

[Looms in place in numbers. Loom hours in thousands]

Type of loom	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
	Looms in place Dec. 31, 1995	Loom hours operated	Looms in place	Loom hours operated	Looms in place	Loom hours operated	Looms in place	Loom hours operated	Looms in place	Loom hours operated
<b>Total</b> .....	<b>78,107</b>	<b>561,356</b>	<b>82,326</b>	<b>149,581</b>	<b>81,221</b>	<b>145,767</b>	<b>79,987</b>	<b>135,806</b>	<b>78,107</b>	<b>130,202</b>
Shuttle type looms.....	13,200	94,160	16,491	27,110	15,646	24,864	14,854	22,133	13,200	20,053
Single shuttle cam looms.....	9,505	70,638	11,331	19,722	11,241	18,998	10,597	16,678	9,505	15,240
Single shuttle dobby looms....	2,018	11,898	2,368	3,551	2,238	2,979	2,189	2,829	2,018	2,539
Multiple shuttle box or head motion looms.....	1,021	8,218	1,952	2,873	1,440	2,032	1,344	1,852	1,021	1,461
Double shuttle pile and plush, and jacquard looms.....	656	3,406	840	964	727	855	724	774	656	813
Shuttleless looms and weaving machines.....	64,907	467,196	65,835	122,471	65,575	120,903	65,133	113,673	64,907	110,149
Single filling insertion capability.....	36,838	282,106	38,242	73,147	37,781	72,733	37,637	69,537	36,838	66,689
Air jet looms.....	16,038	127,298	16,123	32,603	15,989	32,065	16,090	31,708	16,038	30,922
Water jet looms.....	5,073	37,872	5,818	10,226	5,612	9,770	5,596	9,063	5,073	8,813
Projectile looms.....	12,829	94,548	12,710	23,792	12,752	24,735	12,813	23,573	12,829	22,448
Rapier looms.....	2,898	22,388	3,591	6,526	3,428	6,163	3,138	5,193	2,898	4,506
Multiple filling insertion capability.....	27,243	180,760	26,709	48,213	26,922	47,058	26,664	43,072	27,243	42,417
Air jet looms.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Water jet looms.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Projectile looms.....	8,231	58,492	8,361	16,010	8,278	15,437	8,167	13,930	8,231	13,115
Rapier looms.....	13,659	82,034	13,144	21,493	13,611	21,219	13,541	19,759	13,659	19,563
Pile and plush looms.....	826	4,330	884	1,111	872	1,112	832	1,064	826	1,043

D Withheld to avoid disclosing data for individual companies.

Table 36. Production, Exports, Imports, and Apparent Consumption of Broadwoven Fabrics: 1995

[Quantity in thousands of square meters. Value in thousands of dollars]

Product description	Manufacturers' shipments <sup>1</sup> (quantity)	Imports for consumption <sup>2</sup>		Percent imports to manufacturers' shipments (quantity)	Exports of domestic merchandise <sup>4</sup>		Percent exports to manufacturers' shipments (quantity)	Apparent consumption <sup>5</sup>
		Quantity	Value <sup>3</sup>		Quantity	Value		
Cotton fabrics <sup>6</sup>	3,752,553	1,485,065	1,763,351	39.6	277,748	613,950	7.4	4,959,870
Cheesecloth and batistes	750,549	40,523	30,184	5.4	25,980	55,863	3.5	765,092
Print cloth	225,785	316,432	218,494	140.1	11,703	20,112	5.2	530,514
Poplin and broadcloth	32,393	188,592	150,570	582.2	20,991	53,203	64.8	199,994
Weighing 5.9 ounces or less per square yard	(D)	186,900	144,459	(D)	11,048	30,576	(D)	(D)
Weighing more than 5.9 ounces per square yard	(D)	1,692	6,111	(D)	9,943	22,627	(D)	(D)
Duck, including tape warp	23,482	92,593	94,271	394.3	9,175	27,085	39.1	106,900
Sheeting	603,340	295,980	257,628	49.1	16,412	36,217	2.7	882,908
Twills and sateens	460,728	188,453	253,851	40.9	31,672	61,866	6.9	617,509
Oxfords	45,064	7,718	18,145	17.1	(NA)	(NA)	(NA)	(NA)
All other constructions	154,923	80,203	168,057	51.8	(NA)	(NA)	(NA)	(NA)
Blue denim	729,036	173,516	326,865	23.8	96,577	226,240	13.2	805,975
Yarn dyed fabrics	311,370	87,043	187,921	28.0	58,958	110,885	18.9	339,455
Pile fabrics (except terry), including yarn dyed	41,895	9,792	48,976	23.4	4,600	17,135	11.0	47,087
Terry, including yarn dyed	373,987	4,220	8,389	1.1	1,680	5,344	0.4	376,527
Manmade fiber fabrics	9,858,192	838,609	1,208,233	8.5	335,120	819,615	3.4	10,361,681
85 percent or more filament yarn fabrics	5,102,631	445,450	607,792	8.7	187,109	440,145	3.7	5,360,972
Nylon and polyester high tenacity fabrics	70,758	15,240	26,569	21.5	20,318	48,665	28.7	65,680
Rayon high tenacity fabrics	12,888	842	1,786	6.5	4,664	11,999	36.2	9,066
Typewriter fabrics	75,382	59	122	0.1	(NA)	(NA)	(NA)	(NA)
Rayon or acetate filament yarn fabrics	460,900	15,008	81,454	3.3	17,019	36,219	3.7	458,889
Polyester filament yarn fabrics	602,572	185,462	324,794	30.8	60,800	107,225	10.1	727,234
Glass fiber fabrics	383,487	43,114	48,376	11.2	28,779	75,412	7.5	397,822
Nylon filament yarn fabrics	305,791	41,327	56,815	13.5	(NA)	(NA)	(NA)	(NA)
85 percent or more filament yarn obtained from strip	(D)	135,285	36,812	(D)	8,225	36,823	(D)	(D)
All other filament yarn fabrics	(D)	9,113	31,064	(D)	47,304	123,802	(D)	(D)
85 percent or more spun yarn fabrics	3,366,503	234,926	290,537	7.0	114,872	280,082	3.4	3,486,557
Cheesecloth and batistes	88,810	5,419	4,063	6.1	(?)	(?)	(?)	(?)
Poplin and broadcloth	434,498	64,243	57,402	14.8	(?)	(?)	(?)	(?)
Poly/cotton blends weighing less than 5.0 ounces per square yard	341,492	54,375	39,979	15.9	(?)	(?)	(?)	(?)
Poly/cotton blends weighing more than 5.0 ounces per square yard	26,729	1,804	2,819	6.7	(?)	(?)	(?)	(?)
All other spun yarns	66,277	8,064	14,604	12.2	(?)	(?)	(?)	(?)
Print cloth	470,608	59,516	40,706	12.6	(?)	(?)	(?)	(?)
Duck	19,584	1,222	2,298	6.2	(?)	(?)	(?)	(?)
Sheeting	1,564,559	19,532	24,355	1.2	(?)	(?)	(?)	(?)
Poly/cotton blends weighing 5.0 ounces or less per square yard	1,440,385	12,239	8,711	0.8	(?)	(?)	(?)	(?)
Poly/cotton blends weighing more than 5.0 ounces per square yard	10,758	546	739	5.1	(?)	(?)	(?)	(?)
All other spun yarn	113,416	6,747	14,905	5.9	(?)	(?)	(?)	(?)
Sateens or twills	412,267	50,306	48,037	12.2	(?)	(?)	(?)	(?)
Oxfords	31,574	33	56	0.1	(?)	(?)	(?)	(?)
All other spun manmade fiber fabrics	149,524	19,886	62,700	13.3	(?)	(?)	(?)	(?)
Yarn dyed fabrics	151,252	6,540	8,817	4.3	(?)	(?)	(?)	(?)
Pile fabrics	43,828	8,229	42,103	18.8	(?)	(?)	(?)	(?)
Spun/filament yarn combinations, including yarn dyed	1,344,890	147,481	272,010	11.0	33,139	99,388	2.5	1,459,232
Poplin and broadcloth	388,768	53,153	80,265	13.7	(?)	(?)	(?)	(?)
Sheeting	(D)	6,930	10,191	(D)	(?)	(?)	(?)	(?)
Print cloth	436,124	24,728	22,789	5.7	(?)	(?)	(?)	(?)
Twills and sateens	(D)	7,635	25,583	(D)	(?)	(?)	(?)	(?)
All other	387,106	55,035	133,182	14.2	(?)	(?)	(?)	(?)
Chiefly manmade/wool blends	44,168	10,752	37,894	24.3	(?)	(?)	(?)	(?)
Silk fabrics	461	28,820	295,476	6,255.7	2,086	15,895	452.8	27,195
Wool fabrics	135,616	27,055	268,456	19.9	9,296	56,539	6.9	153,375

D Withheld to avoid disclosing data for individual companies. NA Not available.

<sup>1</sup>Represents production of gray broadwoven fabrics; import and export data represent gray as well as finished broadwoven fabrics. For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at the end of this subsection. <sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. <sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) at first port of entry in the United States plus calculated import duty. <sup>4</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*. <sup>5</sup>Apparent consumption represents new domestic supply and is derived by subtracting exports from total manufacturers' shipments plus imports. <sup>6</sup>Includes all cotton and chiefly cotton mixed with manmade fiber. <sup>7</sup>Individual export data are not available for these products; however, export data are available on a total basis.

Note: Fabrics blends as shown in Current Industrial Reports Series MQ22T are reported based on the chief weight of the fiber; whereas, fabrics blends as shown for imports and exports are based on chief value of fiber.

**HISTORICAL NOTE**

Data on the production of broadwoven fabrics have been collected by the Bureau of the Census since 1943. Historical data may be obtained from Current Industrial Reports (called Facts for Industry prior to 1959) at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100. Additional information (employment, payroll, cost of materials,

capital expenditures, inventories, etc.) on broadwoven fabrics is available in both the census of manufactures and the annual survey of manufactures.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Kay Hanks, 301-457-4620.

## KNIT FABRICS PRODUCTION (MA22K)

### INTRODUCTION

The data from the MA22K, Knit Fabrics survey include all firms producing knit fabrics, whether for sale, for own use, or on commission. It excludes very small firms (generally those with less than five employees) for which data for the census of manufactures were derived from administrative records.

The data for production includes all knit fabrics off the knitting machine whether as yard goods, circular sweater strips, or full fashioned garment sections. It also includes the production of fabrics that are finished within the same plant and shipped as finished garments. It does not include hosiery.

### EXPLANATION OF TERMS

**For own use.** Includes cloth that is cut, cut and sewn, or further fabricated within the plant knitting the cloth.

**For sale.** Includes knit cloth that is sold to other plants of the same company for finishing, and to other firms or plants not affiliated with the same company.

**On commission.** Includes fabrics made from yarn owned by others.

See additional explanation of terms at the beginning of this chapter.

Table 37. Summary of Knit Fabrics Production: 1985 to 1995

[Millions of pounds]

Year	Total	Warp knit	Weft knit
1995 .....	2,173	397	1,775
1994 .....	2,212	350	1,861
1993 .....	2,188	323	1,865
1992 <sup>1</sup> .....	2,179	315	1,864
1991 .....	1,963	296	1,667
1990 .....	1,901	269	1,632
1989 .....	1,935	315	1,620
1988 .....	1,662	321	1,341
1987 .....	1,737	328	1,409
1986 .....	1,757	360	1,397
1985 .....	1,496	345	1,151

<sup>1</sup>For 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were received from these establishments for 1992; therefore, information shown for years prior to 1992 may not be directly comparable. These changes represent approximately 4.8 percent of total knit fabrics production.

Note: Detail may not add because of independent rounding.

Table 38. Production of Knit Fabrics Off Knitting Machine by Type: 1995 and 1994

[Thousands of pounds]

Product code	Product description	1995		1994	
		Number of knitting machines <sup>1</sup>	Total production	Number of knitting machines <sup>1</sup>	Total production
	Knit fabrics production, excluding narrow knit fabrics and knit garment lengths, trimmings, and collars.....	20,179	2,172,936	21,411	2,211,798
	Warp knit fabrics yard goods (over 12 inches in width) .	4,978	397,483	5,138	350,326
22581 01	Pile fabrics (raschel and raschel crochet) .....	1,859	118,100	1,711	98,893
22581 02	Long pile fabrics .....	(X)	37,381	(X)	36,501
22581 03	All acrylic or modacrylic and chiefly acrylic or modacrylic .....	(X)	(D)	(X)	(D)
22581 04	All polyester and chiefly polyester .....	(X)	31,739	(X)	30,660
22581 05	All other fibers .....	(X)	(D)	(X)	(D)
22581 07	Looped pile fabrics (terry cloth) .....	(X)	42,540	(X)	26,564
22581 08	All cotton and chiefly cotton .....	(X)	(D)	(X)	10,623
22581 09	All manmade and chiefly manmade .....	(X)	20,594	(X)	13,415
22581 13	All other fibers .....	(X)	(D)	(X)	(D)
	Fiber, n.s.k. ....	(X)	(D)	(X)	(D)
22581 15	All other pile fabrics (velour, etc.) .....	(X)	38,179	(X)	35,828
22581 16	All cotton and chiefly cotton .....	(X)	(D)	(X)	(D)
22581 17	All manmade and chiefly manmade .....	(X)	37,381	(X)	35,051
22581 19	All other fibers .....	(X)	(D)	(X)	(D)
22581 51	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread) .....	907	41,115	854	34,705
22581 61	All other warp knit fabrics .....	2,212	238,268	2,573	216,728
	By type:				
22581 62	Tricot, simplex and milanese .....	(X)	187,139	(X)	170,299
22581 63	All other .....	(X)	51,129	(X)	46,429
	By fiber:				
22581 71	All cotton and chiefly cotton .....	(X)	23,479	(X)	18,262
22581 72	All wool and chiefly wool .....	(X)	(D)	(X)	(D)
22581 73	All manmade and chiefly manmade .....	(X)	214,048	(X)	197,731
22581 75	All other fibers .....	(X)	(D)	(X)	(D)
	Weft knit yard goods (over 12 inches in width) .....	15,201	1,775,453	16,273	1,861,472
22571 01	Pile fabrics .....	497	47,237	688	51,604
22571 03	Long pile fabrics, including sliver knit .....	(X)	27,417	(X)	30,802
22571 05	All acrylic or modacrylic and chiefly acrylic or modacrylic .....	(X)	15,256	(X)	16,749
22571 04	All polyester and chiefly polyester .....	(X)	11,057	(X)	12,281
22571 06	All other fibers .....	(X)	1,104	(X)	1,772
22571 10	Looped pile fabrics (terry cloth) .....	(X)	14,154	(X)	14,092
22571 14	All cotton and chiefly cotton .....	(X)	9,068	(X)	8,548
22571 16	All manmade and chiefly manmade .....	(X)	5,086	(X)	4,863
22571 19	All other fibers .....	(X)	-	(X)	(D)
	Fiber, n.s.k. ....	(X)	-	(X)	(D)
22571 21	All other pile fabrics (velour, etc.) .....	(X)	5,666	(X)	6,710
22571 23	All cotton and chiefly cotton .....	(X)	4,135	(X)	(D)
22571 24	All manmade and chiefly manmade .....	(X)	1,531	(X)	(D)
22571 28	All other fibers .....	(X)	-	(X)	-
22571 71	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread) .....	212	29,219	211	28,607
22571 31	Single circular knit (except pile and elastic) .....	9,972	1,348,940	10,421	1,396,033
	By type:				
22571 32	Fleece or flannel .....	(X)	373,376	(X)	407,053
22571 33	Underwear and nightwear .....	(X)	267,064	(X)	279,747
22571 34	All other apparel uses .....	(X)	574,297	(X)	583,311
22571 36	All other uses .....	(X)	134,203	(X)	125,922
	By fiber:				
22571 37	All cotton and chiefly cotton .....	(X)	819,388	(X)	832,549
22571 38	All wool and chiefly wool .....	(X)	2,604	(X)	2,563
22571 55	All nylon and chiefly nylon .....	(X)	14,830	(X)	13,588
22571 56	All polyester and chiefly polyester .....	(X)	230,595	(X)	213,543
22571 39	All manmade and chiefly manmade .....	(X)	275,376	(X)	322,358
22571 40	All other fibers .....	(X)	6,147	(X)	11,432
22571 41	Double knit and interlock .....	2,448	237,705	2,663	277,129
	By fiber:				
22571 51	All cotton and chiefly cotton .....	(X)	80,871	(X)	98,996
22571 52	All wool and chiefly wool .....	(X)	502	(X)	682
22571 53	All manmade and chiefly manmade .....	(X)	142,692	(X)	164,214
22571 54	All other fibers .....	(X)	13,640	(X)	13,237

See footnotes at end of table.



Table 38. Production of Knit Fabrics Off Knitting Machine by Type: 1995 and 1994—Con.

[Thousands of pounds]

Product code	Product description	1995		1994	
		Number of knitting machines <sup>1</sup>	Total production	Number of knitting machines <sup>1</sup>	Total production
	Knit fabrics production, excluding narrow knit fabrics and knit garment lengths, trimmings, and collars—Con. Weft knit yard goods (over 12 inches in width)—Con. Double knit and interlock—Con.				
	By type:				
22571 45	Outerwear apparel, other than shirts .....	(X)	83,377	(X)	95,304
22571 44	Outer shirts, blouses, and tops .....	(X)	95,902	(X)	116,750
22571 47	All other uses .....	(X)	58,426	(X)	65,075
22571 60	Rib other than double knit and interlock .....	2,072	112,352	2,290	108,099
22571 61	All cotton and chiefly cotton .....	(X)	63,937	(X)	65,394
22571 62	All wool and chiefly wool .....	(X)	2,196	(X)	2,069
22571 63	All manmade and chiefly manmade .....	(X)	43,249	(X)	39,569
22571 65	All other fibers .....	(X)	2,970	(X)	1,067
	Narrow knit fabrics production .....	1,020	30,580	1,134	35,398
22581 91	Narrow warp knit yard goods (12 inches and narrower in width) .....	602	20,629	722	25,835
22581 93	Elastic fabrics .....	(D)	(D)	(D)	(D)
22581 95	All other narrow knit fabrics .....	(D)	(D)	(D)	(D)
22571 81	Narrow weft knit yard goods (12 inches or less) .....	418	9,951	412	9,563
22571 83	Elastic fabrics .....	(D)	(D)	(D)	(D)
22571 84	All other narrow knit fabrics .....	(D)	(D)	(D)	(D)
	Knit garment lengths, trimmings, and collars <sup>2</sup> .....	3,038	26,534	3,132	22,479
	Knit garment lengths, made on sweater, strip, V-bed, and full-fashioned machines .....	1,579	9,405	1,663	7,174
	Knit trimmings and collars .....	1,459	17,129	1,469	15,305

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.s.k. Not specified by kind. <sup>r</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Knitting machines operating on last workday of the year.

<sup>2</sup>Quantity produced in thousands of dozens.

Table 39. Production of Knit Fabrics Off Knitting Machine by Method of Distribution: 1995 and 1994

[Thousands of pounds]

Product code	Product description	1995			1994		
		Produced for own use	Produced for sale	Produced on commission	Produced for own use	Produced for sale	Produced on commission
	Knit fabrics production, excluding narrow knit fabrics and knit garment lengths, trimmings, and collars .....	1,107,127	796,967	268,842	1,136,867	788,878	286,053
22581 01	Warp knit fabrics yard goods (over 12 inches in width) .....	112,674	265,587	19,222	99,066	224,775	26,485
22581 51	Pile fabrics (raschel and raschel crochet) .....	39,716	73,113	5,271	32,217	60,680	5,996
22581 61	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread) .....	(D)	23,412	(D)	(D)	17,244	(D)
	All other warp knit fabrics .....	(D)	169,062	(D)	(D)	146,851	(D)
	Weft knit fabrics yard goods (over 12 inches in width) .....	994,453	531,380	249,620	1,037,801	564,103	259,568
22571 01	Pile fabrics .....	15,895	23,704	7,638	16,482	25,752	9,370
22571 71	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread) .....	1,969	18,326	8,924	1,496	17,227	9,884
22571 31	Single circular knit (except pile and elastic) .....	852,479	373,059	123,402	881,357	394,206	120,470
22571 41	Double knit and interlock .....	71,903	74,187	91,615	86,351	84,332	106,446
22571 60	Rib other than double knit and interlock .....	52,207	42,104	18,041	52,115	42,586	13,398
	Narrow knit fabrics production .....	7,061	22,775	744	9,430	25,212	756
22581 91	Narrow warp knit fabrics yard goods (12 inches or less) .....	5,639	14,590	400	8,015	17,375	445
22581 93	Elastic fabrics .....	(D)	10,817	(D)	(D)	13,213	(D)
22581 95	All other narrow knit fabrics .....	(D)	3,773	(D)	(D)	4,162	(D)
22571 81	Narrow weft knit fabrics yard goods (12 inches or less) .....	1,422	8,185	344	1,415	7,837	311
22571 83	Elastic fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)
22571 84	All other narrow knit fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)
	Knit garment lengths, trimmings, and collars <sup>1</sup> .....	9,070	12,270	5,194	9,164	8,939	4,376
	Knit garment lengths, made on sweater, strip, V-bed and full-fashioned machines .....	3,889	3,326	2,190	4,582	868	1,724
	Knit trimmings and collars .....	5,181	8,944	3,004	4,582	8,071	2,652

D Withheld to avoid disclosing data for individual companies.

¹Revised by 5 percent or more from previously published data.

¹Quantity produced in thousands of dozens.

Table 40. Shipments, Exports, Imports, and Apparent Consumption of Knit Fabrics: 1995

[Quantity in thousands of kilograms. Value in thousands of dollars]

Product description	Domestic production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to manufacturers' shipments (quantity)	Imports for consumption <sup>2</sup>		Percent imports to domestic merchandise (quantity)
		Quantity	Value at port		Quantity	Value <sup>3</sup>	
<b>Total</b> .....	<b>1,026,905</b>	<b>51,137</b>	<b>368,308</b>	<b>5.0</b>	<b>66,692</b>	<b>389,696</b>	<b>6.5</b>
Pile fabrics .....	74,997	20,310	141,100	27.1	37,739	81,585	50.3
Long pile fabrics .....	29,392	847	7,658	2.9	1,764	6,502	6.0
Looped pile fabrics .....	25,716	13,559	73,125	52.7	22,512	36,444	87.5
Of cotton fibers .....	(D)	106	311	(D)	3,085	6,466	(D)
Of manmade fibers .....	11,648	12,820	70,313	110.1	19,253	26,991	165.3
Of other fibers .....	(D)	633	2,501	(D)	174	2,987	(D)
Other pile fabrics .....	19,888	5,904	60,317	29.7	13,463	38,639	67.7
Of cotton fibers .....	(D)	219	989	(D)	595	2,134	(D)
Of manmade fibers .....	17,650	2,900	45,893	16.4	12,326	35,511	69.8
Of other fibers .....	(D)	2,785	13,435	(D)	542	994	(D)
Elastic fabrics .....	(D)	10,816	75,765	(D)	10,602	139,475	(D)
12 inches or less in width .....	(D)	9,225	47,738	(D)	517	5,190	(D)
Over 12 inches in width .....	31,904	1,591	28,027	5.0	10,085	134,285	31.6
Other warp knit fabrics .....	126,728	3,650	41,545	2.9	4,310	39,814	3.4
Of cotton fibers .....	10,650	963	9,712	9.0	271	2,458	2.5
Of wool fibers .....	(D)	27	486	(D)	3	182	(D)
Of manmade fibers .....	97,092	2,534	29,904	2.6	4,018	36,797	4.1
Of other fibers .....	(D)	126	1,443	(D)	18	377	(D)
Other narrow knit fabrics .....	(D)	1,738	16,026	(D)	424	5,878	(D)
Other knit fabrics .....	783,919	14,623	93,872	1.9	13,617	122,944	1.7
Of cotton fibers .....	437,359	12,839	75,668	2.9	7,630	50,333	1.7
Of wool fibers .....	2,405	31	404	1.3	56	2,542	2.3
Of manmade fibers .....	320,578	(NA)	(NA)	(NA)	5,896	69,106	1.8
Double knit or interlock .....	64,725	(NA)	(NA)	(NA)	3,278	33,906	5.1
Other .....	255,853	(NA)	(NA)	(NA)	2,618	35,200	1.0
Of other fibers .....	10,323	1,753	17,800	17.0	35	963	0.3

D Withheld to avoid disclosing data for individual companies. NA Not available.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

## HISTORICAL NOTE

Data on the production of knit fabrics have been collected by the Bureau of the Census since 1966. Historical data may be obtained from the Current Industrial Reports available at your local Federal Depository Library. Additional information (employment, payroll, cost of materials, capital expenditures, inventories, etc.) on knit fabrics is

available in both the census of manufactures and the annual survey of manufactures. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Kay Hanks, 301-457-4620.

## APPAREL (MQ23A)

### INTRODUCTION

The statistics in this subsection represent total U.S. production of most major garments. Hosiery, headwear, neckwear, fur garments, leather garments, and accessories are not included in this survey. Data on the quantity and value of shipments of gloves and mittens are collected separately and shown in separate tables at the end of the apparel section.

The apparel industry is characterized by three types of operations — manufacturers, jobbers, and contractors. The functions of the establishments classified as manufacturers include purchasing materials, cutting and sewing the product within the manufacturers' establishment, and selling the finished product. The functions of the jobber, like those of the manufacturer, involve buying raw materials and marketing the finished product. However, unlike the manufacturer, a jobber has a large part of the actual processing of the product done under contract in an outside factory. Finally, the function of a contractor is to make products in his establishment according to clearly defined specifications, from materials owned by others. A contractor, unlike

the manufacturer or jobber, does not own the finished product and does not become involved in the actual sale of the finished goods.

The purpose of this survey is to provide the total domestic quantity produced and value of shipments for each type of garment. Since collecting this information from all three types of establishments would result in substantial duplication, only manufacturers and jobbers are surveyed.

One other form of manufacturing apparel that is becoming more and more significant is what we refer to as "9802" (formerly 807) production. For "9802" production, a domestic manufacturer or jobber buys fabrics and cuts a garment domestically, and then exports the cut pieces to be sewn. The completed garment is then imported. Under special tariff provisions, duty is paid only on the value added rather than on the whole garment. The quantity and value of these garments are included in the domestic data, as well as in the import and export data.

### EXPLANATION OF TERMS

See explanation of terms at the beginning of this chapter.

Table 41. Summary of Quantity of Production and Value for Apparel: 1995 and 1994

[Quantity in thousands of dozens. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Men's and boys' apparel:										
Suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Coats .....	63,618	2,054.7	17,241	542.1	16,078	528.3	14,585	477.1	15,714	507.2
Tops .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Bottoms .....	661,491	8,084.4	161,474	1,966.8	170,298	2,122.3	171,481	2,067.2	158,238	1,928.1
Underwear and nightwear .....	1,126,079	1,807.7	273,570	475.8	304,240	473.8	300,038	473.7	248,231	384.4
Other garments .....	88,982	1,220.0	22,349	303.9	23,778	399.6	20,492	271.7	22,363	244.8
Women's and girls' apparel:										
Dresses .....	206,814	4,674.1	44,597	1,010.9	49,432	1,107.2	54,218	1,207.4	58,567	1,348.6
Coats .....	50,993	1,833.5	12,418	459.4	14,786	564.2	11,318	404.3	12,471	405.6
Tops .....	627,177	4,695.0	157,194	1,140.3	151,117	1,177.5	148,647	1,122.5	170,219	1,254.7
Bottoms .....	591,389	6,379.8	138,691	1,504.7	153,702	1,722.1	146,094	1,536.0	152,902	1,617.0
Underwear and nightwear .....	1,271,511	4,267.3	295,478	1,067.3	337,849	1,163.7	325,306	1,007.0	312,878	1,029.3
Other garments .....	147,623	1,735.2	34,463	396.9	31,955	365.1	35,676	451.7	45,529	521.5
Infants' apparel:										
Coats and jackets .....	333	8.1	87	2.0	92	2.0	81	1.9	73	2.2
Dresses .....	6,718	66.3	1,711	17.0	1,627	16.4	1,313	12.6	2,067	20.3
Knit shirts .....	16,234	64.5	3,449	13.6	5,842	23.2	3,057	12.2	3,886	15.5
Woven shirts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sweaters .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sets .....	10,269	79.3	2,066	14.8	3,193	24.7	2,134	17.7	2,876	22.1
Pants and shorts .....	15,202	72.4	3,752	20.5	4,711	21.3	3,303	15.4	3,436	15.2
Play clothing .....	30,904	203.2	7,674	50.3	7,794	53.3	6,552	41.3	8,884	58.3
Underwear .....	30,149	56.2	6,707	12.5	7,997	16.3	7,828	13.3	7,617	14.1
Nightwear .....	47,810	223.0	10,744	58.8	13,652	74.9	15,333	49.6	8,081	39.7
<b>1994</b>										
Men's and boys' apparel:										
Suits .....	11,865	1,095.7	3,179	263.3	3,174	295.3	2,709	264.7	2,803	272.4
Coats .....	64,148	2,091.8	16,709	538.0	16,635	571.6	15,109	473.4	15,695	508.8
Tops .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Bottoms .....	645,940	7,735.5	162,058	2,003.2	164,094	2,013.4	165,725	1,950.5	154,063	1,768.4
Underwear and nightwear .....	1,229,673	1,823.1	298,941	539.8	326,323	479.8	306,580	410.6	297,829	392.9
Other garments .....	105,453	1,295.4	26,526	336.8	28,172	399.8	23,831	269.1	26,924	289.7
Women's and girls' apparel:										
Dresses .....	198,503	4,803.5	44,857	1,093.1	48,100	1,179.8	50,585	1,246.3	54,961	1,284.3
Coats .....	53,045	2,005.5	11,368	445.7	14,930	611.2	12,749	475.2	13,998	473.4
Tops .....	664,896	5,163.8	165,143	1,207.5	166,878	1,371.2	174,739	1,331.8	158,136	1,253.3
Bottoms .....	599,976	6,518.3	141,352	1,567.1	158,964	1,789.3	152,117	1,617.8	147,543	1,544.1
Underwear and nightwear .....	1,295,289	3,904.0	334,749	1,062.1	348,704	1,049.5	327,973	934.5	283,863	857.9
Other garments .....	157,481	1,833.6	40,087	415.7	36,272	385.6	37,287	466.4	43,835	565.9
Infants' apparel:										
Coats and jackets .....	432	9.2	108	2.2	108	2.3	108	2.4	108	2.3
Dresses .....	6,216	64.5	1,884	17.7	1,500	15.2	1,044	12.5	1,788	19.1
Knit shirts .....	18,012	71.4	4,332	16.3	6,048	25.6	4,188	15.8	3,444	13.7
Woven shirts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sweaters .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sets .....	13,632	83.1	3,828	23.6	3,684	23.8	3,060	18.7	3,060	17.0
Pants and shorts .....	12,612	45.3	3,480	12.0	4,380	15.7	3,000	11.3	1,752	6.3
Play clothing .....	29,304	166.0	7,296	37.2	8,160	46.1	5,988	35.6	7,860	47.1
Underwear .....	32,892	54.4	8,208	12.5	8,736	16.3	7,320	12.1	8,628	13.5
Nightwear .....	41,244	199.3	10,836	50.2	13,152	73.7	8,304	33.0	8,952	42.4

D Withheld to avoid disclosing data for individual companies.

Note: For 1995, a number of companies were added based on information in 1994 Annual Survey of Manufactures. Data were received from those companies for 1995. Also, in 1994, a number of companies were added based on information in the 1993 Annual Survey of Manufactures. Data were received from those companies for 1994; therefore, information shown for prior year may not be directly comparable. These changes are shown in table 50. Revisions to the 1994 data were based on a reconciliation with the 1994 Annual Survey of Manufactures.

Table 42. Total Quantity of Production and Value of Shipments of Men's, Junior Boys', and Little Boys' Apparel: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Trios .....	2	(NA)	1	(NA)	1	(NA)	-	(NA)	-	(NA)
Coats, jackets, and vests:										
Down and feather filled coats, jackets, and vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Heavy nontailored coats and jackets .....	16,506	553.8	5,500	184.0	4,234	142.6	3,243	111.3	3,529	115.9
Lightweight nontailored coats and jackets .....	25,301	442.7	6,651	120.8	6,374	112.6	6,001	100.8	6,275	108.5
Overcoats and top coats .....	1,131	77.5	271	21.7	367	25.9	330	18.8	163	11.1
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	1,691	21.9	(D)	(D)	(D)	(D)	286	4.6	(D)	(D)
Work jackets .....	5,002	132.7	1,196	31.7	(D)	(D)	1,248	32.3	(D)	(D)
Tops:										
Woven dress and business shirts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven sport shirts .....	25,249	252.1	5,123	60.4	6,546	67.3	7,296	61.8	6,284	62.6
Work shirts .....	52,223	515.7	13,251	132.4	13,662	152.3	12,557	112.8	12,753	118.2
Knit T-shirts and tank tops made for outerwear .....	863,324	4,080.3	180,803	1,050.8	189,350	861.2	245,575	1,113.5	247,596	1,054.8
Sweatshirts .....	213,561	1,155.4	56,590	305.9	53,327	343.9	52,946	262.0	50,698	243.6
Other knit shirts .....	113,475	852.0	25,279	184.8	28,495	214.4	30,951	227.8	28,750	225.0
Sweaters .....	17,831	210.8	4,662	62.3	5,485	74.2	4,099	41.4	3,585	32.9
Dress and sport trousers .....	105,347	1,640.3	23,271	360.0	29,308	463.8	25,820	394.2	26,948	422.3
Junior boys' dress and sport trousers .....	6,609	(NA)	1,870	(NA)	1,658	(NA)	1,544	(NA)	1,537	(NA)
Jeans .....	276,463	3,823.6	75,445	972.2	71,912	1,004.3	72,428	1,025.5	56,678	821.6
Junior boys' jeans .....	41,194	(NA)	13,858	(NA)	10,057	(NA)	11,182	(NA)	6,097	(NA)
Jean-cut casual slacks .....	58,258	875.1	12,870	196.5	16,120	243.8	16,858	239.2	12,410	195.6
Junior boys' jean-cut casual slacks .....	4,400	(NA)	723	(NA)	553	(NA)	1,953	(NA)	1,171	(NA)
Shorts .....	114,618	817.7	21,853	165.1	19,174	130.1	30,263	206.2	43,328	316.3
Athletic shorts .....	42,115	(NA)	7,485	(NA)	9,070	(NA)	12,554	(NA)	13,006	(NA)
Sweatpants .....	53,277	314.3	13,165	96.6	18,231	96.1	13,475	64.5	8,406	57.1
Workpants .....	53,528	613.4	14,870	176.4	15,553	184.2	12,637	137.6	10,468	115.2
Underwear and nightwear:										
Pajamas and nightwear .....	22,447	142.0	6,619	44.5	5,090	36.4	5,230	30.0	5,508	31.1
Junior boys' pajamas and nightwear .....	2,259	(NA)	343	(NA)	386	(NA)	860	(NA)	670	(NA)
Robes .....	5,244	66.6	1,631	29.7	1,835	22.9	1,109	7.7	669	6.3
Underwear total .....	1,098,388	1,599.1	265,320	401.6	297,315	415.5	293,699	436.0	242,054	347.0
Thermal underwear .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Coveralls, overalls, and jumpsuits .....	21,946	402.0	4,914	111.1	5,296	129.5	(D)	(D)	(D)	(D)
Jumpsuits .....	1,188	(NA)	508	(NA)	333	(NA)	223	(NA)	124	(NA)
Jogging and warmup suits .....	10,000	77.0	2,607	19.6	3,213	23.8	2,131	16.8	2,049	16.8
Playsuits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	2,362	27	422	3.9	268	4.2	620	6.7	1,052	12.2
Team sports uniforms .....	15,944	190.6	3982	43.5	3331	45.7	(D)	(D)	(D)	(D)
Washable service apparel .....	27,741	235.6	7,807	59.2	6800	58.3	5,811	56.9	7,323	61.2

See footnotes at end of table.

Table 42. Total Quantity of Production and Value of Shipments of Men's, Junior Boys', and Little Boys' Apparel: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1994</b>										
Suits .....	11,865	1,095.7	3,179	263.3	3,174	295.3	2,709	264.7	2,803	272.4
Trios .....	10	(NA)	8	(NA)	-	(NA)	1	(NA)	1	(NA)
Coats, jackets, and vests:										
Down and feather filled coats, jackets, and vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	13,846	838.8	(D)	(D)	(D)	(D)	(D)	(D)	3,523	218.8
Heavy nontailored coats and jackets .....	15,559	515.6	4,038	151.6	4,048	139.9	3,760	106.0	3,713	118.1
Lightweight nontailored coats and jackets .....	24,970	428.9	6,767	114.9	6,602	112.9	5,530	96.9	6,071	104.2
Overcoats and top coats .....	1,015	75.1	271	23.5	326	25.3	233	13.6	185	12.7
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Work jackets .....	5,144	132.4	1,334	33.7	1,286	34.5	1,265	31.0	1,259	33.2
Tops:										
Woven dress and business shirts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven sport shirts .....	31,016	303.8	7,349	71.9	8,199	84.5	7,372	71.6	8,096	75.8
Work shirts .....	49,076	479.8	12,966	137.7	12,589	128.8	12,306	103.4	11,215	109.9
Knit T-shirts and tank tops made for outerwear .....	839,706	3,466.6	199,802	792.8	198,676	824.9	233,996	1,036.5	207,232	81.2
Sweatshirts .....	226,204	1,157.1	61,995	342.7	69,625	371.9	51,503	243.9	43,081	198.6
Other knit shirts .....	118,709	848.1	25,935	201.3	31,223	220.7	30,454	210.0	31,097	216.1
Sweaters .....	20,782	252.9	5,804	79.0	6,710	80.1	4,374	52.8	3,894	41.0
Bottoms:										
Dress and sport trousers .....	111,968	1,700.1	26,634	418.0	29,159	456.3	28,744	420.1	27,431	405.7
Junior boys' dress and sport trousers .....	5,147	(NA)	1,397	(NA)	1,435	(NA)	980	(NA)	1,335	(NA)
Jean and jean-cut casual slacks .....	325,050	4,501.6	84,565	1,192.0	87,717	1,225.4	84,562	1,154.1	68,206	930.1
Junior boys' jean and jean-cut slacks .....	34,225	(NA)	6,875	(NA)	10,160	(NA)	11,394	(NA)	5,796	(NA)
Shorts .....	111,170	776.8	25,780	190.5	20,347	131.4	29,076	202.9	35,967	252.0
Athletic shorts .....	33,412	(NA)	7,468	(NA)	7,941	(NA)	9,604	(NA)	8,399	(NA)
Sweatpants .....	56,696	355.5	14,612	105.2	16,634	106.3	12,402	61.7	13,048	82.3
Workpants .....	41,056	401.5	10,467	97.5	10,237	94.0	10,941	111.7	9,411	98.3
Underwear and nightwear:										
Pajamas and nightwear .....	28,674	191.7	7,770	54.8	7,745	54.9	6,665	41.3	6,494	40.7
Robes .....	(D)	(D)	1,967	36.2	1,863	23.6	583	7.5	(D)	(D)
Underwear total .....	1,195,933	1,558.0	289,204	448.8	316,715	401.3	299,332	361.8	290,682	346.1
Thermal underwear .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Coveralls, overalls, and jumpsuits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jumpsuits .....	1,303	(NA)	371	(NA)	419	(NA)	261	(NA)	252	(NA)
Jogging and warmup suits .....	13,496	114.8	3,509	29.3	4,389	36.8	2,566	23.1	3,032	25.6
Playsuits .....	(D)	(D)	298	2.4	369	3.1	244	2.0	(D)	(D)
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	4,186	34.3	570	5.7	403	4.9	1,201	9.6	2,012	14.1
Team sports uniforms .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washable service apparel .....	30,693	271.0	7,410	66.1	8,123	67.9	7,817	69.4	7,343	67.6

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available.

Table 43. Quantity of Production and Value of Shipments of Men's and Junior Boys' Apparel: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Suits .....	9,611	930.0	2,100	211.5	2,487	229.3	2,310	218.6	2,714	270.6
Coats, jackets, and vests:										
Down and feather filled coats, jackets, and vests .....	227	15.1	67	4.6	60	5.4	47	2.2	53	2.9
Dress and sport coats (tailored) .....	11,570	736.6	2,513	159.2	2,892	181.1	2,758	182.3	3,407	214.0
Heavy nontailored coats and jackets .....	15,509	535.6	5,070	178.8	3,945	135.6	3,093	107.7	3,401	113.5
Lightweight nontailored coats and jackets .....	23,695	424.2	6,161	115.0	5,982	108.1	5,630	96.7	5,922	104.4
Overcoats and top coats .....	1,131	77.5	271	21.7	367	25.9	330	18.8	163	11.1
Raincoats .....	1,926	67.3	406	12.0	543	23.0	576	22.0	401	10.3
Separate vests .....	1,172	19.5	409	5.5	237	4.6	231	4.3	295	5.1
Work jackets .....	5,002	132.7	1,196	31.7	(D)	(D)	1,248	32.3	(D)	(D)
Tops:										
Woven dress and business shirts .....	67,471	758.5	14,339	167.5	17,693	203.6	18,136	185.0	17,303	202.4
Woven sport shirts .....	20,876	229.8	4,171	55.2	5,409	60.4	6,123	57.0	5,173	57.2
Work shirts .....	52,223	515.7	13,251	132.4	13,662	152.3	12,557	112.8	12,753	118.2
Knit T-shirts and tank tops made for outerwear .....	832,967	3,993.0	173,575	1,030.9	183,109	840.2	238,810	1,093.3	237,473	1,028.6
Sweatshirts .....	206,001	1,122.4	54,632	297.1	51,127	334.4	50,874	253.7	49,368	237.2
Other knit shirts .....	87,140	732.8	19,808	159.5	21,298	181.6	24,279	197.5	21,755	194.2
Sweaters .....	15,443	195.7	4,182	59.3	4,483	67.0	3,745	39.1	3,033	30.3
Bottoms:										
Dress and sport trousers .....	91,814	1,543.2	20,248	337.6	25,625	436.8	22,608	371.7	23,333	397.1
Jeans .....	255,973	3,634.9	70,435	922.3	67,856	964.3	65,682	966.3	52,000	782.0
Jean-cut casual slacks .....	55,406	853.4	12,157	191.8	15,085	235.4	16,001	233.0	12,163	193.2
Shorts .....	90,462	713.2	16,633	143.4	15,579	112.2	25,132	185.9	33,118	271.7
Sweatpants .....	46,362	293.0	12,003	92.5	16,030	89.7	11,048	57.8	7,281	53.0
Workpants .....	53,528	613.4	14,870	176.4	15,553	184.2	12,637	137.6	10,468	115.2
Underwear and nightwear:										
Pajamas and nightwear .....	17,974	118.6	5,596	39.1	4,311	32.0	3,763	22.8	4,304	24.7
Robes .....	5,132	65.7	1,624	29.6	1,796	22.6	1,082	7.5	630	6.0
Underwear total .....	1,007,576	1,448.3	235,650	373.1	279,098	368.0	260,947	383.3	231,881	323.9
Thermal underwear .....	51,103	171.6	13,689	47.8	14,005	44.8	11,850	39.8	11,559	39.2
Undershirts (1/4 sleeve and athletic types) .....	453,561	510.0	102,777	129.7	117,767	130.5	120,534	129.9	112,483	119.9
Knit undershorts and briefs .....	412,714	561.9	(D)	(D)	(D)	(D)	104,296	163.0	88,444	119.4
Woven boxer shorts .....	90,198	204.8	22,398	52.0	24,138	56.8	24,267	50.6	19,395	45.4
Other garments:										
Coveralls, overalls, and jumpsuits .....	15,446	355.0	3,329	99.9	3,832	117.1	4,182	66.6	4,103	71.4
Jogging and warmup suits .....	3,154	34.6	959	10.2	763	8.4	696	8.1	736	7.9
Playsuits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	1,838	21.9	367	3.4	220	3.4	533	5.9	718	9.2
Team sports uniforms .....	15,198	179.0	3,805	40.9	3,166	43.1	3,642	45.1	4,585	49.9
Washable service apparel .....	27,741	235.6	7,807	59.2	6,800	58.3	5,811	56.9	7,323	61.2

See footnotes at end of table.



Table 43. Quantity of Production and Value of Shipments of Men's and Junior Boys' Apparel: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1994</b>										
Suits .....	11,244	1,075.9	(D)	(D)	(D)	(D)	2,575	260.8	2,670	268.0
Coats, jackets, and vests:										
Down and feather filled coats, jackets, and vests ..	434	25.6	102	6.3	84	6.6	132	6.8	116	5.9
Dress and sport coats (tailored) .....	13,497	829.0	3,266	189.1	3,428	226.9	3,353	196.4	3,450	216.6
Heavy nontailored coats and jackets .....	14,746	497.2	3,859	147.0	3,781	133.8	3,592	101.8	3,514	114.6
Lightweight nontailored coats and jackets .....	23,750	415.9	6,393	111.1	6,303	109.7	5,264	94.0	5,790	101.1
Overcoats and top coats .....	1,015	75.1	271	23.5	326	25.3	233	13.6	185	12.7
Raincoats .....	1,757	58.8	418	12.8	442	16.9	459	16.5	438	12.6
Separate vests .....	822	14.4	260	3.6	191	5.6	173	2.5	198	2.7
Work jackets .....	5,144	132.4	1,334	33.7	1,286	34.5	1,265	31.0	1,259	33.2
Tops:										
Woven dress and business shirts .....	73,377	736.5	20,095	186.0	19,934	188.1	16,355	178.0	16,993	184.4
Woven sport shirts .....	26,365	278.0	6,436	66.2	6,696	75.4	6,423	66.9	6,810	69.5
Work shirts .....	49,076	479.8	12,966	137.7	12,589	128.8	12,306	103.4	11,215	109.9
Knit T-shirts and tank tops made for outerwear ..	808,737	3,377.9	192,414	771.5	192,009	803.3	226,442	1,016.1	197,872	787.0
Sweatshirts .....	220,956	1,137.3	60,910	338.5	68,127	366.1	49,933	237.9	41,986	194.8
Other knit shirts .....	93,093	739.3	21,992	182.4	23,279	186.5	23,822	183.5	24,000	186.9
Sweaters .....	17,754	234.7	4,987	75.0	5,938	74.7	3,519	47.2	3,310	37.8
Bottoms:										
Dress and sport trousers .....	97,668	1,600.8	22,640	390.7	25,515	429.4	25,606	399.1	23,907	381.6
Jean and jean-cut casual slacks .....	298,185	4,266.4	78,311	1,141.9	80,227	1,163.3	76,875	1,083.3	62,772	877.9
Shorts .....	88,909	664.8	20,911	163.4	16,239	111.6	23,942	174.2	27,817	215.6
Sweatpants .....	49,583	333.7	13,496	101.1	14,296	99.9	9,844	54.4	11,947	78.3
Workpants .....	41,056	401.5	10,467	97.5	10,237	94.0	10,941	111.7	9,411	98.3
Underwear and nightwear:										
Pajamas and nightwear .....	21,357	150.6	6,270	45.6	6,042	44.6	4,877	30.8	4,168	29.6
Robes .....	4,923	72.4	1,943	36.0	1,823	23.4	523	7.1	634	5.9
Underwear total .....	1,154,078	1,433.6	272,296	408.0	308,919	369.4	293,488	338.8	279,375	317.4
Thermal underwear .....	56,405	199.6	16,285	58.0	15,688	53.9	13,022	46.8	11,410	40.9
Undershirts (1/4 sleeve and athletic types) ..	502,031	503.4	125,709	138.9	128,211	124.5	115,689	120.3	132,422	119.7
Knit undershorts and briefs .....	494,143	503.5	106,897	153.4	138,975	130.0	136,439	114.4	111,832	105.7
Woven boxer shorts .....	101,499	227.1	23,405	57.7	26,045	61.0	28,338	57.3	23,711	51.1
Other garments:										
Coveralls, overalls, and jumpsuits .....	18,257	373.4	4,637	93.1	4,858	120.5	4,480	70.8	4,282	89.0
Jogging and warmup suits .....	4,594	48.7	1,169	12.1	1,289	12.5	1,078	12.4	1,058	11.7
Playsuits .....	(D)	(D)	22	0.1	30	0.1	28	0.2	(D)	(D)
Ski apparel .....	(D)	(D)	1,514	58.9	2,330	85.0	(D)	(D)	(D)	(D)
Swimwear .....	3,349	28.4	486	5.0	338	4.3	925	7.9	1,600	11.2
Team sports uniforms .....	21,089	233.4	5,948	62.4	4,435	57.1	4,450	54.2	6,256	59.7
Washable service apparel .....	30,693	271.0	7,410	66.1	8,123	67.9	7,817	69.4	7,343	67.6

D Withheld to avoid disclosing data for individual companies.

Table 44. Quantity of Production and Value of Shipments of Little Boys' Apparel: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Coats, jackets, and vests:										
Down and feather filled coats, jackets, and vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Heavy nontailored coats and jackets .....	997	18.2	430	5.2	289	7.0	150	3.6	128	2.4
Lightweight nontailored coats and jackets .....	1,606	18.5	490	5.8	392	4.5	371	4.1	353	4.1
Overcoats and top coats .....	-	-	-	-	-	-	-	-	-	-
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	519	2.4	(D)	(D)	(D)	(D)	55	0.3	(D)	(D)
Work jackets .....	-	-	-	-	-	-	-	-	-	-
Tops:										
Woven dress and business shirts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven sport shirts .....	4,373	22.3	952	5.2	1,137	6.9	1,173	4.8	1,111	5.4
Work shirts .....	-	-	-	-	-	-	-	-	-	-
Knit T-shirts and tank tops made for outerwear .....	30,357	87.3	7,228	19.9	6,241	21.0	6,765	20.2	10,123	26.2
Sweatshirts .....	7,560	33.0	1,958	8.8	2,200	9.5	2,072	8.3	1,330	6.4
Other knit shirts .....	26,335	119.2	5,471	25.3	7,197	32.8	6,672	30.3	6,995	30.8
Sweaters .....	2,388	15.1	480	3.0	1,002	7.2	354	2.3	552	2.6
Bottoms:										
Dress and sport trousers .....	13,533	97.1	3,023	22.4	3,683	27.0	3,212	22.5	3,615	25.2
Jean .....	20,490	188.7	5,010	49.9	4,056	40.0	6,746	59.2	4,678	39.6
Jean-cut casual slacks .....	2,852	21.7	713	4.7	1,035	8.4	857	6.2	247	2.4
Shorts .....	24,156	104.5	5,220	21.7	3,595	17.9	5,131	20.3	10,210	44.6
Sweatpants .....	6,915	21.3	1,162	4.1	2,201	6.4	2,427	6.7	1,125	4.1
Workpants .....	-	-	-	-	-	-	-	-	-	-
Underwear and nightwear:										
Pajamas and nightwear .....	4,473	23.4	1,023	5.4	779	4.4	1,467	7.2	1,204	6.4
Robes .....	112	0.9	7	0.1	39	0.3	27	0.2	39	0.3
Underwear total .....	90,812	150.8	29,670	28.5	18,217	46.5	32,752	52.7	10,173	23.1
Thermal underwear .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Coveralls, overalls, and jumpsuits .....	6,500	47.0	1,585	11.2	1,464	12.4	(D)	(D)	(D)	(D)
Jogging and warmup suits .....	6,846	42.4	1,648	9.4	2,450	15.4	1,435	8.7	1,313	8.9
Playsuits .....	1,991	17.4	820	6.7	402	3.6	168	1.7	601	5.4
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	524	5.1	55	0.5	48	0.8	87	0.8	334	3.0
Team sports uniforms .....	746	11.6	177	2.6	165	2.6	(D)	(D)	(D)	(D)
Washable service apparel .....	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. Quantity of Production and Value of Shipments of Little Boys' Apparel: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1994</b>										
Suits .....	621	19.8	(D)	(D)	(D)	(D)	134	3.9	133	4.4
Coats, jackets, and vests:										
Down and feather filled coats, jackets, and vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	349	9.8	(D)	(D)	(D)	(D)	(D)	(D)	73	2.2
Heavy nontailored coats and jackets .....	813	18.4	179	4.6	267	6.1	168	4.2	199	3.5
Lightweight nontailored coats and jackets .....	1,220	13.0	374	3.8	299	3.2	266	2.9	281	3.1
Overcoats and top coats .....	-	-	-	-	-	-	-	-	-	-
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Work jackets .....	-	-	-	-	-	-	-	-	-	-
Tops:										
Woven dress and business shirts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven sport shirts .....	4,651	25.8	913	5.7	1,503	9.1	949	4.7	1,286	6.3
Work shirts .....	-	-	-	-	-	-	-	-	-	-
Knit T-shirts and tank tops made for outerwear .....	30,969	88.7	7,388	21.3	6,667	21.6	7,554	20.4	9,360	25.4
Sweatshirts .....	5,248	19.8	1,085	4.2	1,498	5.8	1,570	6.0	1,095	3.8
Other knit shirts .....	25,616	108.8	3,943	18.9	7,944	34.2	6,632	26.5	7,097	29.2
Sweaters .....	3,028	18.2	817	4.0	772	5.4	855	5.6	584	3.2
Bottoms:										
Dress and sport trousers .....	14,300	99.3	3,994	27.3	3,644	26.9	3,138	21.0	3,524	24.1
Jean and jean-cut casual slacks .....	26,865	235.2	6,254	50.1	7,490	62.1	7,687	70.8	5,434	52.2
Shorts .....	22,261	112.0	4,869	27.1	4,108	19.8	5,134	28.7	8,150	36.4
Sweatpants .....	7,113	21.8	1,116	4.1	2,338	6.4	2,558	7.3	1,101	4.0
Workpants .....	-	-	-	-	-	-	-	-	-	-
Underwear and nightwear:										
Pajamas and nightwear .....	7,317	41.1	1,500	9.2	1,703	10.3	1,788	10.5	2,326	11.1
Robes .....	(D)	(D)	24	0.2	40	0.2	60	0.4	(D)	(D)
Underwear total .....	41,855	124.4	16,908	40.8	7,796	31.9	5,844	23.0	11,307	28.7
Thermal underwear .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Coveralls, overalls, and jumpsuits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jogging and warmup suits .....	8,902	66.1	2,340	17.2	3,100	24.3	1,488	10.7	1,974	13.9
Playsuits .....	1,464	12.1	276	2.3	339	3.0	216	1.8	633	5.0
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	837	5.9	84	0.7	65	0.6	276	1.7	412	2.9
Team sports uniforms .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washable service apparel .....	-	-	-	-	-	-	-	-	-	-

- Represents zero. D Withheld to avoid disclosing data for individual companies.

Table 45. Total Quantity of Production and Value of Shipments of Women's, Misses', Juniors', and Girls' Apparel: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Dresses .....	206,814	4,674.1	44,597	1,010.9	49,432	1,107.2	54,218	1,207.4	58,567	1,348.6
Coats, jackets, and vests:										
Coats and capes .....	7,761	525.8	1,868	149.9	2,376	165.1	1,970	113.3	1,547	97.5
Down and feather filled coats, jackets, and vests .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nontailored jackets .....	9,066	232.9	2,088	51.0	2,468	66.0	1,996	49.9	2,514	66.0
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	3,347	61.0	929	17.0	914	18.3	820	13.8	684	11.9
Tailored suit-type jackets .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:										
Woven blouses and shirts .....	199,283	2,028.7	46,396	467.4	44,399	480.1	50,284	505.4	58,204	575.8
Knit T-shirts and tank tops made for outerwear .....	221,892	1,081.5	59,720	271.1	48,541	257.7	51,237	254.1	62,394	298.6
Sweatshirts .....	47,322	264.4	11,868	66.6	14,207	71.7	11,686	80.7	9,561	45.4
Other knit blouses and shirts .....	108,547	739.6	24,501	166.3	28,862	188.1	24,714	166.0	30,470	219.2
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	50,133	580.8	14,709	168.9	15,108	179.9	10,726	116.3	9,590	115.7
Bottoms:										
Shorts .....	118,383	848.1	25,981	168.1	19,119	144.1	29,952	212.7	43,331	323.2
Skirts and divided skirts .....	87,145	1,249.2	19,143	271.6	22,521	343.5	21,290	294.7	24,191	339.4
Jeans .....	167,094	2,124.6	40,789	543.2	49,837	617.9	43,613	544.2	32,855	419.3
Slacks (except jeans) .....	179,157	1,993.5	43,284	480.6	49,180	565.4	40,883	441.3	45,810	506.2
Sweatpants .....	39,610	164.4	9,494	41.2	13,045	51.2	10,356	43.1	6,715	28.9
Underwear and nightwear:										
Brassieres, bra-lettes, and bandeaux .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Total produced in Puerto Rico .....	42,219	(NA)	10,338	(NA)	11,717	(NA)	10,657	(NA)	9,507	(NA)
Girdles, corsets, and other foundation garments .....	92,186	405.3	21,569	98.6	24,177	110.9	24,045	100.7	22,395	95.1
Total produced in Puerto Rico .....	8,786	(NA)	806	(NA)	2,797	(NA)	2,646	(NA)	2,537	(NA)
Nightgowns, pajamas, and other nightwear .....	87,976	694.0	22,329	191.2	22,464	182.8	18,994	138.9	24,189	181.1
Other underwear, including camisoles, teddies, undershirts, and union suits .....	61,811	266.2	15,449	64.6	18,363	75.5	14,345	60.6	13,654	65.5
Panties .....	688,632	976.0	156,589	256.4	184,799	290.3	178,901	233.4	168,343	195.9
Robes and dressing gowns .....	23,666	222.3	6,148	67.7	6,473	66.9	(D)	(D)	(D)	(D)
Slips .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Bodysuits and bodyshirts .....	19,883	155.8	4,875	35.5	5,550	36.2	4,932	41.0	4,526	43.1
Jogging and warmup suits .....	13,321	95.8	2,875	22.3	3,654	27.5	2,992	21.9	3,800	24.1
Overalls, coveralls, and jumpsuits .....	8,653	82.8	1,969	22.2	1,855	20.0	1,964	18.4	2,865	22.2
Playsuits, rompers, halters, etc. ....	17,548	106.1	4,541	27.7	3,322	22.3	4,168	23.2	5,517	32.9
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	49,261	656.0	10,546	127.5	7,267	69.8	13,055	209.8	18,393	248.9
Washable service apparel .....	26,887	251.8	6,816	61.3	6,876	64.4	5,709	58.7	7,486	67.4
Smocks and lab coats .....	6,960	(NA)	1,481	(NA)	1,464	(NA)	1,445	(NA)	2,570	(NA)
Uniform dresses .....	4,338	(NA)	957	(NA)	1,085	(NA)	1,072	(NA)	1,224	(NA)
Uniform pant sets .....	1,858	(NA)	375	(NA)	380	(NA)	400	(NA)	703	(NA)
All other garment types .....	4,098	(NA)	756	(NA)	824	(NA)	945	(NA)	1,573	(NA)

See footnotes at end of table.

Table 45. Total Quantity of Production and Value of Shipments of Women's, Misses', Juniors', and Girls' Apparel: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1994</b>										
Dresses .....	198,503	4,803.5	44,857	1,093.1	48,100	1,179.8	50,585	1,246.3	54,961	1,284.3
Coats, jackets, and vests:										
Coats and capes .....	8,720	687.9	1,635	147.5	2,989	236.0	(D)	(D)	(D)	(D)
Down and feather filled coats, jackets, and vests .....	59	7.3	16	1.8	14	1.9	12	1.2	17	2.4
Nontailored jackets .....	9,898	258.3	2,377	60.6	2,818	77.5	2,391	57.9	2,312	62.3
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	2,031	48.3	(D)	(D)	(D)	(D)	(D)	(D)	476	11.7
Tailored suit-type jackets .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:										
Woven blouses and shirts .....	233,440	2,359.5	53,611	510.2	57,081	609.0	61,992	619.8	60,756	620.5
Knit T-shirts and tank tops made for outerwear .....	195,227	987.8	49,049	249.2	43,203	230.8	52,520	265.6	50,455	242.2
Sweatshirts .....	50,716	277.7	11,691	64.3	13,705	85.3	13,943	73.0	11,377	55.1
Other knit blouses and shirts .....	134,558	894.3	37,976	222.1	37,610	248.4	33,711	220.7	25,261	203.1
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	50,955	644.5	12,816	161.7	15,279	197.7	12,573	152.7	10,287	132.4
Bottoms:										
Shorts .....	90,373	733.5	21,612	181.4	15,019	136.4	24,290	196.6	29,452	219.1
Skirts and divided skirts .....	96,427	1,344.4	18,984	273.7	25,970	370.2	25,319	337.1	26,154	363.4
Slacks, pants, and jeans, including jean-cut casual slacks .....	361,326	4,226.5	87,463	1,055.1	101,506	1,213.1	89,989	1,034.6	82,368	923.7
Sweatpants .....	51,850	213.9	13,293	56.9	16,469	69.6	12,519	49.5	9,569	37.9
Underwear and nightwear:										
Brassieres, bra-lettes, and bandeaux .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Total produced in Puerto Rico .....	43,230	(NA)	11,328	(NA)	11,844	(NA)	10,338	(NA)	9,720	(NA)
Girdles, corsets, and other foundation garments .....	90,063	391.3	24,112	114.8	23,824	97.9	22,566	95.5	19,561	83.1
Total produced in Puerto Rico .....	9,794	(NA)	2,568	(NA)	2,724	(NA)	2,364	(NA)	2,138	(NA)
Nightgowns, pajamas, and other nightwear .....	93,900	700.0	25,022	198.6	25,803	194.1	20,199	145.2	22,876	162.1
Other underwear, including camisoles, teddies, undershirts, and union suits .....	54,508	253.5	15,998	70.2	15,537	69.5	11,900	59.0	11,073	54.8
Panties .....	759,698	859.7	191,205	212.9	205,321	230.8	198,844	224.4	164,328	191.6
Robes and dressing gowns .....	24,375	237.9	(D)	(D)	(D)	(D)	(D)	(D)	6,164	51.2
Slips .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Bodysuits and bodyshirts .....	22,862	182.1	5,009	39.7	6,121	45.1	(D)	(D)	(D)	(D)
Jogging and warmup suits .....	15,005	114.3	4,119	30.3	4,194	35.7	3,004	23.0	3,688	25.3
Overalls, coveralls, and jumpsuits .....	12,674	92.7	3,786	25.6	3,843	27.0	2,323	18.0	2,722	22.1
Playsuits, rompers, halters, etc. ....	18,039	90.4	4,876	24.3	5,008	22.8	3,853	20.1	4,302	23.2
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	49,108	639.4	12,512	125.4	6,917	61.9	12,249	191.7	17,430	260.4
Washable service apparel .....	24,564	251.6	5,898	60.0	6,329	65.1	6,537	66.9	5,800	59.6
Smocks and lab coats .....	6,300	(NA)	1,644	(NA)	1,524	(NA)	1,632	(NA)	1,500	(NA)
Uniform dresses .....	4,014	(NA)	924	(NA)	1,020	(NA)	1,132	(NA)	938	(NA)
Uniform pant sets .....	1,442	(NA)	360	(NA)	432	(NA)	372	(NA)	278	(NA)
All other garment types .....	4,642	(NA)	1,140	(NA)	1,308	(NA)	1,188	(NA)	1,006	(NA)

D Withheld to avoid disclosing data for individual companies. NA Not available.

Table 46. Quantity of Production and Value of Shipments of Women's, Misses', and Juniors' Apparel: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Dresses .....	162,485	4,185.6	34,385	887.7	38,885	987.6	43,499	1,102.6	45,716	1,207.7
Coats, jackets, and vests:										
Coats and capes .....	7,647	520.8	1,856	149.1	2,336	162.8	1,932	112.1	1,523	96.8
Down and feather filled coats, jackets, and vests .....	28	3.7	7	1.1	7	0.9	5	0.5	9	1.2
Nontailored jackets .....	8,149	223.3	1,833	48.3	2,226	63.3	1,730	46.9	2,360	64.8
Raincoats .....	589	37.7	137	9.3	214	14.1	(D)	(D)	(D)	(D)
Separate vests .....	3,120	58.6	826	15.9	866	17.7	795	13.5	633	11.5
Tailored suit-type jackets .....	30,136	970.9	7,378	230.7	8,798	299.5	6,342	216.2	7,618	224.5
Tops:										
Woven blouses and shirts .....	171,348	1,813.7	40,383	416.1	37,705	420.1	42,325	449.8	50,935	527.7
Knit T-shirts and tank tops made for outerwear .....	174,630	914.8	49,621	235.1	38,266	217.2	38,327	210.0	48,416	252.5
Sweatshirts .....	38,451	229.6	8,912	54.2	11,285	60.1	10,042	74.7	8,212	40.6
Other knit blouses and shirts .....	76,343	580.8	18,635	136.5	19,225	141.5	17,159	128.2	21,324	174.6
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	43,959	535.2	12,803	153.6	12,992	163.8	9,363	107.0	8,801	110.8
Bottoms:										
Shorts .....	90,076	696.7	19,704	137.0	15,191	122.0	21,784	168.7	33,397	269.0
Skirts and divided skirts .....	80,833	1,190.6	17,867	261.1	20,734	327.5	19,845	283.9	22,387	318.1
Jeans .....	149,524	1,954.6	36,198	502.6	44,219	560.0	39,044	498.4	30,063	393.6
Slacks (except jeans) .....	152,098	1,849.4	38,082	449.9	40,512	517.1	33,175	405.4	40,329	477.0
Sweatpants .....	30,988	135.4	6,932	31.8	10,140	41.3	8,373	37.2	5,543	25.1
Underwear and nightwear:										
Brassieres, bra-lettes, and bandeaux .....	305,297	1,646.9	70,793	373.4	78,904	423.9	80,819	421.9	74,781	427.7
Girdles, corsets, and other foundation garments .....	92,186	405.3	21,569	98.6	24,177	110.9	24,045	100.7	22,395	95.1
Nightgowns, pajamas, and other nightwear .....	65,258	558.9	16,977	154.7	15,549	138.4	14,833	117.2	17,899	148.6
Other underwear, including camisoles, teddies, undershirts, and union suits .....	56,619	256.2	14,102	62.2	16,373	71.6	13,555	58.9	12,589	63.5
Panties .....	550,789	883.4	127,372	239.2	143,812	257.7	138,327	209.1	141,278	177.4
Robes and dressing gowns .....	23,430	219.9	6,084	66.9	6,377	65.9	4,941	37.8	6,028	49.3
Slips .....	10,909	52.5	2,311	14.1	2,575	13.0	2,986	12.6	3,037	12.8
Other garments:										
Bodysuits and bodyshirts .....	17,892	137.1	4,437	31.7	5,036	31.8	4,424	36.1	3,995	37.5
Jogging and warmup suits .....	2,119	27.6	560	8.1	529	6.8	489	6.4	541	6.3
Overalls, coveralls, and jumpsuits .....	2,857	39.9	802	12.6	619	9.9	338	7.5	1,098	9.9
Playsuits, rompers, halters, etc. ....	5,220	43.4	1,025	8.5	1,307	10.3	1,546	12.9	1,342	11.7
Ski apparel .....	1,889	79.4	615	25.5	1,022	41.1	105	6.1	147	6.7
Suits, including pant suits .....	8,681	286.1	1,812	66.8	2,148	78.8	2,125	66.7	2,596	73.8
Swimwear .....	36,879	577.9	7,638	115.8	5,075	62.5	10,256	189.9	13,910	209.7
Washable service apparel .....	26,887	251.8	6,816	61.3	6,876	64.4	5,709	58.7	7,486	67.4

See footnotes at end of table.

Table 46. **Quantity of Production and Value of Shipments of Women's, Misses', and Juniors' Apparel: 1995 and 1994—Con.**

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1994</b>										
Dresses .....	157,007	4,300.8	35,014	965.3	38,094	1,050.6	40,883	1,137.3	43,016	1,147.6
Coats, jackets, and vests:										
Coats and capes .....	8,412	670.5	1,618	146.9	2,910	231.0	2,313	178.0	1,571	114.6
Down and feather filled coats, jackets, and vests .....	59	7.3	16	1.8	14	1.9	12	1.2	17	2.4
Nontailored jackets .....	9,208	250.8	2,198	58.7	2,649	75.3	2,222	56.2	2,139	60.6
Raincoats .....	(D)	(D)	140	9.7	187	13.5	179	11.4	(D)	(D)
Separate vests .....	1,942	45.0	469	9.6	512	11.7	494	12.2	467	11.5
Tailored suit-type jackets .....	31,558	958.0	6,650	213.1	8,346	269.5	7,205	210.7	9,357	264.7
Tops:										
Woven blouses and shirts .....	204,320	2,131.5	46,833	460.4	49,363	549.7	54,350	556.8	53,774	564.6
Knit T-shirts and tank tops made for outerwear .....	146,085	806.9	37,332	209.7	32,022	185.5	39,779	219.3	36,952	192.4
Sweatshirts .....	40,963	242.4	8,940	53.9	10,585	73.6	11,518	64.8	9,920	50.1
Other knit blouses and shirts .....	100,308	729.6	30,224	184.2	26,339	196.3	25,770	184.1	17,975	165.0
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	45,978	606.2	11,720	152.6	13,514	183.5	11,040	142.0	9,704	128.1
Bottoms:										
Shorts .....	66,935	589.4	16,457	146.8	11,543	109.1	17,963	158.8	20,972	174.7
Skirts and divided skirts .....	89,054	1,282.3	17,321	259.7	23,877	351.1	23,618	322.6	24,238	348.9
Slacks, pants, and jeans, including jean-cut casual slacks .....	322,549	3,948.0	78,653	990.9	88,708	1,124.8	80,256	962.9	74,932	869.4
Sweatpants .....	41,636	183.1	10,570	48.1	12,734	58.8	9,896	42.0	8,436	34.2
Underwear and nightwear:										
Brassieres, bra-lettes, and bandeaux .....	259,178	1,404.5	68,165	379.5	68,621	377.2	65,991	347.0	56,401	300.8
Girdles, corsets, and other foundation garments .....	90,063	391.3	24,112	114.8	23,824	97.9	22,566	95.5	19,561	83.1
Nightgowns, pajamas, and other nightwear .....	73,865	584.6	19,686	164.1	20,201	160.7	16,933	127.9	17,045	131.9
Other underwear, including camisoles, teddies, undershirts, and union suits .....	48,890	241.6	14,274	66.4	13,609	65.6	10,743	56.6	10,264	53.0
Panties .....	605,028	749.2	160,290	188.8	161,652	200.7	154,416	191.7	128,670	168.0
Robes and dressing gowns .....	24,128	235.7	6,943	71.7	5,802	64.0	5,244	49.1	6,139	50.9
Slips .....	11,812	51.4	2,943	12.9	3,372	14.2	2,873	12.8	2,624	11.5
Other garments:										
Bodysuits and bodyshirts .....	20,923	158.3	4,547	33.7	5,653	40.3	5,245	39.4	5,478	44.9
Jogging and warmup suits .....	2,410	32.7	538	6.3	655	10.1	580	7.6	637	8.7
Overalls, coveralls, and jumpsuits .....	3,206	36.9	1,458	12.5	954	10.3	471	6.9	323	7.2
Playsuits, rompers, halters, etc. ....	4,563	39.8	1,173	10.9	1,102	9.5	1,134	9.8	1,154	9.6
Ski apparel .....	1,593	75.7	455	23.5	695	35.3	281	11.2	162	5.7
Suits, including pant suits .....	12,309	376.7	2,850	82.4	2,958	90.9	2,930	85.6	3,571	117.8
Swimwear .....	35,850	544.9	8,021	104.3	5,199	53.9	9,793	168.2	12,837	218.5
Washable service apparel .....	24,564	251.6	5,898	60.0	6,329	65.1	6,537	66.9	5,800	59.6

D Withheld to avoid disclosing data for individual companies.

Table 47. Quantity of Production and Value of Shipments of Little Girls' Apparel: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
Dresses .....	44,329	488.5	10,212	123.2	10,547	119.6	10,719	104.8	12,851	140.9
Coats, jackets, and vests:										
Coats and capes .....	114	5.0	12	0.8	40	2.3	38	1.2	24	0.7
Down and feather filled coats, jackets, and vests ..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nontailored jackets .....	917	9.6	255	2.7	242	2.7	266	3.0	154	1.2
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	227	2.4	103	1.1	48	0.6	25	0.3	51	0.4
Tailored suit-type jackets .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:										
Woven blouses and shirts .....	27,935	215.0	6,013	51.3	6,694	60.0	7,959	55.6	7,269	48.1
Knit T-shirts and tank tops made for outerwear ..	47,262	166.7	10,099	36.0	10,275	40.5	12,910	44.1	13,978	46.1
Sweatshirts .....	8,871	34.8	2,956	12.4	2,922	11.6	1,644	6.0	1,349	4.8
Other knit blouses and shirts .....	32,204	158.8	5,866	29.8	9,637	46.6	7,555	37.8	9,146	44.6
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	6,174	45.6	1,906	15.3	2,116	16.1	1,363	9.3	789	4.9
Bottoms:										
Shorts .....	28,307	151.4	6,277	31.1	3,928	22.1	8,168	44.0	9,934	54.2
Skirts and divided skirts .....	6,312	58.6	1,276	10.5	1,787	16.0	1,445	10.8	1,804	21.3
Jeans .....	17,570	170.0	4,591	40.6	5,618	57.9	4,569	45.8	2,792	25.7
Slacks (except jeans) .....	27,059	144.1	5,202	30.7	8,668	48.3	7,708	35.9	5,481	29.2
Sweatpants .....	8,622	29.0	2,562	9.4	2,905	9.9	1,983	5.9	1,172	3.8
Underwear and nightwear:										
Brassieres, bra-lettes, and bandeaux .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Girdles, corsets, and other foundation garments ..	-	-	-	-	-	-	-	-	-	-
Nightgowns, pajamas, and other nightwear .....	22,718	135.1	5,352	36.5	6,915	44.4	4,161	21.7	6,290	32.5
Other underwear, including camisoles, teddies, undershirts, and union suits .....	5,192	10.0	1,347	2.4	1,990	3.9	790	1.7	1,065	2.0
Panties .....	137,843	92.6	29,217	17.2	40,987	32.6	40,574	24.3	27,065	18.5
Robes and dressing gowns .....	236	2.4	64	0.8	96	1.0	(D)	(D)	(D)	(D)
Slips .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Bodysuits and bodyshirts .....	1,991	18.7	438	3.8	514	4.4	508	4.9	531	5.6
Jogging and warmup suits .....	11,202	68.2	2,315	14.2	3,125	20.7	2,503	15.5	3,259	17.8
Overalls, coveralls, and jumpsuits .....	5,796	42.9	1,167	9.6	1,236	10.1	1,626	10.9	1,767	12.3
Playsuits, rompers, halters, etc. ....	12,328	62.7	3,516	19.2	2,015	12.0	2,622	10.3	4,175	21.2
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	12,382	78.1	2,908	11.7	2,192	7.3	2,799	19.9	4,483	39.2
Washable service apparel .....	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.



Table 47. Quantity of Production and Value of Shipments of Little Girls' Apparel: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product description	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1994</b>										
Dresses .....	41,496	502.7	9,843	127.8	10,006	129.2	9,702	109.0	11,945	136.7
Coats, jackets, and vests:										
Coats and capes .....	308	17.4	17	0.6	79	5.0	(D)	(D)	(D)	(D)
Down and feather filled coats, jackets, and vests ..	-	-	-	-	-	-	-	-	-	-
Nontailored jackets .....	690	7.5	179	1.9	169	2.2	169	1.7	173	1.7
Raincoats .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	89	3.3	(D)	(D)	(D)	(D)	(D)	(D)	9	0.2
Tailored suit-type jackets .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:										
Woven blouses and shirts .....	29,120	228.0	6,778	49.8	7,718	59.3	7,642	63.0	6,982	55.9
Knit T-shirts and tank tops made for outerwear ..	49,142	180.9	11,717	39.5	11,181	45.3	12,741	46.3	13,503	49.8
Sweatshirts .....	9,753	35.3	2,751	10.4	3,120	11.7	2,425	8.2	1,457	5.0
Other knit blouses and shirts .....	34,250	164.7	7,752	37.9	11,271	52.1	7,941	36.6	7,286	38.1
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	4,977	38.3	1,096	9.1	1,765	14.2	1,533	10.7	583	4.3
Bottoms:										
Shorts .....	23,438	144.1	5,155	34.6	3,476	27.3	6,327	37.8	8,480	44.4
Skirts and divided skirts .....	7,373	62.1	1,663	14.0	2,093	19.1	1,701	14.5	1,916	14.5
Slacks, pants, and jeans, including jean-cut casual slacks .....	38,777	278.5	8,810	64.2	12,798	88.3	9,733	71.7	7,436	54.3
Sweatpants .....	10,214	30.8	2,723	8.8	3,735	10.8	2,623	7.5	1,133	3.7
Underwear and nightwear:										
Brassieres, bra-lettes, and bandeaux .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Girdles, corsets, and other foundation garments ..	-	-	-	-	-	-	-	-	-	-
Nightgowns, pajamas, and other nightwear .....	20,035	115.4	5,336	34.5	5,602	33.4	3,266	17.3	5,831	30.2
Other underwear, including camisoles, teddies, undershirts, and union suits .....	5,618	11.9	1,724	3.8	1,928	3.9	1,157	2.4	809	1.8
Panties .....	154,670	110.5	30,915	24.1	43,669	30.1	44,428	32.7	35,658	23.6
Robes and dressing gowns .....	247	2.2	(D)	(D)	(D)	(D)	(D)	(D)	25	0.3
Slips .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:										
Bodysuits and bodyshirts .....	1,939	23.8	462	6.0	468	4.8	(D)	(D)	(D)	(D)
Jogging and warmup suits .....	12,595	81.6	3,581	24.0	3,539	25.6	2,424	15.4	3,051	16.6
Overalls, coveralls, and jumpsuits .....	9,468	55.8	2,328	13.1	2,889	16.7	1,852	11.1	2,399	14.9
Playsuits, rompers, halters, etc. ....	13,476	50.6	3,703	13.4	3,906	13.3	2,719	10.3	3,148	13.6
Ski apparel .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	13,258	94.5	4,491	21.1	1,718	8.0	2,456	23.5	4,593	41.9
Washable service apparel .....	-	-	-	-	-	-	-	-	-	-

- Represents zero. D Withheld to avoid disclosing data for individual companies.

Table 48. Quantity of Production of Apparel by Type of Fabrics: 1995

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
			Total	Wool blends			
<b>TOTAL</b>							
Men's and boys' garments:							
Suits . . . . .	(D)	(D)	5,040	1,227	2,735	119	(D)
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests . . .	(D)	(D)	181	(NA)	(D)	-	11
Dress and sport coats (tailored) . . . . .	(D)	430	6,910	2,492	2,918	685	(D)
Heavy nontailored coats and jackets . . . . .	16,506	4,670	9,085	(NA)	926	208	1,617
Lightweight nontailored coats and jackets . . . . .	25,301	2,615	12,182	(NA)	(D)	(D)	10,299
Overcoats and top coats . . . . .	1,131	(D)	413	(NA)	410	(D)	(D)
Raincoats . . . . .	(D)	(D)	1,092	(NA)	(NA)	(D)	288
Separate vests . . . . .	1,691	109	827	(NA)	48	(D)	(D)
Work jackets . . . . .	5,002	(D)	2,887	(NA)	(NA)	(D)	244
Tops:							
Woven dress and business shirts . . . . .	(D)	36,541	30,424	(NA)	(NA)	(D)	3,818
Woven sport shirts . . . . .	25,249	18,082	4,648	(NA)	(D)	-	(D)
Work shirts . . . . .	52,223	9,742	38,585	(NA)	(NA)	-	3,896
Knit T-shirts and tank tops made for outerwear . . . . .	863,324	707,994	88,855	(NA)	5	-	66,470
Sweatshirts . . . . .	213,561	142,479	64,737	(NA)	-	-	6,345
Other knit shirts . . . . .	113,475	71,722	35,890	(NA)	(D)	(D)	5,846
Sweaters . . . . .	17,831	8,668	4,310	(NA)	(D)	(D)	4,345
Bottoms:							
Dress and sport trousers . . . . .	105,347	41,832	50,107	11,466	5,273	(D)	(D)
Jeans . . . . .	276,463	263,941	458	-	-	-	12,064
Jean-cut casual slacks . . . . .	58,258	43,112	6,591	(NA)	(NA)	-	8,555
Shorts . . . . .	114,618	75,838	20,882	(NA)	(D)	(D)	(D)
Sweatpants . . . . .	53,277	21,900	30,397	(NA)	(NA)	-	980
Workpants . . . . .	53,528	2,767	49,039	(NA)	(NA)	(D)	(D)
Underwear and nightwear:							
Pajamas and nightwear . . . . .	22,447	5,493	14,430	(NA)	(NA)	(D)	(D)
Robes . . . . .	5,244	1,649	3,368	(NA)	(NA)	-	227
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts . . . . .	1,098,388	998,347	79,363	(NA)	(NA)	34	20,644
Other garments:							
Coveralls, overalls, and jumpsuits . . . . .	21,946	6,454	13,062	(NA)	-	87	2,343
Jogging and warmup suits . . . . .	10,000	(D)	7,442	(NA)	(NA)	-	(D)
Playsuits . . . . .	(D)	1,097	711	(NA)	-	8	(D)
Ski apparel . . . . .	(D)	-	8,495	(NA)	(NA)	-	(D)
Swimwear . . . . .	2,362	721	1,132	(NA)	(NA)	-	509
Team sports uniforms . . . . .	15,944	(D)	9,484	(NA)	-	-	(D)
Washable service apparel . . . . .	27,741	(D)	20,759	(NA)	(NA)	(D)	(D)
Women's and girls' garments:							
Dresses . . . . .	206,814	40,196	113,118	(NA)	1,865	5,260	46,375
Coats, jackets, and vests:							
Coats and capes . . . . .	7,761	(D)	3,054	1,847	3,192	(D)	(D)
Down and feather filled coats, jackets, and vests . . .	(D)	(D)	16	(NA)	-	(D)	6
Heavy nontailored coats and jackets . . . . .	9,066	2,624	2,408	(NA)	(D)	(D)	(D)
Raincoats . . . . .	(D)	(D)	318	(NA)	(NA)	1	80
Separate vests . . . . .	3,347	(D)	1,489	(NA)	(D)	37	1,156
Tailored suit-type jackets . . . . .	(D)	1,089	17,952	1,592	5,754	1,127	(D)
Tops:							
Woven blouses and shirts . . . . .	199,283	66,349	91,642	(NA)	241	4,500	36,551
Knit T-shirts and tank tops made for outerwear . . . . .	221,892	107,576	51,739	(NA)	(NA)	1,279	61,298
Sweatshirts . . . . .	47,322	15,018	28,108	(NA)	(NA)	-	4,196
Other knit blouses and shirts . . . . .	108,547	49,122	36,434	(NA)	56	(D)	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters . . . . .	50,133	25,005	15,568	(NA)	1,163	75	8,322
Bottoms:							
Shorts . . . . .	118,383	61,244	38,695	(NA)	(NA)	957	17,487
Skirts and divided skirts . . . . .	87,145	12,974	42,085	4,576	11,096	2,358	18,632
Jeans . . . . .	167,094	146,716	(D)	(D)	-	(D)	19,298
Slacks (except jeans) . . . . .	179,157	51,558	87,584	9,533	7,489	2,498	30,028
Sweatpants . . . . .	39,610	(D)	23,411	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux . . . . .	(D)	14,460	286,932	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments . . . . .	92,186	(D)	83,295	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear . . . . .	87,976	14,048	60,333	(NA)	(NA)	2,194	11,401
Panties . . . . .	688,632	489,244	190,198	(NA)	(NA)	-	9,190
Robes and dressing gowns . . . . .	23,666	5,965	17,129	(NA)	(NA)	-	572
All other underwear, including slips, camisoles, teddies, undershirts, and union suits . . . . .	(D)	20,197	45,125	(NA)	(NA)	944	(D)
Other garments:							
Bodysuits and bodyshirts . . . . .	19,883	(D)	6,177	(NA)	(NA)	-	(D)
Jogging and warmup suits . . . . .	13,321	653	12,001	(NA)	(NA)	-	667
Overalls, coveralls, and jumpsuits . . . . .	8,653	3,663	4,001	(NA)	6	-	983
Playsuits, rompers, halters, etc. . . . .	17,548	4,962	10,133	(NA)	(D)	810	(D)
Ski apparel . . . . .	(D)	-	1,688	(NA)	(NA)	-	(D)
Suits, including pant suits . . . . .	(D)	103	3,971	1,375	2,066	(D)	3,945
Swimwear . . . . .	49,261	(D)	41,592	(NA)	(NA)	14	(D)
Washable service apparel . . . . .	26,887	6,894	16,706	(NA)	(NA)	-	3,287
Infants' apparel . . . . .	158,306	103,202	44,209	(NA)	(NA)	4,752	6,143

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabrics: 1995—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
			Total	Wool blends			
<b>FOURTH QUARTER</b>							
Men's and boys' garments:							
Suits .....	(D)	155	1,030	309	613	38	(D)
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests .....	(D)	(D)	47	(NA)	-	-	3
Dress and sport coats (tailored) .....	(D)	109	1,489	537	641	148	(D)
Heavy nontailored coats and jackets .....	5,500	2,362	2,391	(NA)	277	70	400
Lightweight nontailored coats and jackets .....	6,651	750	2,281	(NA)	(D)	-	(D)
Overcoats and top coats .....	271	24	121	(NA)	73	(D)	(D)
Raincoats .....	(D)	(D)	240	(NA)	(NA)	(D)	52
Separate vests .....	(D)	50	300	(NA)	7	(D)	208
Work jackets .....	1,196	(D)	728	(NA)	(NA)	(D)	58
Tops:							
Woven dress and business shirts .....	(D)	8,194	5,980	(NA)	(NA)	(D)	881
Woven sport shirts .....	5,123	3,570	1,038	(NA)	(D)	-	(D)
Work shirts .....	13,251	2,902	9,362	(NA)	(NA)	-	987
Knit T-shirts and tank tops made for outerwear .....	180,803	150,595	16,409	(NA)	-	-	13,799
Sweatshirts .....	56,590	37,174	17,802	(NA)	-	-	1,614
Other knit shirts .....	25,279	16,632	7,359	(NA)	-	-	1,288
Sweaters .....	4,662	2,652	798	(NA)	(D)	(D)	1,079
Bottoms:							
Dress and sport trousers .....	23,271	9,225	11,050	3,207	1,207	(D)	(D)
Jeans .....	75,445	72,317	112	-	-	-	3,016
Jeans-cut casual slacks .....	12,870	9,231	1,804	(NA)	(NA)	(D)	(D)
Shorts .....	21,853	14,396	3,813	(NA)	(D)	-	(D)
Sweatpants .....	13,165	5,805	7,108	(NA)	(NA)	-	252
Workpants .....	14,870	706	13,691	(NA)	(NA)	-	473
Underwear and nightwear:							
Pajamas and nightwear .....	6,619	1,524	4,468	(NA)	(NA)	(D)	(D)
Robes .....	1,631	588	975	(NA)	(NA)	-	68
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts .....	265,320	241,504	19,303	(NA)	(NA)	7	4,506
Other garments:							
Coveralls, overalls, and jumpsuits .....	4,914	1,647	2,800	(NA)	-	-	467
Jogging and warmup suits .....	2,607	(D)	1,885	(NA)	(NA)	-	(D)
Playsuits .....	(D)	(D)	274	(NA)	-	(D)	47
Ski apparel .....	(D)	-	1,680	(NA)	(NA)	-	(D)
Swimwear .....	422	150	172	(NA)	(NA)	-	100
Team sports uniforms .....	3,982	(D)	2,349	(NA)	-	-	(D)
Washable service apparel .....	7,807	(D)	5,733	(NA)	(NA)	-	(D)
Women's and girls' garments:							
Dresses .....	44,597	8,357	24,778	(NA)	471	1,026	9,965
Coats, jackets, and vests:							
Coats and capes .....	1,868	(D)	904	535	561	(D)	212
Down and feather filled coats, jackets, and vests .....	(D)	(D)	4	(NA)	-	(D)	2
Heavy nontailored coats and jackets .....	2,088	701	437	(NA)	11	128	811
Raincoats .....	(D)	(D)	74	(NA)	(NA)	-	18
Separate vests .....	929	180	433	(NA)	2	19	295
Tailored suit-type jackets .....	(D)	236	4,305	423	1,448	392	(D)
Tops:							
Woven blouses and shirts .....	46,396	15,706	20,437	(NA)	53	1,149	9,051
Knit T-shirts and tank tops made for outerwear .....	59,720	32,309	10,224	(NA)	(NA)	260	16,927
Sweatshirts .....	11,868	3,597	7,325	(NA)	(NA)	-	946
Other knit blouses and shirts .....	24,501	11,352	7,082	(NA)	(D)	996	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	14,709	7,100	5,014	(NA)	213	(D)	(D)
Bottoms:							
Shorts .....	25,981	12,378	8,388	(NA)	(NA)	133	5,082
Skirts and divided skirts .....	19,143	2,529	10,067	1,254	1,887	508	4,152
Jeans .....	40,789	35,823	(D)	(D)	-	(D)	4,824
Slacks (except jeans) .....	43,284	14,187	19,947	1,691	1,536	397	7,217
Sweatpants .....	9,494	(D)	5,277	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux .....	(D)	3,268	66,642	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments .....	21,569	(D)	20,465	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear .....	22,329	4,195	14,622	(NA)	(NA)	639	2,873
Panties .....	156,589	116,656	37,990	(NA)	(NA)	-	1,943
Robes and dressing gowns .....	6,148	1,616	4,388	(NA)	(NA)	-	144
All other underwear, including slips, camisoles, teddies, undershirts, and union suits .....	(D)	4,547	11,481	(NA)	(NA)	167	(D)
Other garments:							
Bodysuits and bodyshirts .....	4,875	(D)	1,308	(NA)	(NA)	-	(D)
Jogging and warmup suits .....	2,875	136	2,590	(NA)	(NA)	-	149
Overalls, coveralls, and jumpsuits .....	1,969	932	808	(NA)	(D)	-	(D)
Playsuits, rompers, halters, etc. ....	4,541	1,438	2,544	(NA)	-	(D)	(D)
Ski apparel .....	(D)	-	570	(NA)	(NA)	-	(D)
Suits, including pant suits .....	(D)	(D)	907	348	435	12	845
Swimwear .....	10,546	863	8,450	(NA)	(NA)	-	1,233
Washable service apparel .....	6,816	2,227	3,698	(NA)	(NA)	-	891
Infants' apparel .....	36,376	22,440	11,426	(NA)	(NA)	910	1,600

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabrics: 1995—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
			Total	Wool blends			
<b>THIRD QUARTER</b>							
Men's and boys' garments:							
Suits	(D)	(D)	1,299	289	687	24	491
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests	(D)	(D)	49	(NA)	(D)	-	3
Dress and sport coats (tailored)	(D)	104	1,699	629	741	166	(D)
Heavy nontailored coats and jackets	4,234	1,257	2,329	(NA)	188	53	407
Lightweight nontailored coats and jackets	6,374	694	2,185	(NA)	(D)	(D)	3,466
Overcoats and top coats	367	(D)	114	(NA)	174	(D)	6
Raincoats	(D)	(D)	304	(NA)	(NA)	(D)	74
Separate vests	(D)	16	186	(NA)	23	(D)	136
Work jackets	(D)	(D)	692	(NA)	(NA)	(D)	57
Tops:							
Woven dress and business shirts	(D)	8,984	8,375	(NA)	(NA)	(D)	942
Woven sport shirts	6,546	4,763	1,157	(NA)	(D)	-	(D)
Work shirts	13,662	3,699	8,983	(NA)	(NA)	-	980
Knit T-shirts and tank tops made for outerwear	189,350	155,598	19,148	(NA)	(D)	-	(D)
Sweatshirts	53,327	31,860	19,822	(NA)	-	-	1,645
Other knit shirts	28,495	17,591	9,466	(NA)	-	-	1,438
Sweaters	5,485	2,795	1,392	(NA)	(D)	(D)	1,155
Bottoms:							
Dress and sport trousers	29,308	12,839	12,853	3,885	1,527	(D)	(D)
Jeans	71,912	68,784	112	-	-	-	3,016
Jeans-cut casual slacks	16,120	12,052	1,804	(NA)	(NA)	-	2,264
Shorts	19,174	10,642	4,878	(NA)	(D)	(D)	3,653
Sweatpants	18,231	7,335	10,606	(NA)	(NA)	-	290
Workpants	15,553	769	14,299	(NA)	(NA)	(D)	(D)
Underwear and nightwear:							
Pajamas and nightwear	5,090	1,007	3,464	(NA)	(NA)	(D)	(D)
Robes	1,835	541	1,220	(NA)	(NA)	-	74
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	297,315	270,793	21,786	(NA)	(NA)	18	4,718
Other garments:							
Coveralls, overalls, and jumpsuits	5,296	1,902	2,597	(NA)	-	-	797
Jogging and warmup suits	3,213	(D)	2,563	(NA)	(NA)	-	(D)
Playsuits	(D)	(D)	239	(NA)	-	(D)	90
Ski apparel	(D)	-	4,307	(NA)	(NA)	-	(D)
Swimwear	268	85	118	(NA)	(NA)	-	65
Team sports uniforms	3,331	(D)	1,988	(NA)	-	-	(D)
Washable service apparel	6,800	1,901	4,574	(NA)	(NA)	-	325
Women's and girls' garments:							
Dresses	49,432	9,179	27,529	(NA)	469	1,272	10,983
Coats, jackets, and vests:							
Coats and capes	2,376	(D)	923	620	1,036	(D)	226
Down and feather filled coats, jackets, and vests	(D)	(D)	4	(NA)	-	(D)	2
Heavy nontailored coats and jackets	2,468	667	676	(NA)	64	(D)	(D)
Raincoats	(D)	(D)	119	(NA)	(NA)	-	26
Separate vests	914	(D)	398	(NA)	18	(D)	301
Tailored suit-type jackets	(D)	187	4,238	536	2,750	408	(D)
Tops:							
Woven blouses and shirts	44,399	15,283	19,111	(NA)	46	1,199	8,760
Knit T-shirts and tank tops made for outerwear	48,541	24,674	9,834	(NA)	(NA)	(D)	(D)
Sweatshirts	14,207	4,646	8,514	(NA)	(NA)	-	1,047
Other knit blouses and shirts	28,862	13,815	9,191	(NA)	(D)	897	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters	15,108	6,763	5,495	(NA)	381	14	2,455
Bottoms:							
Shorts	19,119	7,387	7,396	(NA)	(NA)	288	4,048
Skirts and divided skirts	22,521	2,956	10,820	1,216	3,398	572	4,775
Jeans	49,837	44,484	(D)	(D)	-	(D)	4,824
Slacks (except jeans)	49,180	13,358	24,218	2,822	2,781	739	8,084
Sweatpants	13,045	(D)	7,761	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux	(D)	3,564	74,368	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	24,177	(D)	21,331	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	22,464	3,456	15,790	(NA)	(NA)	478	2,740
Panties	184,799	128,380	53,989	(NA)	(NA)	-	2,430
Robes and dressing gowns	6,473	1,665	4,656	(NA)	(NA)	-	152
All other underwear, including slips, camisoles, teddies undershirts, and union suits	(D)	6,024	12,627	(NA)	(NA)	266	(D)
Other garments:							
Bodysuits and bodyshirts	5,550	(D)	1,409	(NA)	(NA)	-	(D)
Jogging and warmup suits	3,654	180	3,324	(NA)	(NA)	-	150
Overalls, coveralls, and jumpsuits	1,855	771	884	(NA)	(D)	(D)	195
Playsuits, rompers, halters, etc.	3,322	867	1,881	(NA)	(D)	(D)	367
Ski apparel	(D)	-	954	(NA)	(NA)	-	(D)
Suits, including pant suits	(D)	(D)	894	381	466	18	998
Swimwear	7,267	101	6,140	(NA)	(NA)	(D)	(D)
Washable service apparel	6,876	2,366	3,788	(NA)	(NA)	-	722
Infants' apparel	45,086	30,520	11,955	(NA)	(NA)	1,020	1,591

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabrics: 1995—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
			Total	Wool blends			
<b>SECOND QUARTER</b>							
Men's and boys' garments:							
Suits	(D)	121	1,165	271	677	28	(D)
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests	(D)	(D)	41	(NA)	(D)	-	3
Dress and sport coats (tailored)	(D)	86	1,615	611	753	184	(D)
Heavy nontailored coats and jackets	3,243	535	2,080	(NA)	191	(D)	(D)
Lightweight nontailored coats and jackets	6,001	614	3,756	(NA)	(D)	(D)	1,578
Overcoats and top coats	330	(D)	110	(NA)	(D)	(D)	6
Raincoats	(D)	(D)	329	(NA)	(NA)	(D)	78
Separate vests	286	26	90	(NA)	6	2	162
Work jackets	1,248	(D)	750	(NA)	(NA)	(D)	60
Tops:							
Woven dress and business shirts	(D)	10,209	7,747	(NA)	(NA)	(D)	951
Woven sport shirts	7,296	5,144	1,444	(NA)	(D)	-	(D)
Work shirts	12,557	1,566	10,055	(NA)	(NA)	-	936
Knit T-shirts and tank tops made for outerwear	245,575	201,623	26,312	(NA)	-	-	17,640
Sweatshirts	52,946	36,332	14,999	(NA)	-	-	1,615
Other knit shirts	30,951	19,453	9,889	(NA)	-	-	1,609
Sweaters	4,099	1,709	1,114	(NA)	(D)	(D)	1,138
Bottoms:							
Dress and sport trousers	25,820	10,046	12,440	2,072	1,344	(D)	(D)
Jeans	72,428	69,298	114	-	-	-	3,016
Jean-cut casual slacks	16,858	12,945	1,511	(NA)	(NA)	(D)	(D)
Shorts	30,263	19,488	6,077	(NA)	-	(D)	(D)
Sweatpants	13,475	4,748	8,491	(NA)	(NA)	-	236
Workpants	12,637	599	11,631	(NA)	(NA)	-	407
Underwear and nightwear:							
Pajamas and nightwear	5,230	1,294	3,367	(NA)	(NA)	(D)	(D)
Robes	1,109	311	750	(NA)	(NA)	(D)	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	293,699	267,286	21,914	(NA)	(NA)	7	4,492
Other garments:							
Coveralls, overalls, and jumpsuits	(D)	1,342	3,934	(NA)	-	(D)	541
Jogging and warmup suits	2,131	(D)	1,513	(NA)	(NA)	-	(D)
Playsuits	(D)	70	63	(NA)	-	(D)	47
Ski apparel	(D)	-	2,027	(NA)	(NA)	-	(D)
Swimwear	620	209	300	(NA)	(NA)	-	111
Team sports uniforms	(D)	(D)	2,319	(NA)	-	-	(D)
Washable service apparel	5,811	747	4,732	(NA)	(NA)	(D)	(D)
Women's and girls' garments:							
Dresses	54,218	9,822	29,997	(NA)	450	1,518	12,431
Coats, jackets, and vests:							
Coats and capes	1,970	(D)	485	103	1,049	6	(D)
Down and feather filled coats, jackets, and vests	(D)	(D)	3	(NA)	-	(D)	1
Heavy nontailored coats and jackets	1,996	629	513	(NA)	(D)	(D)	715
Raincoats	(D)	(D)	98	(NA)	(NA)	(D)	10
Separate vests	820	(D)	315	(NA)	(D)	2	289
Tailored suit-type jackets	(D)	275	3,866	283	1,069	186	(D)
Tops:							
Woven blouses and shirts	50,284	16,933	22,812	(NA)	38	1,200	9,301
Knit T-shirts and tank tops made for outerwear	51,237	21,909	15,473	(NA)	(NA)	(D)	(D)
Sweatshirts	11,686	3,501	6,834	(NA)	(NA)	-	1,351
Other knit blouses and shirts	24,714	10,119	9,114	(NA)	-	979	4,502
Sweaters, including coat, cardigan, pullover, and vest sweaters	10,726	5,718	2,857	(NA)	356	12	1,783
Bottoms:							
Shorts	29,952	15,262	10,813	(NA)	(NA)	152	3,725
Skirts and divided skirts	21,290	3,274	9,677	990	3,101	526	4,712
Jeans	43,613	38,653	(D)	(D)	-	(D)	4,825
Slacks (except jeans)	40,883	11,655	20,005	2,258	(D)	384	(D)
Sweatpants	10,356	(D)	6,541	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux	(D)	3,587	76,244	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	24,045	(D)	21,424	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	18,994	3,111	12,746	(NA)	(NA)	573	2,564
Panties	178,901	127,871	48,685	(NA)	(NA)	-	2,345
Robes and dressing gowns	(D)	1,173	3,696	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies undershirts, and union suits	(D)	4,815	10,573	(NA)	(NA)	303	(D)
Other garments:							
Bodysuits and bodyshirts	4,932	(D)	1,706	(NA)	(NA)	-	(D)
Jogging and warmup suits	2,992	147	2,706	(NA)	(NA)	-	139
Overalls, coveralls, and jumpsuits	1,964	534	1,208	(NA)	-	-	222
Playsuits, rompers, halters, etc.	4,168	1,214	2,333	(NA)	-	(D)	(D)
Ski apparel	(D)	-	68	(NA)	(NA)	-	(D)
Suits, including pant suits	(D)	(D)	1,343	297	445	17	903
Swimwear	13,055	326	11,245	(NA)	(NA)	(D)	(D)
Washable service apparel	5,709	950	4,007	(NA)	(NA)	-	752
Infants' apparel	39,770	27,892	9,282	(NA)	(NA)	1,106	1,490

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabrics: 1995—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
			Total	Wool blends			
<b>FIRST QUARTER</b>							
Men's and boys' garments:							
Suits	(D)	151	1,546	358	758	29	(D)
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests	(D)	(D)	44	(NA)	(D)	-	2
Dress and sport coats (tailored)	(D)	131	2,107	715	783	187	(D)
Heavy nontailored coats and jackets	3,529	516	2,285	(NA)	270	40	418
Lightweight nontailored coats and jackets	6,275	557	3,960	(NA)	(D)	-	(D)
Overcoats and top coats	163	(D)	68	(NA)	25	(D)	4
Raincoats	(D)	(D)	219	(NA)	(NA)	(D)	84
Separate vests	(D)	17	251	(NA)	12	13	(D)
Work jackets	(D)	(D)	717	(NA)	(NA)	(D)	69
Tops:							
Woven dress and business shirts	(D)	9,154	8,322	(NA)	(NA)	(D)	1,044
Woven sport shirts	6,284	4,605	1,009	(NA)	(D)	-	(D)
Work shirts	12,753	1,575	10,185	(NA)	(NA)	-	993
Knit T-shirts and tank tops made for outerwear	247,596	200,178	26,986	(NA)	-	-	20,432
Sweatshirts	50,698	37,113	12,114	(NA)	-	-	1,471
Other knit shirts	28,750	18,046	9,176	(NA)	(D)	(D)	1,511
Sweaters	3,585	1,512	1,006	(NA)	94	-	973
Bottoms:							
Dress and sport trousers	26,948	9,722	13,764	2,302	1,195	(D)	(D)
Jeans	56,678	53,542	120	-	-	-	3,016
Jean-cut casual slacks	12,410	8,884	1,472	(NA)	(NA)	-	2,054
Shorts	43,328	31,312	6,114	(NA)	(D)	(D)	5,900
Sweatpants	8,406	4,012	4,192	(NA)	(NA)	-	202
Workpants	10,468	693	9,418	(NA)	(NA)	-	357
Underwear and nightwear:							
Pajamas and nightwear	5,508	1,668	3,131	(NA)	(NA)	(D)	(D)
Robes	669	209	423	(NA)	(NA)	-	37
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	242,054	218,764	16,360	(NA)	(NA)	2	6,928
Other garments:							
Coveralls, overalls, and jumpsuits	(D)	1,563	3,731	(NA)	-	(D)	538
Jogging and warmup suits	2,049	(D)	1,481	(NA)	(NA)	-	(D)
Playsuits	(D)	(D)	135	(NA)	-	(D)	87
Ski apparel	(D)	-	481	(NA)	(NA)	-	(D)
Swimwear	1,052	277	542	(NA)	(NA)	-	233
Team sports uniforms	(D)	(D)	2,828	(NA)	-	-	(D)
Washable service apparel	7,323	888	5,720	(NA)	(NA)	(D)	(D)
Women's and girls' garments:							
Dresses	58,567	12,838	30,814	(NA)	475	1,444	12,996
Coats, jackets, and vests:							
Coats and capes	1,547	(D)	742	589	546	11	(D)
Down and feather filled coats, jackets, and vests	(D)	(D)	5	(NA)	-	(D)	1
Heavy nontailored coats and jackets	2,514	627	782	(NA)	101	195	809
Raincoats	(D)	(D)	27	(NA)	(NA)	(D)	26
Separate vests	684	(D)	343	(NA)	-	(D)	271
Tailored suit-type jackets	(D)	391	5,543	350	487	141	(D)
Tops:							
Woven blouses and shirts	58,204	18,427	29,282	(NA)	104	952	9,439
Knit T-shirts and tank tops made for outerwear	62,394	28,684	16,208	(NA)	(NA)	(D)	(D)
Sweatshirts	9,561	3,274	5,435	(NA)	(NA)	-	852
Other knit blouses and shirts	30,470	13,836	11,047	(NA)	(D)	(D)	4,349
Sweaters, including coat, cardigan, pullover, and vest sweaters	9,590	5,424	2,202	(NA)	213	(D)	(D)
Bottoms:							
Shorts	43,331	26,217	12,098	(NA)	(NA)	384	4,632
Skirts and divided skirts	24,191	4,215	11,521	1,116	(D)	752	(D)
Jeans	32,855	27,756	(D)	(D)	-	-	(D)
Slacks (except jeans)	45,810	12,358	23,414	2,762	(D)	978	(D)
Sweatpants	6,715	(D)	3,832	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux	(D)	4,041	69,678	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	22,395	(D)	20,075	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	24,189	3,286	17,175	(NA)	(NA)	504	3,224
Panties	168,343	116,337	49,534	(NA)	(NA)	-	2,472
Robes and dressing gowns	(D)	1,511	4,389	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	(D)	4,811	10,444	(NA)	(NA)	208	(D)
Other garments:							
Bodysuits and bodyshirts	4,526	(D)	1,754	(NA)	(NA)	-	(D)
Jogging and warmup suits	3,800	190	3,381	(NA)	(NA)	-	229
Overalls, coveralls, and jumpsuits	2,865	1,426	1,101	(NA)	-	(D)	(D)
Playsuits, rompers, halters, etc.	5,517	1,443	3,375	(NA)	-	(D)	(D)
Ski apparel	(D)	-	96	(NA)	(NA)	-	(D)
Suits, including pant suits	(D)	12	827	349	720	(D)	1,199
Swimwear	18,393	(D)	15,757	(NA)	(NA)	-	(D)
Washable service apparel	7,486	1,351	5,213	(NA)	(NA)	-	922
Infants' apparel	37,074	22,350	11,546	(NA)	(NA)	1,716	1,462

- Represents zero.

D Withheld to avoid disclosing data for individual companies.

NA Not available.

Table 49. Quantity of Production of Apparel by Type of Fabrics: 1994

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
			Total	Wool blends			
<b>TOTAL</b>							
Men's and boys' garments:							
Suits.....	11,865	566	6,115	1,608	3,227	137	1,820
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests.....	(D)	(D)	259	(NA)	(D)	-	135
Dress and sport coats (tailored).....	13,846	592	8,373	2,843	3,485	569	827
Heavy nontailored coats and jackets.....	15,559	3,258	9,649	(NA)	967	(D)	(D)
Lightweight nontailored coats and jackets.....	24,970	2,308	15,981	(NA)	220	-	6,461
Overcoats and top coats.....	1,015	(D)	274	(NA)	306	(D)	78
Raincoats.....	(D)	(D)	976	(NA)	(NA)	(D)	258
Separate vests.....	(D)	73	718	(NA)	52	(D)	543
Work jackets.....	5,144	(D)	2,931	(NA)	(NA)	(D)	183
Tops:							
Woven dress and business shirts.....	(D)	46,206	29,069	(NA)	(NA)	(D)	2,286
Woven sport shirts.....	31,016	23,163	4,642	(NA)	(D)	(D)	2,660
Work shirts.....	49,076	7,254	40,060	(NA)	(NA)	-	1,762
Knit T-shirts and tank tops made for outerwear.....	839,706	627,138	115,002	(NA)	-	-	97,566
Sweatshirts.....	226,204	133,497	85,381	(NA)	-	-	7,326
Other knit shirts.....	118,709	64,182	47,816	(NA)	(D)	(D)	(D)
Sweaters.....	20,782	8,486	7,592	(NA)	877	(D)	(D)
Bottoms:							
Dress and sport trousers.....	111,968	40,833	60,120	12,951	4,706	(D)	(D)
Jeans and jean-cut casual slacks.....	325,050	279,560	6,301	-	-	-	39,189
Shorts.....	111,170	76,120	18,781	(NA)	(D)	(D)	16,167
Sweatpants.....	56,696	(D)	35,579	(NA)	(NA)	-	(D)
Workpants.....	41,056	2,223	37,003	(NA)	(NA)	-	1,830
Underwear and nightwear:							
Pajamas and nightwear.....	28,674	7,896	15,740	(NA)	(NA)	88	4,950
Robes.....	(D)	1,935	2,738	(NA)	(NA)	-	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts.....	1,195,933	1,082,040	88,456	(NA)	(NA)	48	25,389
Other garments:							
Coveralls, overalls, and jumpsuits.....	(D)	6,165	19,456	(NA)	-	-	(D)
Jogging and warmup suits.....	13,496	1,747	10,378	(NA)	(NA)	-	1,371
Playsuits.....	(D)	575	718	(NA)	-	(D)	(D)
Ski apparel.....	(D)	-	4,103	(NA)	(NA)	-	(D)
Swimwear.....	4,186	1,596	1,988	(NA)	(NA)	-	602
Team sports uniforms.....	(D)	(D)	12,479	(NA)	-	-9,308	-
Washable service apparel.....	30,693	2,632	20,618	(NA)	(NA)	-	7,443
Women's and girls' garments:							
Dresses.....	198,503	29,122	115,504	(NA)	2,195	5,180	46,502
Coats, jackets, and vests:							
Coats and capes.....	8,720	(D)	3,611	2,745	3,537	77	(D)
Down and feather filled coats, jackets, and vests.....	59	(D)	(D)	(NA)	-	(D)	33
Heavy nontailored coats and jackets.....	9,898	2,202	3,734	(NA)	(D)	(D)	2,959
Raincoats.....	(D)	(D)	297	(NA)	(NA)	(D)	126
Separate vests.....	2,031	174	1,044	(NA)	1	15	797
Tailored suit-type jackets.....	(D)	2,047	19,590	1,651	5,085	818	(D)
Tops:							
Woven blouses and shirts.....	233,440	80,730	115,423	(NA)	310	6,659	30,318
Knit T-shirts and tank tops made for outerwear.....	195,227	83,845	48,940	(NA)	(NA)	(D)	(D)
Sweatshirts.....	50,716	14,668	30,478	(NA)	(NA)	-	5,570
Other knit blouses and shirts.....	134,558	39,667	64,409	(NA)	(D)	(D)	26,438
Sweaters, including coat, cardigan, pullover, and vest sweaters.....	50,955	23,650	14,199	(NA)	1,184	116	11,806
Bottoms:							
Shorts.....	90,373	44,674	28,826	(NA)	(NA)	667	16,206
Skirts and divided skirts.....	96,427	21,265	41,952	5,116	10,508	1,929	20,773
Slacks, pants, and jeans, including jean-cut casual slacks.....	361,326	191,083	106,998	9,831	7,514	1,534	54,197
Sweatpants.....	51,850	14,496	29,253	(NA)	(NA)	-	8,101
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux.....	(D)	11,618	244,832	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments.....	90,063	5,489	80,968	(NA)	(NA)	-	3,606
Nightgowns, pajamas, and other nightwear.....	93,900	12,693	72,995	(NA)	(NA)	1,843	6,369
Panties.....	759,698	542,310	204,841	(NA)	(NA)	-	12,547
Robes and dressing gowns.....	24,375	7,064	15,892	(NA)	(NA)	-	1,419
All other underwear, including slips, camisoles, teddies, undershirts, and union suits.....	(D)	15,480	45,047	(NA)	(NA)	-	(D)
Other garments:							
Bodysuits and bodyshirts.....	22,862	(D)	6,163	(NA)	(NA)	(D)	10,611
Jogging and warmup suits.....	15,005	(D)	13,560	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits.....	12,674	4,335	7,023	(NA)	(D)	(D)	(D)
Playsuits, rompers, halters, etc.....	18,039	3,557	10,896	(NA)	-	(D)	(D)
Ski apparel.....	(D)	(D)	1,384	(NA)	(NA)	-	210
Suits, including pant suits.....	(D)	(D)	5,265	1,147	2,660	237	5,401
Swimwear.....	49,108	(D)	43,911	(NA)	(NA)	(D)	(D)
Washable service apparel.....	24,564	3,570	17,152	(NA)	(NA)	-	3,842
Infants' apparel.....	155,424	92,136	51,960	(NA)	(NA)	5,520	5,808

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabrics: 1994—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
			Total	Wool blends			
<b>FOURTH QUARTER</b>							
Men's and boys' garments:							
Suits .....	3,179	163	1,723	337	743	38	512
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests .....	(D)	(D)	49	(NA)	-	-	37
Dress and sport coats (tailored) .....	(D)	198	2,040	713	763	127	(D)
Heavy nontailored coats and jackets .....	4,038	762	2,556	(NA)	278	(D)	(D)
Lightweight nontailored coats and jackets .....	6,767	610	4,990	(NA)	19	-	1,148
Overcoats and top coats .....	271	(D)	76	(NA)	91	(D)	21
Raincoats .....	(D)	(D)	225	(NA)	(NA)	(D)	61
Separate vests .....	(D)	23	246	(NA)	6	(D)	167
Work jackets .....	1,334	(D)	782	(NA)	(NA)	(D)	49
Tops:							
Woven dress and business shirts .....	(D)	13,470	7,432	(NA)	(NA)	(D)	586
Woven sport shirts .....	7,349	5,167	1,256	(NA)	(D)	(D)	788
Work shirts .....	12,966	1,895	10,612	(NA)	(NA)	-	459
Knit T-shirts and tank tops made for outerwear .....	199,802	154,854	25,146	(NA)	-	-	19,802
Sweatshirts .....	61,995	35,587	24,373	(NA)	-	-	2,035
Other knit shirts .....	25,935	13,982	10,504	(NA)	(D)	(D)	1,435
Sweaters .....	5,804	3,195	1,467	(NA)	110	(D)	(D)
Bottoms:							
Dress and sport trousers .....	26,634	9,244	14,185	3,212	1,092	(D)	(D)
Jeans and jean-cut casual slacks .....	84,565	73,833	1,652	(NA)	(NA)	-	9,080
Shorts .....	25,780	17,655	4,282	(NA)	(D)	(D)	3,842
Sweatpants .....	14,612	5,267	8,597	(NA)	(NA)	-	748
Workpants .....	10,467	520	9,398	(NA)	(NA)	-	549
Underwear and nightwear:							
Pajamas and nightwear .....	7,770	2,317	4,057	(NA)	(NA)	(D)	(D)
Robes .....	1,967	797	1,055	(NA)	(NA)	-	115
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts .....	289,204	263,892	19,308	(NA)	(NA)	12	5,992
Other garments:							
Coveralls .....	(D)	1,576	4,828	(NA)	-	-	(D)
Jogging and warmup suits .....	3,509	(D)	2,717	(NA)	(NA)	-	(D)
Playsuits .....	298	(D)	134	(NA)	-	(D)	53
Ski apparel .....	(D)	-	1,208	(NA)	(NA)	-	(D)
Swimwear .....	570	196	220	(NA)	(NA)	-	154
Team sports uniforms .....	(D)	(D)	3,456	(NA)	-	-	2,724
Washable service apparel .....	7,410	651	4,996	(NA)	(NA)	-	1,763
Women's and girls' garments:							
Dresses .....	44,857	6,224	26,214	(NA)	557	1,286	10,576
Coats, jackets, and vests:							
Coats and capes .....	1,635	(D)	683	438	581	18	(D)
Down and feather filled coats, jackets, and vests .....	16	(D)	(D)	(NA)	-	(D)	9
Heavy nontailored coats and jackets .....	2,377	748	639	(NA)	17	186	787
Raincoats .....	(D)	(D)	68	(NA)	(NA)	(D)	29
Separate vests .....	(D)	38	278	(NA)	-	(D)	188
Tailored suit-type jackets .....	(D)	306	4,133	465	1,120	165	(D)
Tops:							
Woven blouses and shirts .....	53,611	17,484	28,029	(NA)	90	1,206	6,802
Knit T-shirts and tank tops made for outerwear .....	49,049	22,405	12,829	(NA)	(NA)	(D)	(D)
Sweatshirts .....	11,691	3,979	6,876	(NA)	(NA)	-	836
Other knit blouses and shirts .....	37,976	9,168	20,733	(NA)	(D)	(D)	6,902
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	12,816	5,923	3,492	(NA)	333	(D)	(D)
Bottoms:							
Shorts .....	21,612	10,046	7,180	(NA)	(NA)	149	4,237
Skirts and divided skirts .....	18,984	3,787	8,597	1,299	1,550	518	4,532
Slacks, pants, and jeans, including jean-cut casual slacks .....	87,463	48,026	24,806	3,080	1,243	425	12,963
Sweatpants .....	13,293	(D)	7,640	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux .....	(D)	3,773	63,693	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments .....	24,112	1,560	21,600	(NA)	(NA)	-	952
Nightgowns, pajamas, and other nightwear .....	25,022	3,491	19,318	(NA)	(NA)	437	1,776
Panties .....	191,205	136,723	51,278	(NA)	(NA)	-	3,204
Robes and dressing gowns .....	(D)	2,331	4,161	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits .....	(D)	4,632	12,359	(NA)	(NA)	-	(D)
Other garments:							
Bodysuits and bodyshirts .....	5,009	(D)	1,267	(NA)	(NA)	(D)	2,458
Jogging and warmup suits .....	4,119	(D)	3,763	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits .....	3,786	1,585	1,771	(NA)	(D)	(D)	429
Playsuits, rompers, halters, etc. ....	4,876	1,140	2,749	(NA)	-	(D)	(D)
Ski apparel .....	(D)	(D)	406	(NA)	(NA)	-	48
Suits, including pant suits .....	(D)	(D)	1,341	263	681	87	1,278
Swimwear .....	12,512	(D)	11,274	(NA)	(NA)	-	(D)
Washable service apparel .....	5,898	(D)	4,054	(NA)	(NA)	-	(D)
Infants' apparel .....	40,164	23,592	13,392	(NA)	(NA)	1,584	1,596

See footnotes at end of table.



Table 49. Quantity of Production of Apparel by Type of Fabrics: 1994—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
			Total	Wool blends			
<b>THIRD QUARTER</b>							
Men's and boys' garments:							
Suits	3,174	139	1,642	422	866	39	488
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests	(D)	(D)	46	(NA)	(D)	-	27
Dress and sport coats (tailored)	(D)	197	2,051	721	932	126	(D)
Heavy nontailored coats and jackets	4,048	1,124	2,261	(NA)	223	58	382
Lightweight nontailored coats and jackets	6,602	647	4,869	(NA)	49	-	1,037
Overcoats and top coats	326	(D)	70	(NA)	94	(D)	21
Raincoats	(D)	(D)	231	(NA)	(NA)	(D)	68
Separate vests	(D)	24	158	(NA)	17	(D)	119
Work jackets	1,286	(D)	712	(NA)	(NA)	(D)	44
Tops:							
Woven dress and business shirts	(D)	13,082	7,018	(NA)	(NA)	(D)	564
Woven sport shirts	8,199	6,318	1,105	(NA)	(D)	(D)	641
Work shirts	12,589	1,980	10,161	(NA)	(NA)	-	448
Knit T-shirts and tank tops made for outerwear	198,676	145,008	27,865	(NA)	-	-	25,803
Sweatshirts	69,625	38,622	28,931	(NA)	-	-	2,072
Other knit shirts	31,223	16,214	13,545	(NA)	(D)	(D)	1,451
Sweaters	6,710	2,215	3,245	(NA)	(D)	-	(D)
Bottoms:							
Dress and sport trousers	29,159	10,140	15,762	3,237	1,262	(D)	(D)
Jeans and jean-cut casual slacks	87,717	75,984	1,538	(NA)	(NA)	-	10,195
Shorts	20,347	12,007	4,704	(NA)	(D)	(D)	3,538
Sweatpants	16,634	4,552	11,392	(NA)	(NA)	-	690
Workpants	10,237	596	9,219	(NA)	(NA)	-	422
Underwear and nightwear:							
Pajamas and nightwear	7,745	2,294	4,087	(NA)	(NA)	(D)	(D)
Robes	1,863	687	1,068	(NA)	(NA)	-	108
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	316,715	286,716	24,126	(NA)	(NA)	24	5,849
Other garments:							
Coveralls	(D)	1,619	5,632	(NA)	-	-	(D)
Jogging and warmup suits	4,389	(D)	3,526	(NA)	(NA)	-	(D)
Playsuits	369	(D)	193	(NA)	-	(D)	77
Ski apparel	(D)	-	1,928	(NA)	(NA)	-	(D)
Swimwear	403	128	158	(NA)	(NA)	-	117
Team sports uniforms	(D)	(D)	2,625	(NA)	-	-	2,040
Washable service apparel	8,123	673	5,440	(NA)	(NA)	-	2,010
Women's and girls' garments:							
Dresses	48,100	6,369	28,552	(NA)	683	1,140	11,356
Coats, jackets, and vests:							
Coats and capes	2,989	(D)	1,476	1,205	1,027	31	(D)
Down and feather filled coats, jackets, and vests	14	(D)	(D)	(NA)	-	(D)	8
Heavy nontailored coats and jackets	2,818	571	1,144	(NA)	(D)	(D)	808
Raincoats	(D)	(D)	91	(NA)	(NA)	(D)	38
Separate vests	(D)	50	259	(NA)	(D)	(D)	217
Tailored suit-type jackets	(D)	542	4,197	461	2,345	268	(D)
Tops:							
Woven blouses and shirts	57,081	20,851	26,750	(NA)	86	1,957	7,437
Knit T-shirts and tank tops made for outerwear	43,203	18,803	12,075	(NA)	(NA)	(D)	(D)
Sweatshirts	13,705	3,825	8,940	(NA)	(NA)	-	940
Other knit shirts	37,610	11,041	18,862	(NA)	(D)	(D)	6,686
Sweaters, including coat, cardigan, pullover, and vest sweaters	15,279	6,875	4,767	(NA)	405	(D)	(D)
Bottoms:							
Shorts	15,019	5,579	5,549	(NA)	(NA)	191	3,700
Skirts and divided skirts	25,970	6,254	10,665	1,387	3,468	429	5,154
Slacks, pants, and jeans, including jean-cut casual slacks	101,506	55,213	29,167	2,536	2,671	277	14,178
Sweatpants	16,469	(D)	9,756	(NA)	(NA)	-	(D)
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux	(D)	3,513	64,402	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	23,824	1,471	21,419	(NA)	(NA)	-	934
Nightgowns, pajamas, and other nightwear	25,803	3,238	20,409	(NA)	(NA)	442	1,714
Panties	205,321	147,083	54,981	(NA)	(NA)	-	3,257
Robes and dressing gowns	(D)	1,917	3,675	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	(D)	4,260	13,048	(NA)	(NA)	-	(D)
Other garments:							
Bodysuits and bodyshirts	6,121	(D)	1,680	(NA)	(NA)	(D)	2,803
Jogging and warmup suits	4,194	(D)	3,844	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	3,843	1,087	2,361	(NA)	(D)	(D)	390
Playsuits, rompers, halters, etc.	5,008	1,224	2,884	(NA)	-	(D)	(D)
Ski apparel	(D)	(D)	627	(NA)	(NA)	-	68
Suits, including pant suits	(D)	(D)	1,214	284	611	22	1,298
Swimwear	6,917	37	6,112	(NA)	(NA)	-	768
Washable service apparel	6,329	(D)	4,361	(NA)	(NA)	-	(D)
Infants' apparel	46,212	26,628	16,920	(NA)	(NA)	1,092	1,572

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabrics: 1994—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
			Total	Wool blends			
<b>SECOND QUARTER</b>							
Men's and boys' garments:							
Suits .....	2,709	128	1,326	385	822	29	404
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests .....	(D)	(D)	86	(NA)	(D)	-	39
Dress and sport coats (tailored) .....	(D)	87	2,101	700	948	134	(D)
Heavy nontailored coats and jackets .....	3,760	779	2,347	(NA)	241	(D)	(D)
Lightweight nontailored coats and jackets .....	5,530	475	4,025	(NA)	74	-	956
Overcoats and top coats .....	233	(D)	64	(NA)	84	(D)	21
Raincoats .....	(D)	(D)	264	(NA)	(NA)	(D)	67
Separate vests .....	(D)	14	95	(NA)	13	(D)	120
Work jackets .....	1,265	(D)	748	(NA)	(NA)	(D)	47
Tops:							
Woven dress and business shirts .....	(D)	9,559	7,054	(NA)	(NA)	(D)	557
Woven sport shirts .....	7,372	5,404	1,202	(NA)	(D)	-	(D)
Work shirts .....	12,306	1,740	10,120	(NA)	(NA)	-	446
Knit T-shirts and tank tops made for outerwear .....	233,996	174,859	29,864	(NA)	-	-	29,273
Sweatshirts .....	51,503	32,665	17,155	(NA)	-	-	1,683
Other knit shirts .....	30,454	16,965	11,654	(NA)	(D)	-	(D)
Sweaters .....	4,374	1,643	1,641	(NA)	203	-	887
Bottoms:							
Dress and sport trousers .....	28,744	10,907	15,720	3,322	1,174	(D)	(D)
Jeans and jean-cut casual slacks .....	84,562	73,157	1,586	(NA)	(NA)	-	9,819
Shorts .....	29,076	20,344	4,578	(NA)	(D)	(D)	4,154
Sweatpants .....	12,402	2,441	9,384	(NA)	(NA)	-	577
Workpants .....	10,941	508	9,992	(NA)	(NA)	-	441
Underwear and nightwear:							
Pajamas and nightwear .....	6,665	1,693	3,787	(NA)	(NA)	(D)	(D)
Robes .....	583	229	264	(NA)	(NA)	-	90
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts .....	299,332	267,720	24,472	(NA)	(NA)	12	7,128
Other garments:							
Coveralls, overalls, and jumpsuits .....	(D)	1,399	4,382	(NA)	-	-	(D)
Jogging and warmup suits .....	2,566	(D)	1,771	(NA)	(NA)	-	(D)
Playsuits .....	244	75	115	(NA)	-	(D)	(D)
Ski apparel .....	(D)	-	637	(NA)	(NA)	-	(D)
Swimwear .....	1,201	643	419	(NA)	(NA)	-	139
Team sports uniforms .....	(D)	(D)	2,555	(NA)	-	-	2,035
Washable service apparel .....	7,817	779	5,167	(NA)	(NA)	-	1,871
Women's and girls' garments:							
Dresses .....	50,585	6,953	30,144	(NA)	527	1,221	11,740
Coats, jackets, and vests:							
Coats and capes .....	(D)	(D)	819	629	1,175	17	(D)
Down and feather filled coats, jackets, and vests .....	12	(D)	(D)	(NA)	-	(D)	9
Heavy nontailored coats and jackets .....	2,391	467	974	(NA)	(D)	(D)	695
Raincoats .....	(D)	(D)	86	(NA)	(NA)	(D)	37
Separate vests .....	(D)	52	261	(NA)	(D)	4	204
Tailored suit-type jackets .....	(D)	515	4,831	271	795	77	(D)
Tops:							
Woven blouses and shirts .....	61,992	20,937	31,282	(NA)	63	1,656	8,054
Knit T-shirts and tank tops made for outerwear .....	52,520	22,218	13,213	(NA)	(NA)	(D)	(D)
Sweatshirts .....	13,943	2,913	9,008	(NA)	(NA)	-	2,022
Other knit blouses and shirts .....	33,711	9,661	16,311	(NA)	(D)	(D)	6,799
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	12,573	5,870	3,463	(NA)	257	23	2,960
Bottoms:							
Shorts .....	24,290	12,129	8,161	(NA)	(NA)	140	3,860
Skirts and divided skirts .....	25,319	5,973	10,507	992	2,894	419	5,526
Slacks, pants, and jeans, including jean-cut casual slacks .....	89,989	48,974	25,023	1,636	1,609	363	14,020
Sweatpants .....	12,519	3,233	7,333	(NA)	(NA)	-	1,953
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux .....	(D)	2,712	62,606	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments .....	22,566	(D)	20,337	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear .....	20,199	3,114	15,230	(NA)	(NA)	403	1,452
Panties .....	198,844	141,459	54,224	(NA)	(NA)	-	3,161
Robes and dressing gowns .....	(D)	1,415	3,584	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits .....	(D)	3,204	10,137	(NA)	(NA)	-	(D)
Other garments:							
Bodysuits and bodyshirts .....	(D)	(D)	1,491	(NA)	(NA)	(D)	2,662
Jogging and warmup suits .....	3,004	(D)	2,671	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits .....	2,323	801	1,291	(NA)	-	(D)	(D)
Playsuits, rompers, halters, etc. ....	3,853	592	2,463	(NA)	-	(D)	(D)
Ski apparel .....	(D)	(D)	220	(NA)	(NA)	-	62
Suits, including pant suits .....	(D)	(D)	1,371	265	500	70	1,345
Swimwear .....	12,249	129	11,013	(NA)	(NA)	-	1,107
Washable service apparel .....	6,537	1,059	4,480	(NA)	(NA)	-	998
Infants' apparel .....	33,312	20,712	10,236	(NA)	(NA)	1,104	1,260

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabrics: 1994—Con.

[Quantity in thousands of units]

Product description	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
			Total	Wool blends			
<b>FIRST QUARTER</b>							
Men's and boys' garments:							
Suits	2,803	136	1,425	464	796	31	415
Coats, jackets, and vests:							
Down and feather filled coats, jackets, and vests	(D)	(D)	78	(NA)	(D)	-	32
Dress and sport coats (tailored)	3,523	110	2,180	709	842	182	209
Heavy nontailored coats and jackets	3,713	593	2,486	(NA)	225	(D)	(D)
Lightweight nontailored coats and jackets	6,071	576	4,339	(NA)	(D)	-	(D)
Overcoats and top coats	185	(D)	64	(NA)	37	40	(D)
Raincoats	(D)	(D)	256	(NA)	(NA)	(D)	62
Separate vests	(D)	12	219	(NA)	16	2	(D)
Work jackets	1,259	(D)	689	(NA)	(NA)	(D)	43
Tops:							
Woven dress and business shirts	(D)	10,095	7,565	(NA)	(NA)	(D)	579
Woven sport shirts	8,096	6,274	1,079	(NA)	(D)	-	(D)
Work shirts	11,215	1,639	9,166	(NA)	(NA)	-	410
Knit T-shirts and tank tops made for outerwear	207,232	152,417	32,127	(NA)	-	-	22,688
Sweatshirts	43,081	26,623	14,922	(NA)	-	-	1,536
Other knit shirts	31,097	17,021	12,114	(NA)	(D)	(D)	1,812
Sweaters	3,894	1,433	1,239	(NA)	(D)	-	(D)
Bottoms:							
Dress and sport trousers	27,431	10,542	14,453	3,180	1,178	(D)	(D)
Jeans and jean-cut casual slacks	68,206	56,586	1,526	(NA)	(NA)	(D)	(D)
Shorts	35,967	26,114	5,217	(NA)	(D)	(D)	4,633
Sweatpants	13,048	(D)	6,207	(NA)	(NA)	-	(D)
Workpants	9,411	599	8,393	(NA)	(NA)	-	419
Underwear and nightwear:							
Pajamas and nightwear	6,494	1,592	3,809	(NA)	(NA)	(D)	(D)
Robes	(D)	222	351	(NA)	(NA)	-	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	290,682	263,712	20,550	(NA)	(NA)	-	6,420
Other garments:							
Coveralls, overalls, and jumpsuits	(D)	1,571	4,614	(NA)	-	-	(D)
Jogging and warmup suits	3,032	(D)	2,365	(NA)	(NA)	-	(D)
Playsuits	(D)	297	276	(NA)	-	(D)	100
Ski apparel	(D)	-	330	(NA)	(NA)	-	(D)
Swimwear	2,012	629	1,192	(NA)	(NA)	-	191
Team sports uniforms	(D)	(D)	3,843	(NA)	-	-	2,509
Washable service apparel	7,343	529	5,015	(NA)	(NA)	-	1,799
Women's and girls' garments:							
Dresses	54,961	9,576	30,595	(NA)	428	1,533	12,829
Coats, jackets, and vests:							
Coats and capes	(D)	(D)	633	473	754	11	(D)
Down and feather filled coats, jackets, and vests	17	(D)	(D)	(NA)	-	(D)	7
Heavy nontailored coats and jackets	2,312	416	977	(NA)	(D)	(D)	669
Raincoats	(D)	(D)	52	(NA)	(NA)	(D)	22
Separate vests	476	34	247	(NA)	-	8	187
Tailored suit-type jackets	(D)	684	6,430	454	825	308	(D)
Tops:							
Woven blouses and shirts	60,756	21,458	29,363	(NA)	71	1,840	8,024
Knit T-shirts and tank tops made for outerwear	50,455	20,419	10,823	(NA)	(NA)	(D)	(D)
Sweatshirts	11,377	(D)	5,655	(NA)	(NA)	-	(D)
Other knit blouses and shirts	25,261	9,797	8,502	(NA)	(D)	(D)	6,052
Sweaters, including coat, cardigan, pullover, and vest sweaters	10,287	4,982	2,477	(NA)	189	(D)	(D)
Bottoms:							
Shorts	29,452	16,920	7,936	(NA)	(NA)	187	4,409
Skirts and divided skirts	26,154	5,251	12,183	1,438	2,596	563	5,561
Slacks, pants, and jeans, including jean-cut casual slacks	82,368	38,870	28,003	2,579	(D)	469	(D)
Sweatpants	9,569	3,187	4,524	(NA)	(NA)	-	1,858
Underwear and nightwear:							
Brassieres, bra-lettes, and bandeaux	(D)	1,620	54,131	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	19,561	(D)	17,611	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	22,876	2,850	18,038	(NA)	(NA)	561	1,427
Panties	164,328	117,045	44,358	(NA)	(NA)	-	2,925
Robes and dressing gowns	6,164	1,401	4,471	(NA)	(NA)	-	292
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	(D)	3,384	9,503	(NA)	(NA)	-	(D)
Other garments:							
Bodysuits and bodyshirts	(D)	(D)	1,726	(NA)	(NA)	-	2,687
Jogging and warmup suits	3,688	(D)	3,283	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	2,722	862	1,600	(NA)	-	(D)	(D)
Playsuits, rompers, halters, etc.	4,302	601	2,801	(NA)	-	(D)	(D)
Ski apparel	(D)	(D)	130	(NA)	(NA)	-	33
Suits, including pant suits	(D)	(D)	1,339	335	868	58	1,480
Swimwear	17,430	447	15,513	(NA)	(NA)	(D)	(D)
Washable service apparel	5,800	(D)	4,257	(NA)	(NA)	-	(D)
Infants' apparel	35,736	21,204	11,412	(NA)	(NA)	1,740	1,380

- Represents zero.

D Withheld to avoid disclosing data for individual companies.

NA Not available.

Table 50. Percent of Value of Shipments From New Establishments: 1995 and 1994

[Value in millions of dollars]

Product description	1995		1994	
	Total value of shipments	Percent from added establishments	Total value of shipments	Percent from added establishments
<b>MEN'S AND JUNIOR BOYS'</b>				
Suits.....	930.0	-	1,075.9	-
Coats, jackets, and vests:				
Down and feather filled coats, jackets, and vests.....	15.1	-	25.6	-
Dress and sport coats (tailored).....	736.6	-	829.0	-
Heavy nontailored coats and jackets.....	535.6	0.4	497.2	-
Lightweight nontailored coats and jackets.....	424.2	0.1	415.9	2.4
Overcoats and top coats.....	77.5	-	75.1	-
Raincoats.....	67.3	-	58.8	0.1
Separate vests.....	19.5	1.0	14.4	-
Work jackets.....	132.7	0.6	132.4	0.1
Tops:				
Woven dress and business shirts.....	758.5	-	736.5	-
Woven sport shirts.....	229.8	0.2	278.0	0.2
Work shirts.....	515.7	-	479.8	0.2
Knit T-shirts and tank tops made for outerwear.....	3,993.0	0.3	3,377.9	0.5
Sweatshirts.....	1,122.4	1.2	1,137.3	0.2
Other knit shirts.....	732.8	0.5	739.3	-
Sweaters.....	195.7	0.2	234.7	15.3
Bottoms:				
Dress and sport trousers.....	1,543.2	0.2	1,600.8	-
Jean.....	3,634.9	0.1	(NA)	(NA)
Jean-cut casual slacks.....	853.4	-	4,266.4	0.5
Shorts.....	713.2	1.4	664.8	-
Sweatpants.....	293.0	1.3	333.7	0.1
Workpants.....	613.4	0.6	401.5	-
Underwear and nightwear:				
Pajamas and nightwear.....	118.6	-	150.6	-
Robes.....	65.7	-	72.4	-
Underwear.....	1,448.3	-	1,433.6	-
Thermal underwear.....	171.6	-	199.6	-
Undershirts (1/4 sleeves and athletic types).....	510.0	-	503.4	-
Knit undershorts and briefs.....	561.9	-	503.5	-
Woven boxer shorts.....	204.8	0.2	227.1	-
Other garments:				
Coveralls, overalls, jumpsuits.....	355.0	-	373.4	0.7
Jogging and warmup suits.....	34.6	-	48.7	1.0
Playsuits.....	(D)	(D)	(D)	(D)
Ski apparel.....	(D)	(D)	(D)	(D)
Swimwear.....	21.9	4.6	28.4	0.2
Team sports uniforms.....	179.0	0.5	233.4	2.2
Washable service apparel.....	235.6	0.7	271.0	-
<b>LITTLE BOYS'</b>				
Suits.....	(D)	(D)	19.8	-
Coats, jackets, and vests:				
Down and feather filled coats, jackets, and vests.....	(D)	(D)	(D)	(D)
Dress and sport coats (tailored).....	(D)	(D)	9.8	-
Heavy nontailored coats and jackets.....	18.2	-	18.4	-
Lightweight nontailored coats and jackets.....	18.5	-	13.0	-
Overcoats and top coats.....	-	-	-	-
Raincoats.....	(D)	(D)	(D)	(D)
Separate vests.....	2.4	-	(D)	(D)
Work jackets.....	-	-	-	-
Tops:				
Woven dress and business shirts.....	(D)	(D)	(D)	(D)
Woven sport shirts.....	22.3	0.2	25.8	1.9
Work shirts.....	-	-	-	-
Knit T-shirts and tank tops made for outerwear.....	87.3	1.4	88.7	0.2
Sweatshirts.....	33.0	4.2	19.8	-
Other knit shirts.....	119.2	0.8	108.8	0.5
Sweaters.....	15.1	-	18.2	-

See footnotes at end of table.

Table 50. Percent of Value of Shipments From New Establishments: 1995 and 1994—Con.

[Value in millions of dollars]

Product description	1995		1994	
	Total value of shipments	Percent from added establishments	Total value of shipments	Percent from added establishments
<b>LITTLE BOYS'—Con.</b>				
Bottoms:				
Dress and sport trousers .....	97.1	-	99.3	-
Jean .....	188.7	0.3	(NA)	(NA)
Jean-cut casual slacks .....	21.7	-	235.2	0.1
Shorts .....	104.5	0.1	112.0	0.3
Sweatpants .....	21.3	-	21.8	0.9
Workpants .....	-	-	-	-
Underwear and nightwear:				
Pajamas and nightwear .....	23.4	-	41.1	2.4
Robes .....	0.9	-	1.0	-
Underwear total .....	150.8	-	124.4	0.8
Thermal underwear .....	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeves and athletic types) .....	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	(D)	(D)	(D)	(D)
Woven boxer shorts .....	(D)	(D)	(D)	(D)
Other garments:				
Coveralls, overalls, jumpsuits .....	47.0	-	(D)	(D)
Jogging and warmup suits .....	42.4	-	66.1	-
Playsuits .....	17.4	-	12.1	-
Ski apparel .....	(D)	(D)	(D)	(D)
Swimwear .....	5.1	-	5.9	-
Team sports uniforms .....	11.6	-	(D)	(D)
Washable service apparel .....	-	-	-	-
<b>WOMEN'S, MISSES', AND JUNIORS'</b>				
Dresses .....	4,185.6	0.4	4,300.8	2.2
Coats, jackets, and vests:				
Coats and capes .....	520.8	-	670.5	1.6
Down and feather filled coats, jackets, and vests .....	3.7	-	7.3	-
Nontailored jackets .....	223.3	0.3	250.8	0.3
Raincoats .....	37.7	0.1	(D)	(D)
Separate vests .....	58.6	0.7	45.0	0.2
Tailored suit-type jackets .....	970.9	0.1	958.0	1.1
Tops:				
Woven blouses and shirts .....	1,813.7	1.1	2,131.5	0.7
Knit T-shirts and tank tops made for outerwear .....	914.8	2.8	806.9	1.6
Sweatshirts .....	229.6	0.3	242.4	0.1
Other knit blouses and shirts .....	580.8	1.3	729.6	1.1
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	535.2	0.4	606.2	4.2
Bottoms:				
Shorts .....	696.7	1.0	589.4	0.1
Skirts and divided skirts .....	1,190.6	0.7	1,282.3	0.5
Jeans .....	1,954.6	0.7	(NA)	(NA)
Slacks (except jeans) .....	1,849.4	1.4	3,948.0	0.5
Sweatpants .....	135.4	-	183.1	0.3
Underwear and nightwear:				
Brassieres, bra-lettes, and bandeaux .....	1,646.9	-	1,404.5	-
Girdles, corsets, and other foundation garments .....	405.3	-	391.3	-
Nightgowns, pajamas, and other nightwear .....	558.9	0.4	584.6	0.1
Other underwear, including camisoles, teddies, undershirts, and union suits .....	256.2	-	241.6	3.5
Panties .....	883.4	-	749.2	-
Robes and dressing gowns .....	219.9	0.1	235.7	-
Slips .....	52.5	-	51.4	-
Other garments:				
Bodysuits and bodyshirts .....	137.1	-	158.3	0.8
Jogging and warmup suits .....	27.6	-	32.7	-
Overalls, coveralls, and jumpsuits .....	39.9	0.7	36.9	0.4
Playsuits, rompers, halters, etc. ....	43.4	4.4	39.8	0.3
Ski apparel .....	79.4	-	75.7	-
Suits, including pant suits .....	286.1	2.5	376.7	0.2
Swimwear .....	577.9	-	544.9	0.9
Washable service apparel .....	251.8	0.4	251.6	-

See footnotes at end of table.

Table 50. Percent of Value of Shipments From New Establishments: 1995 and 1994—Con.

[Value in millions of dollars]

Product description	1995		1994	
	Total value of shipments	Percent from added establishments	Total value of shipments	Percent from added establishments
<b>GIRLS'</b>				
Dresses.....	488.5	0.1	502.7	1.2
Coats, jackets, and vests:				
Coats and capes.....	5.0	-	17.4	2.3
Down and feather filled coats, jackets, and vests.....	(D)	(D)	-	-
Nontailored jackets.....	9.6	1.0	7.5	1.3
Raincoats.....	(D)	(D)	(D)	(D)
Separate vests.....	2.4	-	3.3	-
Tailored suit-type jackets.....	(D)	(D)	(D)	(D)
Tops:				
Woven blouses and shirts.....	215.0	-	228.0	1.3
Knit T-shirts and tank tops made for outerwear.....	166.7	0.1	180.9	0.1
Sweatshirts.....	34.8	-	35.3	-
Other knit blouses and shirts.....	158.8	-	164.7	-
Sweaters, including coat, cardigan, pullover, and vest sweaters.....	45.6	-	38.3	-
Bottoms:				
Shorts.....	151.4	-	144.1	-
Skirts and divided skirts.....	58.6	-	62.1	1.6
Jeans.....	170.0	-	(NA)	(NA)
Slacks (except jeans).....	144.1	-	278.5	0.4
Sweatpants.....	29.0	-	30.8	-
Underwear and nightwear:				
Brassieres, bra-lettes, and bandeaux.....	(D)	(D)	(D)	(D)
Girdles, corsets, and other foundation garments.....	-	-	-	-
Nightgowns, pajamas, and other nightwear.....	135.1	-	115.4	-
Other underwear, including camisoles, teddies, undershirts, and union suits.....	10.0	-	11.9	-
Panties.....	92.6	-	110.5	-
Robes and dressing gowns.....	2.4	-	2.2	-
Slips.....	(D)	(D)	(D)	(D)
Other garments:				
Bodysuits and bodyshirts.....	18.7	-	23.8	-
Jogging and warmup suits.....	68.2	-	81.6	-
Overalls, coveralls, and jumpsuits.....	42.9	-	55.8	-
Playsuits, rompers, halters, etc.....	62.7	-	50.6	-
Ski apparel.....	(D)	(D)	(D)	(D)
Suits, including pant suits.....	(D)	(D)	(D)	(D)
Swimwear.....	78.1	-	94.5	-
Washable service apparel.....	-	-	-	-
<b>INFANTS'</b>				
Coats and jackets.....	8.1	-	9.2	-
Dresses.....	66.3	-	64.5	-
Knit shirts.....	64.5	0.1	71.4	-
Woven shirts.....	(D)	(D)	(D)	(D)
Sweaters.....	(D)	(D)	(D)	(D)
Sets.....	79.3	-	83.1	-
Pants and shorts.....	72.4	-	45.3	-
Play clothing.....	203.2	-	166.0	-
Underwear.....	56.2	-	54.4	-
Nightwear.....	223.0	-	199.3	-

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available.

Note: Based on 1995 value of shipments, percentage represents value attributed to added establishments from the 1994 Annual Survey of Manufactures. Based on 1994 value of shipments, percentage represents value attributed to added establishments from the 1993 Annual Survey of Manufactures.

Table 51. Shipments, Exports, Imports, and Apparent Consumption of Selected Apparel Items: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		"9802" imports <sup>2</sup>			Imports for consumption <sup>5</sup>		Apparent consumption <sup>7</sup>		Percent imports to apparent consumption	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value U.S. content <sup>3</sup>	Total value <sup>4</sup>	Quantity	Value <sup>6</sup>	Quantity	Value	Quantity	Value
<b>1995</b>													
Men's and boys' apparel:													
Sweaters .....	17,831	210.8	54,048	121.4	240	0.6	2.0	40,668	457.5	4,451	546.9	913.7	83.7
Tops (except sweaters) .....	(D)	(D)	346,968	941.7	306,210	680.3	1,030.8	1,212,228	6,389.3	(D)	(D)	(D)	(D)
Bottoms .....	661,491	8,084.4	233,628	882.2	269,875	1,016.7	1,703.6	580,548	3,762.8	1,008,411	10,965.0	57.6	34.3
Coats:													
Suit type, dress and sport .....	(D)	(D)	7,932	66.1	5,332	71.7	130.5	12,216	416.1	(D)	(D)	(D)	(D)
Other coats .....	51,805	1,311.5	25,776	105.0	5,424	44.3	76.3	130,128	2,141.0	156,157	3,347.5	83.3	64.0
Suits .....	(D)	(D)	5,508	63.5	771	9.0	31.6	87,228	430.5	(D)	(D)	(D)	(D)
Swimwear .....	2,362	27.0	1,200	4.8	968	2.2	3.7	50,388	213.6	51,550	235.8	97.7	90.6
Women's and girls' apparel:													
Sweaters .....	50,133	580.8	1,344	21.9	1,524	1.6	26.0	136,032	1,401.8	184,821	1,960.7	73.6	71.5
Dresses .....	206,814	4,674.1	20,712	112.5	23,628	81.2	198.7	168,168	1,872.4	354,270	6,434.0	47.5	29.1
Tops (except sweaters) .....	577,044	4,114.2	141,312	386.7	125,208	245.9	461.2	1,011,144	5,663.2	1,446,876	9,390.7	69.9	60.3
Skirts .....	87,145	1,249.2	10,020	45.2	19,968	57.2	144.1	127,284	1,032.9	204,409	2,236.9	62.3	46.2
Coats and jackets .....	50,993	1,833.5	16,080	121.5	21,036	189.8	405.6	119,172	2,099.7	154,085	3,811.7	77.3	55.1
Bottoms (except skirts) ..	504,244	5,130.6	117,348	418.1	189,708	539.6	1,009.9	582,576	3,692.5	969,472	8,405.0	60.1	43.9
Suits .....	(D)	(D)	6,480	55.2	1,374	25.8	49.1	100,776	371.9	(D)	(D)	(D)	(D)
Swimwear .....	49,261	656.0	6,324	32.1	9,864	31.9	45.8	27,468	191.3	70,405	815.2	39.0	23.5
Other apparel (men's/women's):													
Playsuits .....	(D)	(D)	-	-	5,148	7.8	13.8	50,712	298.2	(D)	(D)	(D)	(D)
Coveralls, etc. ....	30,599	484.8	7,356	35.3	7,308	40.8	64.4	50,772	409.8	74,015	859.3	68.6	47.7
Robes and dressing gowns .....	28,910	288.9	13,620	34.4	10,956	32.2	59.3	37,128	335.4	52,418	589.9	70.8	56.9
Pajamas and other nightwear .....	110,423	836.0	24,684	60.2	45,204	85.7	174.9	146,388	848.8	232,127	1,624.6	63.1	52.2
Underwear (except foundation garments) ..	1,860,770	2,897.9	624,492	617.7	994,248	609.9	872.9	1,556,316	1,541.4	2,792,594	3,821.6	55.7	40.3
Foundation garments ...	(D)	(D)	336,456	387.5	296,500	455.2	674.2	399,648	901.8	(D)	(D)	(D)	(D)
Infants' apparel .....	158,306	777.4	88,236	121.5	72,240	93.4	143.3	413,736	1,001.6	483,806	1,657.5	85.5	60.4
<b>1994<sup>8</sup></b>													
Men's and boys' apparel:													
Sweaters .....	20,782	252.9	43,116	84.8	24	-	1.1	44,472	564.6	22,138	732.7	200.9	77.1
Tops (except sweaters) .....	(D)	(D)	306,096	786.7	117,276	243.8	406.8	974,844	5,891.4	(D)	(D)	(D)	(D)
Bottoms .....	645,940	7,735.5	233,724	893.8	153,732	560.9	907.5	425,088	3,246.1	837,303	10,087.8	50.8	32.2
Coats:													
Suit type, dress and sport .....	13,846	838.8	9,036	71.9	5,028	66.6	111.9	11,424	379.4	16,234	1,146.3	70.4	33.1
Other coats .....	50,302	1,253.0	17,316	107.8	3,288	21.8	45.4	116,532	1,884.2	149,518	3,029.4	77.9	62.2
Suits .....	11,865	1,095.7	4,548	54.1	610	7.4	19.6	5,952	422.3	13,269	1,463.9	44.9	28.8
Swimwear .....	4,186	34.3	1,332	5.2	1,236	2.5	4.6	44,940	161.0	47,794	190.1	94.0	84.7
Women's and girls' apparel:													
Sweaters .....	50,955	644.5	2,040	12.2	396	0.4	9.4	144,372	1,657.2	193,287	2,289.5	74.7	72.4
Dresses .....	198,503	4,803.5	18,288	103.4	12,408	42.0	102.8	120,720	1,494.7	300,935	6,194.8	40.1	24.1
Tops (except sweaters) .....	613,941	4,519.3	106,236	281.1	80,232	158.2	284.6	1,022,148	6,002.0	1,529,853	10,240.2	66.8	58.6
Skirts .....	96,427	1,344.4	10,464	47.0	12,804	43.3	93.2	113,820	948.9	199,783	2,246.3	57.0	42.2
Coats and jackets .....	53,045	2,005.5	14,220	113.5	16,464	146.8	310.8	127,944	2,283.2	166,769	4,175.2	76.7	54.7
Bottoms (except skirts) ..	503,549	5,173.9	97,464	346.5	94,464	254.2	490.1	584,760	3,775.9	990,845	8,603.3	59.0	43.9
Suits .....	(D)	(D)	5,580	60.0	1,228	28.8	51.8	59,568	318.8	(D)	(D)	(D)	(D)
Swimwear .....	49,108	639.4	4,704	24.4	7,332	21.5	31.0	23,232	143.5	67,636	758.5	34.3	18.9

See footnotes at end of table.

Table 51. Shipments, Exports, Imports, and Apparent Consumption of Selected Apparel Items: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		"9802" imports <sup>2</sup>			Imports for consumption <sup>5</sup>		Apparent consumption <sup>7</sup>		Percent imports to apparent consumption	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value U.S. content <sup>3</sup>	Total value <sup>4</sup>	Quantity	Value <sup>6</sup>	Quantity	Value	Quantity	Value
<b>1994<sup>8</sup>—Con.</b>													
Other apparel (men's/women's):													
Playsuits .....	(D)	(D)	-	-	3,948	5.0	9.3	46,200	217.4	(D)	(D)	(D)	(D)
Coveralls, etc.....	(D)	(D)	7,740	39.6	2,808	11.9	20.5	37,380	296.1	(D)	(D)	(D)	(D)
Robes and dressing gowns.....	(D)	(D)	24,396	36.0	7,980	21.9	41.5	34,368	325.4	(D)	(D)	(D)	(D)
Pajamas and other nightwear.....	122,574	891.7	28,116	67.9	30,324	55.4	115.7	140,160	827.0	234,618	1,650.8	59.7	50.1
Underwear (except foundation garments) ..	2,023,698	2,728.3	466,488	464.9	584,736	348.4	488.3	1,194,720	1,217.8	2,084,384	3,481.2	57.3	35.0
Foundation garments ...	(D)	(D)	271,704	298.5	206,100	296.6	446.4	333,408	771.7	(D)	(D)	(D)	(D)
Infants' apparel.....	155,424	700.1	73,452	93.7	46,636	57.8	93.3	352,500	877.6	434,472	1,484.0	81.1	59.1

- Represents zero. D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Represents apparel that is cut in the United States, sent outside the country to be sewn, and then returned to the United States under 9802 (formerly 807) of Chapter 98, Special Classification Provisions of the Harmonized Tariff Schedules of the United States, and is included in domestic output, imports, and exports. Because 9802 garments are exported in pieces, the export quantity data may be overstated since some data may be reported in pieces rather than in completed garments.<sup>3</sup>Represents the value of the U.S. fabricated components.<sup>4</sup>Represents the total c.i.f. (cost, insurance, and freight) value of the article, which includes the value of the U.S. fabricated components and foreign processing.<sup>5</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>6</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.<sup>7</sup>Apparent consumption represents new domestic supply and is derived by subtracting exports from sum of manufacturers' shipments plus imports.<sup>8</sup>Data for 1994 "9802" Imports are incomplete. Codes included for 1994 from the Harmonized Tariff Schedule of the United States are 9802.00.8015 and 9802.00.8065.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of subsection MA23D, Gloves and Mittens, page 2-81.



## GLOVES AND MITTENS (MA23D)

Table 52. Quantity and Value of Shipments of Gloves and Mittens: 1995 and 1994

[Quantity in thousand dozen pairs. Value in millions of dollars]

Product description	1995		1994	
	Quantity	Value	Quantity	Value
Gloves and mittens.....	344,132	984.1	<sup>1</sup> 304,641	897.2
All fabrics gloves and mittens.....	32,152	353.4	36,535	363.3
All leather and leather and fabrics combination gloves and mittens.....	1,645	131.0	1,821	140.4
All plastics gloves.....	31,054	36.7	31,831	35.9
All rubber gloves.....	279,281	463.0	<sup>1</sup> 234,454	357.6
Of total:				
Dress/casual gloves and mittens.....	375	28.9	<sup>1</sup> 421	31.2
Work/chore gloves and mittens.....	343,757	955.2	<sup>1</sup> 304,220	866.0

<sup>1</sup>Revised by 5 percent or more from previously published data.

Table 53. Quantity and Value of Shipments of Gloves and Mittens: 1995 and 1994

[Quantity in thousand dozen pairs. Value in millions of dollars]

Product description	1995		1994	
	Quantity	Value	Quantity	Value
<b>All fabrics gloves and mittens.....</b>	<b>32,152</b>	<b>353.4</b>	<b>36,535</b>	<b>363.3</b>
Woven fabrics gloves and mittens.....	3,774	56.4	4,272	60.1
Impregnated with rubber or plastics.....	523	7.8	642	<sup>1</sup> 9.5
Greater than 50 percent plastics or rubber.....	(D)	(D)	(D)	(D)
Cotton.....	229	3.0	367	4.8
Manmade.....	(D)	(D)	(D)	(D)
Other.....	-	-	-	-
Nonimpregnated.....	3,251	48.6	3,630	50.6
Cotton.....	3,227	47.0	3,604	48.7
Manmade.....	<sup>a</sup> 11	<sup>b</sup> 1.3	12	1.6
Wool.....	(D)	(D)	(D)	(D)
Other.....	(D)	(D)	(D)	(D)
Knit fabrics gloves and mittens.....	28,378	297.0	32,263	303.2
Impregnated with rubber or plastics.....	6,365	115.2	<sup>1</sup> 7,366	121.2
Greater than 50 percent plastics or rubber.....	3,341	71.0	4,321	75.9
Cotton.....	2,048	24.8	<sup>2</sup> 2,075	<sup>a</sup> <sup>1</sup> 26.4
Manmade.....	(D)	(D)	(D)	(D)
Other.....	(D)	(D)	(D)	(D)
Nonimpregnated.....	22,013	181.8	<sup>1</sup> 24,897	182.0
Cotton.....	20,852	164.0	<sup>1</sup> 23,377	163.7
Terry/looped pile.....	736	9.2	801	8.9
Jersey, brushed, napped.....	4,723	79.3	4,903	77.9
Lisle (no nap or brush).....	1,632	6.0	1,832	6.4
Other.....	13,761	69.5	15,841	70.5
Manmade.....	886	9.7	1,224	10.4
Wool.....	(D)	(D)	(D)	(D)
Other.....	(D)	(D)	(D)	(D)
Leather and fabrics combination gloves.....	<sup>b</sup> 357	<sup>b</sup> 22.3	<sup>b</sup> 430	<sup>b</sup> <sup>1</sup> 26.4
All leather gloves and mittens.....	1,288	108.7	1,391	114.0
All grain leather.....	<sup>a</sup> 956	<sup>a</sup> 89.2	<sup>1</sup> 1,018	<sup>1</sup> 92.8
All split leather.....	<sup>b</sup> 281	<sup>b</sup> 15.4	<sup>b</sup> 295	<sup>a</sup> 16.2
All other leather gloves.....	<sup>a</sup> 51	<sup>a</sup> 4.1	<sup>a</sup> <sup>1</sup> 78	<sup>1</sup> 5.0
All plastics gloves.....	31,054	36.7	31,831	35.9
Medical and surgical.....	(D)	(D)	(D)	(D)
All other.....	(D)	(D)	(D)	(D)
All rubber gloves.....	279,281	463.0	<sup>1</sup> 234,454	357.6
Medical and surgical.....	262,146	<sup>a</sup> 361.1	<sup>1</sup> 219,857	<sup>1</sup> 260.3
All other.....	<sup>a</sup> 17,135	101.9	14,597	97.3

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 19 percent of this item is estimated. <sup>b</sup>20 to 49 percent of this item is estimated.

Table 54. Shipments, Exports, Imports, and Apparent Consumption of Gloves and Mittens: 1995 and 1994

[Quantity in thousand dozen pairs. Value and calculated import duty in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Percent exports to manufacturers' shipments		Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup>		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value <sup>3</sup>	Quantity	Value	Quantity	Value
<b>1995</b>													
23813	Knitted, not coated or impregnated gloves and mittens . . . . .	22,013	181.8	1,066	15.0	4.8	8.3	33,110	208.4	54,057	375.2	61.3	55.5
3069D	Knitted, plastics or rubber, coated or impregnated gloves and mittens . . . . .	6,365	115.2	2,326	27.9	36.5	24.2	6,241	66.0	10,280	153.3	60.7	43.1
23813	Woven, nonimpregnated gloves and mittens . . . . .	3,251	48.6	1,291	11.4	39.7	23.5	11,333	74.5	13,293	111.7	85.3	66.7
3069D	Woven impregnated gloves and mittens . . . . .	523	7.8	59	1.0	11.3	12.8	1,207	9.6	1,671	16.4	72.2	58.5
23814, 31510	All leather and leather and fabrics combination gloves and mittens . . . . .	1,645	131.0	349	13.4	21.2	10.2	14,102	338.9	15,398	456.5	91.6	74.2
30698	Rubber, surgical and medical gloves . . . . .	262,146	361.1	19,039	36.4	7.3	10.1	724,743	648.4	967,850	973.1	74.9	66.6
3069D	Rubber, other gloves . . . . .	17,135	101.9	2,216	20.5	12.9	20.1	82,737	127.1	97,656	208.5	84.7	61.0
30896	Plastics, surgical and medical gloves . . . . .	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
30896	Plastics, other gloves . . . . .	<sup>5</sup> 31,054	<sup>5</sup> 36.7	<sup>5</sup> 8,247	<sup>5</sup> 39.6	<sup>5</sup> 26.6	<sup>5</sup> 107.9	<sup>5</sup> 216,864	<sup>5</sup> 91.4	<sup>5</sup> 239,671	<sup>5</sup> 88.5	<sup>5</sup> 90.5	<sup>5</sup> 103.3
<b>1994</b>													
23813	Knitted, not coated or impregnated gloves and mittens . . . . .	<sup>1</sup> 24,897	182.0	1,052	12.2	4.2	6.7	31,014	181.6	54,859	351.4	56.5	51.7
3069D	Knitted, plastics or rubber, coated or impregnated gloves and mittens . . . . .	<sup>1</sup> 7,366	121.2	2,285	24.4	31.0	20.1	5,728	56.3	10,809	153.1	53.0	36.8
23813	Woven, nonimpregnated gloves and mittens . . . . .	3,630	50.6	1,040	8.4	28.7	16.6	9,068	59.0	11,658	101.2	77.8	58.3
3069D	Woven impregnated gloves and mittens . . . . .	642	<sup>1</sup> 9.5	137	1.7	21.3	17.9	1,202	10.3	1,707	18.1	70.4	56.9
23814, 31510	All leather and leather and fabrics combination gloves and mittens . . . . .	1,821	140.4	381	13.8	20.9	9.8	15,006	305.8	16,446	432.4	91.2	70.7
30698	Rubber, surgical and medical gloves . . . . .	<sup>1</sup> 219,857	<sup>1</sup> 260.3	25,467	45.6	11.6	17.5	620,380	515.7	814,770	730.4	76.1	70.6
3069D	Rubber, other gloves . . . . .	14,597	97.3	1,793	16.2	12.3	16.6	84,830	112.0	97,634	193.1	86.9	58.0
30896	Plastics, surgical and medical gloves . . . . .	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
30896	Plastics, other gloves . . . . .	<sup>5</sup> 31,831	<sup>5</sup> 35.9	<sup>5</sup> 9,848	<sup>5</sup> 37.7	<sup>5</sup> 30.9	<sup>5</sup> 105.0	<sup>5</sup> 196,194	<sup>5</sup> 82.7	<sup>5</sup> 218,177	<sup>5</sup> 80.9	<sup>5</sup> 89.9	<sup>5</sup> 102.2

<sup>1</sup>Revised by 5 percent or more from previously published data.<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.<sup>5</sup>Apparent consumption represents new domestic supply and is derived by subtracting exports from total of manufacturers' shipments plus imports.<sup>6</sup>"Plastics, surgical and medical gloves" and "Plastics, other gloves" are combined to avoid disclosing data for individual companies.

Note: Export and import data include glove linings that are not available by separate classification; however, this item is not included in manufacturers' shipments. For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at the end of this subsection.

## HISTORICAL NOTE

Data on apparel have been collected by the Bureau of the Census since 1923. In 1955, the MA23A apparel series consolidated, on an annual basis, five separate series that were formerly conducted independently (between 1923 and 1954). The 1968 apparel report was the first in this series to show quantity and value for each major product description. Previously, only product code values and/or production data were published.

For the years 1980 through 1985, similar data were published separately as MA23E, Men's and Boys' Outerwear, MA23F, Women's and Children's Outerwear, and MA23G, Underwear and Nightwear. Prior to 1984, data on foundation garments were published separately as MA23J, Foundation Garments.

The data were again published on an annual basis from 1986 through 1989 as the MA23A. Since 1990, the data have been published quarterly as the MQ23A. The annual summary shows any revisions to the quarterly data.

Data on gloves and mittens have also been collected since 1923. They are collected on MA23D, Gloves and Mittens.

Additional information for the apparel industry (employment, payroll, cost of materials, capital expenditures, inventories, etc.) is also collected by the Bureau of the Census and is shown in the census of manufactures and the annual survey of manufactures series.

## CONTACT FOR DATA USERS

For additional information on these data, contact Kristin Williams, 301-452-4698.

## BED AND BATH FURNISHINGS (MQ23X) (Formerly Sheets, Pillowcases, and Towels)

### INTRODUCTION

The data shown for sheets, pillowcases, and towels are for finished products. They do not include sheeting fabrics that may be used later in items such as comforter sets. However, included is a category for terry towel blanks, which are generally sold for further embellishment.

### EXPLANATION OF TERMS

#### Distribution Channels

**Branded retail.** Sales of company brands, including premium goods, drops (closeouts), and seconds sold to domestic consumers through all types of retailers.

**Private ticket retail.** Sales with retail identification, with or without a manufacturer's corporate identification, but not with a manufacturer's brand name.

**Other (institutional).** Includes domestic distribution only and includes all Federal and State contract business, commercial accounts (e.g., hotels) that are sold on a contract basis, and shipments to dealers who are involved in resale to the institutional trade.

**Exports.** Includes only direct company shipments for export, usually through a domestic international sales corporation, regardless of put-up or packaging. Export shipments through jobbers or distributors are included in the other categories (e.g., branded or private ticket).

**Inventories.** Represents the quantity of finished goods on hand, plus those held at private or public warehouses by the manufacturers who own the goods.

#### Products

**Sheets.** Excludes bedsheeting fabrics used for bedspreads, shower curtains, tablecloths, piece goods, etc.

**Sheet sets.** Packages of at least two sheets and one pillowcase that may contain additional sheets, pillowcases, or other items.

**Kitchen accessories.** Includes items such as terry cloth aprons, pot holders, dish cloths, and toaster covers.

**Towel blanks.** Includes towels sold for further processing elsewhere. The figure reported for finished terry woven towels includes towel blanks; thus, both sets of data are not additive.

#### Types of Finish

**Solids (sheets).** Includes solid color sheets with attached hems or piping.

**Fancies.** Towels include jacquards, mixed color or pattern weaves, prints, embroidered, and attached or embellished hems. Excludes solid color, white dobby, and white cam. Sheets include prints and solids with embroidery, lace, or other embellishments, except attached hems or piping.

Table 55. Summary of Production of Sheets, Pillowcases, and Terry Towels: 1985 to 1995

[Thousands of dozens]

Year	Sheets			Pillowcases	Terry towels
	Crib	Flat	Fitted		
1995 .....	862	9,703	7,720	13,855	49,313
1994 .....	812	9,669	7,432	13,701	48,974
1993 .....	1,056	9,117	6,952	12,304	48,529
1992 .....	675	8,303	6,220	12,523	48,789
1991 .....	624	7,548	5,829	11,301	43,158
1990 .....	618	8,476	6,314	12,665	42,376
1989 .....	608	8,571	6,484	13,089	62,741
1988 .....	539	8,773	6,193	12,564	47,179
1987 .....	494	8,698	6,169	12,627	52,425
1986 .....	520	8,610	5,923	12,372	50,182
1985 .....	543	8,925	6,023	13,174	44,974

Note: For 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were received from these companies for 1993; therefore, information shown for years prior to 1993 may not be directly comparable. These changes represent approximately 2.0 percent of total value of shipments for sheets, pillowcases, and towels.

Table 56. Inventories and Unfilled Orders of Sheets, Pillowcases, and Terry Towels: 1995 and 1994

[Thousands of dozens]

Year and quarter	Inventories			Unfilled orders		
	Sheets, flat and fitted <sup>1</sup>	Pillowcases	Terry towels	Sheets, flat and fitted <sup>1</sup>	Pillowcases	Terry towels
<b>1995</b>						
Fourth quarter .....	2,673	2,139	10,532	101,550	31,346	(D)
Third quarter .....	2,770	2,295	11,057	122,145	39,588	(D)
Second quarter .....	2,943	2,390	11,053	131,986	43,543	(D)
First quarter .....	2,788	2,308	12,145	138,998	44,580	(D)
<b>1994</b>						
Fourth quarter .....	2,752	2,291	11,212	114,203	37,249	(D)
Third quarter .....	2,818	2,176	11,715	131,658	42,591	(D)
Second quarter .....	3,196	2,484	11,827	120,780	42,121	(D)
First quarter .....	3,140	2,534	11,741	127,522	42,522	(D)

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Excludes crib sheets.

Table 57. Summary of Quantity and Value of Shipments of Sheets, Pillowcases, and Terry Towels: 1995 and 1994

[Quantity in thousands of dozens. Value in thousands of dollars]

Year and quarter	Sheets, flat and fitted <sup>1</sup>		Pillowcases		Terry towels	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>						
Fourth quarter .....	3,702	313,905	3,455	93,442	11,931	289,490
Third quarter .....	3,961	346,316	3,846	106,250	12,057	291,848
Second quarter .....	3,990	298,425	3,682	92,109	12,527	291,021
First quarter .....	3,573	275,565	3,203	92,965	11,424	275,151
<b>1994</b>						
Fourth quarter .....	3,999	308,880	3,606	92,410	12,457	302,345
Third quarter .....	4,397	344,047	4,027	105,011	12,190	284,011
Second quarter .....	4,055	301,144	3,719	91,126	12,527	285,346
First quarter .....	3,739	276,792	3,270	83,680	11,174	258,380

<sup>1</sup>Excludes crib sheets.

Table 58. Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1995

[Production and shipments in thousands of dozens. Value in thousands of dollars]

Product description	Total			Fourth quarter			Third quarter			Second quarter			First quarter		
	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments
Sheets and pillowcases .....	32,969	30,269	1,653,721	8,566	7,362	415,484	7,989	8,030	461,634	8,690	7,875	398,740	7,724	7,002	377,863
Crib size sheets and pillowcases .....	862	857	34,744	188	205	8,137	210	223	9,068	229	203	8,206	235	226	9,333
Sheets, excluding crib .....	18,252	15,226	1,234,211	4,700	3,702	313,905	4,428	3,961	346,316	4,817	3,990	298,425	4,307	3,573	275,565
By type:															
Flat sheets .....	9,703	7,942	654,280	2,461	1,905	164,977	2,326	2,017	181,997	2,583	2,116	159,130	2,333	1,904	148,176
Fitted sheets .....	7,720	6,313	520,533	2,009	1,539	133,397	1,899	1,700	148,459	2,026	1,625	122,899	1,786	1,449	115,778
Not specified by kind (n.s.k.) .....	829	971	59,398	230	258	15,531	203	244	15,860	208	249	16,396	188	220	11,611
By thread count:															
195 and over .....	2,513	2,335	302,259	719	589	77,582	620	621	89,029	551	515	63,468	623	610	72,180
180 to 194 .....	9,553	7,364	572,456	2,519	1,792	140,311	2,353	1,907	153,826	2,461	1,963	148,320	2,220	1,702	129,999
135 to 179 .....	727	618	48,145	162	107	11,940	121	132	12,718	246	231	13,109	198	148	10,378
125 to 134 .....	1,634	1,646	106,465	282	283	23,103	248	309	24,684	567	601	32,348	537	453	26,330
Under 125 .....	2,996	2,292	145,488	788	673	45,438	883	748	50,199	784	431	24,784	541	440	25,067
Not specified by kind (n.s.k.) .....	829	971	59,398	230	258	15,531	203	244	15,860	208	249	16,396	188	220	11,611
By fabrics:															
Chiefly polyester blends with cotton .....	10,464	8,887	649,521	2,602	1,980	159,154	2,507	2,242	176,878	2,829	2,543	166,167	2,526	2,122	147,322
All cotton and chiefly cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All other fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By size:															
King .....	(X)	1,984	245,523	(X)	493	64,620	(X)	536	69,334	(X)	487	55,857	(X)	468	55,712
Queen .....	(X)	3,361	361,801	(X)	827	90,928	(X)	905	104,323	(X)	832	84,826	(X)	797	81,724
Full .....	(X)	3,803	278,847	(X)	864	69,896	(X)	932	75,019	(X)	1,088	70,834	(X)	919	63,098
Twin .....	(X)	4,749	264,608	(X)	1,152	65,222	(X)	1,246	75,016	(X)	1,252	65,330	(X)	1,099	59,040
Single and smaller .....	(X)	358	24,034	(X)	108	7,708	(X)	98	6,764	(X)	82	5,182	(X)	70	4,380
Not specified by kind (n.s.k.) .....	(X)	971	59,398	(X)	258	15,531	(X)	244	15,860	(X)	249	16,396	(X)	220	11,611
Flannel sheets .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pillowcases, excluding crib size .....	13,855	14,186	384,766	3,678	3,455	93,442	3,351	3,846	106,250	3,644	3,682	92,109	3,182	3,203	92,965
By thread count:															
195 and over .....	2,202	2,556	118,506	670	623	31,360	560	831	35,086	464	554	25,119	508	548	26,941
180 to 194 .....	7,140	7,185	172,952	1,934	1,734	38,990	1,769	1,884	44,436	1,850	1,954	43,401	1,587	1,613	46,125
135 to 179 .....	501	465	10,615	121	90	2,965	76	94	2,682	172	176	2,769	132	105	2,199
125 to 134 .....	1,146	1,209	20,721	198	203	3,959	189	248	5,251	402	437	6,459	357	321	5,052
Under 125 .....	2,098	1,993	35,250	547	606	10,638	581	604	13,090	563	359	5,596	407	424	5,926
Not specified by kind (n.s.k.) .....	768	778	26,722	208	199	5,530	176	185	5,705	193	202	8,765	191	192	6,722
By fabrics:															
Chiefly polyester blends with cotton .....	8,576	7,969	183,544	2,205	1,859	41,646	2,061	2,009	50,590	2,284	2,224	48,624	2,026	1,877	42,684
All cotton and chiefly cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All other fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Flannel pillowcases .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table 59.

Table 58. **Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1995—Con.**

[Production and shipments in thousands of dozens. Value in thousands of dollars]

Product description	Total			Fourth quarter			Third quarter			Second quarter			First quarter		
	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments
Sheets and pillowcases—Con.															
Branded retail shipments of sheets and pillowcases (except crib) . . . . .	(X)	18,724	1,104,673	(X)	4,829	292,032	(X)	5,100	314,395	(X)	4,374	244,566	(X)	4,421	253,680
Upstairs brand . . . . .	(X)	8,294	612,758	(X)	2,154	163,587	(X)	2,255	172,730	(X)	1,926	134,720	(X)	1,959	141,721
Open brand . . . . .	(X)	10,430	491,915	(X)	2,675	128,445	(X)	2,845	141,665	(X)	2,448	109,846	(X)	2,462	111,959
Sheet sets, excluding waterbed sheet sets . . . . .	(X)	3,155	603,878	(X)	688	142,751	(X)	851	173,101	(X)	882	150,511	(X)	734	137,515
Waterbed sheet sets . . . . .	(X)	114	13,238	(X)	17	4,012	(X)	53	3,292	(X)	34	3,858	(X)	10	2,076
Finished towels . . . . .	49,313	47,939	1,147,510	11,786	11,931	289,490	12,145	12,057	291,848	12,687	12,527	291,021	12,695	11,424	275,151
By type:															
Sheared . . . . .	7,476	7,048	95,477	1,645	1,603	21,937	1,892	1,672	22,830	1,999	1,978	26,526	1,940	1,795	24,184
Nonsheared . . . . .	32,748	32,142	946,431	7,895	8,032	241,024	8,044	8,186	242,594	8,203	8,353	238,546	8,606	7,571	224,267
Not specified by kind (n.s.k.) . . . . .	9,089	8,749	105,602	2,246	2,296	26,529	2,209	2,199	26,424	2,485	2,196	25,949	2,149	2,058	26,700
By end use:															
Kitchen . . . . .	4,382	4,489	34,520	1,089	1,176	9,089	940	1,090	8,460	1,168	1,046	7,967	1,185	1,177	9,004
Bath . . . . .	22,924	22,298	718,423	5,693	5,782	187,215	5,710	5,715	182,308	5,622	5,609	178,031	5,899	5,192	170,869
Hand, face, guest, and fingertip . . . . .	18,564	17,736	282,958	4,301	4,269	69,228	4,713	4,401	71,924	4,890	4,888	74,446	4,660	4,178	67,360
Bath/tub mats . . . . .	620	650	23,703	128	156	5,436	156	165	6,313	177	173	6,106	159	156	5,848
All other types, including larger than bath (queen/king size bath towels, bath sheets, beach towels, and bath mats) . . . . .	2,823	2,766	87,906	575	548	18,522	626	686	22,843	830	811	24,471	792	721	22,070
Not specified by kind (n.s.k.) . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terry towels sold for further processing . . . . .	(X)	4,421	39,038	(X)	829	7,270	(X)	1,026	9,357	(X)	1,366	12,072	(X)	1,200	10,339
Washcloths . . . . .	29,386	28,529	199,980	7,279	7,225	50,702	7,420	7,301	54,675	7,212	7,173	48,195	7,475	6,830	46,408
Branded shipments of towels and washcloths . . . . .	(X)	45,112	846,111	(X)	11,260	213,248	(X)	11,522	220,931	(X)	11,308	207,552	(X)	11,022	204,380
Upstairs brand . . . . .	(X)	7,503	258,021	(X)	1,927	64,368	(X)	1,829	67,029	(X)	1,860	60,229	(X)	1,887	66,395
Open brand . . . . .	(X)	37,609	588,090	(X)	9,333	148,880	(X)	9,693	153,902	(X)	9,448	147,323	(X)	9,135	137,985
Huck and crash towels . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other terry products:															
Terry cloth sold by the yard <sup>1</sup> . Pot holders, aprons, dishcloths, etc. . . . .	(X)	1,339	8,560	(X)	297	2,027	(X)	311	2,057	(X)	248	1,676	(X)	483	2,800
Knit and/or crocheted bedspreads . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table 59.

Table 58. **Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1995—Con.**

[Production and shipments in thousands of dozens. Value in thousands of dollars]

Product description	Total			Fourth quarter			Third quarter			Second quarter			First quarter		
	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments
Tailored bedspreads (except knit) . . . . .	1,481	1,839	178,688	305	348	35,470	397	500	44,920	414	541	49,722	365	450	48,576
Quilted:															
All cotton and chiefly cotton . . . . .	920	1,276	75,078	187	226	11,223	252	357	19,597	249	375	22,472	232	318	21,786
All manmade and chiefly manmade . . . . .	546	548	97,141	116	120	22,893	141	139	23,812	161	162	25,516	128	127	24,920
Nonquilted:															
All cotton and chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All manmade and chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nontailored bedspreads . . . . .	151	139	70,746	43	34	18,168	32	32	16,475	37	36	17,611	39	37	18,492
All cotton and chiefly cotton . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All manmade and chiefly manmade . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Comforters and quilts . . . . .	7,867	7,884	866,720	1,870	1,992	231,868	2,034	2,090	209,861	1,837	1,818	200,918	2,126	1,984	224,073
All cotton and chiefly cotton . . . . .	784	734	198,321	138	149	50,456	249	229	39,703	170	145	45,917	227	211	62,245
All manmade and chiefly manmade . . . . .	6,858	6,931	590,910	1,655	1,773	155,657	1,722	1,797	147,329	1,614	1,620	139,919	1,867	1,741	148,005
Downfilled . . . . .	225	219	77,489	77	70	25,755	63	64	22,829	53	53	15,082	32	32	13,823
Blankets . . . . .	4,079	4,125	482,498	952	1,089	126,166	1,025	1,051	122,729	1,075	1,011	118,085	1,027	974	115,518

See footnotes at end of table 59.

Table 59. Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1994

[Production and shipments in thousands of dozens. Value in thousands of dollars]

Product description	Total			Fourth quarter			Third quarter			Second quarter			First quarter		
	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments
Sheets and pillowcases .....	32,419	31,662	1,636,442	8,062	7,809	409,520	8,328	8,644	457,648	8,098	7,980	399,868	7,931	7,229	369,406
Crib size sheets and pillowcases .....	812	850	33,352	214	204	8,230	207	220	8,590	201	206	7,598	190	220	8,934
Sheets, excluding crib .....	17,906	16,190	1,230,863	4,417	3,999	308,880	4,582	4,397	344,047	4,468	4,055	301,144	4,439	3,739	276,792
By type:															
Flat sheets .....	9,669	8,624	666,094	2,383	2,128	167,486	2,477	2,327	185,222	2,410	2,169	163,324	2,399	2,000	150,062
Fitted sheets .....	7,432	6,636	513,687	1,820	1,622	127,415	1,909	1,844	146,510	1,858	1,656	125,277	1,845	1,514	114,485
Not specified by kind (n.s.k.) .....	805	930	51,082	214	249	13,979	196	226	12,315	200	230	12,543	195	225	12,245
By thread count:															
195 and over .....	2,219	2,085	241,243	558	549	60,227	564	535	64,291	523	498	59,311	574	503	57,414
180 to 194 .....	9,582	8,189	612,259	2,372	1,953	148,725	2,379	2,171	163,952	2,436	2,129	157,175	2,395	1,936	142,407
135 to 179 .....	710	688	49,578	172	187	13,230	187	169	13,708	176	173	11,679	175	159	10,961
125 to 134 .....	2,022	1,979	129,901	479	450	32,364	524	512	35,416	488	548	32,595	531	469	29,526
Under 125 .....	2,568	2,319	146,800	622	611	40,355	732	784	54,365	645	477	27,841	569	447	24,239
Not specified by kind (n.s.k.) .....	805	930	51,082	214	249	13,979	196	226	12,315	200	230	12,543	195	225	12,245
By fabric:															
Chiefly polyester blends with cotton .....	10,609	9,896	691,109	2,506	2,334	164,113	2,574	2,446	178,222	2,511	2,468	167,307	3,018	2,648	181,467
Cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All other fabric .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By size:															
King .....	(X)	2,053	222,851	(X)	504	58,937	(X)	539	61,590	(X)	496	55,069	(X)	514	47,255
Queen .....	(X)	3,500	346,352	(X)	866	89,000	(X)	960	99,173	(X)	872	86,242	(X)	802	71,937
Full .....	(X)	4,215	299,158	(X)	1,030	72,821	(X)	1,132	84,036	(X)	1,086	72,124	(X)	967	70,177
Twin .....	(X)	5,111	288,729	(X)	1,247	67,563	(X)	1,445	80,934	(X)	1,275	69,886	(X)	1,144	70,346
Single and smaller .....	(X)	381	22,691	(X)	103	6,580	(X)	95	5,999	(X)	96	5,280	(X)	87	4,832
Not specified by kind (n.s.k.) .....	(X)	930	51,082	(X)	249	13,979	(X)	226	12,315	(X)	230	12,543	(X)	225	12,245
Flannel sheets .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pillowcases, excluding crib ..	13,701	14,622	372,227	3,431	3,606	92,410	3,539	4,027	105,011	3,429	3,719	91,126	3,302	3,270	83,680
By thread count:															
195 and over .....	1,867	1,998	92,081	504	542	23,046	465	523	25,046	417	482	22,335	481	451	21,654
180 to 194 .....	7,102	7,688	183,910	1,808	1,836	43,635	1,792	2,059	50,517	1,815	2,045	47,280	1,687	1,748	42,478
135 to 179 .....	502	521	8,522	123	143	2,492	131	132	2,117	121	125	2,022	127	121	1,891
125 to 134 .....	1,463	1,471	26,149	343	318	6,555	367	393	6,536	370	420	7,090	383	340	5,968
Under 125 .....	1,895	2,053	37,187	464	565	10,593	556	690	14,697	477	416	6,287	398	382	5,610
Not specified by kind (n.s.k.) .....	872	891	24,378	189	202	6,089	228	230	6,098	229	231	6,112	226	228	6,079
By fabrics:															
Chiefly polyester blends with cotton .....	8,881	8,789	191,001	2,111	2,044	44,916	2,144	2,232	48,214	2,129	2,220	45,260	2,497	2,293	52,611
All cotton and chiefly cotton .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All other fabrics .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Flannel pillowcases .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.



Table 59. **Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1994—Con.**

[Production and shipments in thousands of dozens. Value in thousands of dollars]

Product description	Total			Fourth quarter			Third quarter			Second quarter			First quarter		
	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments
Sheets and pillowcases—Con.															
Branded retail shipments of sheets and pillowcases (except crib) . . . . .	(X)	19,850	1,087,602	(X)	4,962	275,919	(X)	5,641	315,006	(X)	4,861	260,282	(X)	4,386	236,395
Upstairs brand . . . . .	(X)	8,793	591,857	(X)	2,222	150,885	(X)	2,438	168,193	(X)	2,127	142,312	(X)	2,006	130,467
Open brand . . . . .	(X)	11,057	495,745	(X)	2,740	125,034	(X)	3,203	146,813	(X)	2,734	117,970	(X)	2,380	105,928
Sheet sets, excluding waterbed sheet sets . . . . .	(X)	8,381	612,938	(X)	3,431	174,888	(X)	3,472	176,551	(X)	791	139,768	(X)	687	121,731
Waterbed sheet sets . . . . .	(X)	63	10,278	(X)	13	2,157	(X)	21	2,277	(X)	15	2,926	(X)	14	2,918
Finished terry towels <sup>1</sup> . . . . .	48,974	48,348	1,130,082	12,283	12,457	302,345	11,710	12,190	284,011	12,677	12,527	285,346	12,304	11,174	258,380
By type:															
Sheared . . . . .	6,578	6,828	99,961	1,629	1,690	25,290	1,547	1,694	25,309	1,793	1,868	26,874	1,609	1,576	22,488
Nonsheared . . . . .	33,831	33,144	926,396	8,424	8,561	249,444	8,027	8,399	232,550	8,791	8,608	232,789	8,589	7,576	211,613
Not specified by kind (n.s.k.) . . . . .	8,565	8,376	103,725	2,230	2,206	27,611	2,136	2,097	26,152	2,093	2,051	25,683	2,106	2,022	24,279
By end use:															
Kitchen . . . . .	4,475	4,425	34,632	1,265	1,165	8,900	1,090	1,132	8,848	1,018	1,057	8,196	1,102	1,071	8,688
Bath . . . . .	23,492	23,485	712,059	5,814	6,104	194,702	5,764	5,938	178,582	6,076	6,131	178,148	5,838	5,312	160,627
Hand, face, guest, and fingertip . . . . .	17,463	16,980	271,496	4,304	4,373	72,346	4,041	4,279	68,935	4,658	4,390	67,762	4,460	3,938	62,453
Bath/tub mats . . . . .	701	702	24,747	178	162	6,148	167	165	5,943	172	190	6,354	184	185	6,302
All other types, including larger than bath (queen/king size bath towels, bath sheets, beach towels, and bath mats) . . . . .	2,843	2,756	87,148	722	653	20,249	648	676	21,703	753	759	24,886	720	668	20,310
Not specified by kind (n.s.k.) . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terry towels sold for further processing . . . . .	(X)	4,010	34,241	(X)	995	8,941	(X)	943	8,400	(X)	1,100	9,012	(X)	972	7,888
Washcloths . . . . .	29,076	26,755	184,775	7,748	7,028	49,528	6,899	6,731	48,468	7,535	6,951	44,101	6,894	6,045	42,678
Branded shipments of towels and washcloths . . . . .	(X)	42,028	801,544	(X)	11,247	214,022	(X)	10,491	198,685	(X)	10,694	201,855	(X)	9,596	186,982
Upstairs brand . . . . .	(X)	6,259	212,536	(X)	1,670	57,177	(X)	1,473	50,843	(X)	1,484	49,501	(X)	1,632	55,015
Open brand . . . . .	(X)	35,769	589,008	(X)	9,577	156,845	(X)	9,018	147,842	(X)	9,210	152,354	(X)	7,964	131,967
Huck and crash towels . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other terry products:															
Terry cloth sold by the yard <sup>1</sup> . . . . .	6,582	6,760	16,893	1,881	1,777	4,592	1,372	1,451	3,757	1,772	1,887	4,568	1,557	1,645	3,976
Pot holders, aprons, dishcloths, etc. . . . .	(X)	1,402	8,926	(X)	315	2,104	(X)	407	2,541	(X)	324	1,918	(X)	356	2,363

See footnotes at end of table.

Table 59. **Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1994—Con.**

[Production and shipments in thousands of dozens. Value in thousands of dollars]

Product description	Total			Fourth quarter			Third quarter			Second quarter			First quarter		
	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments	Production	Shipments	Value of shipments
Knit and/or chocheted bedspreads .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Tailored bedspreads (except knit) .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Quilted:															
All cotton and chiefly cotton .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
All manmade and chiefly manmade .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Nonquilted:															
All cotton and chiefly cotton .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
All manmade and chiefly manmade .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Nontailored bedspreads .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
All cotton and chiefly cotton .	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
All manmade and chiefly manmade .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Comforters and quilts .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
All cotton and chiefly cotton .	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
All manmade and chiefly manmade .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Downfilled .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
Blankets .....	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

- Represents zero.    D Withheld to avoid disclosing data for individual companies.    X Not applicable.

<sup>1</sup>To extent that terry cloth yard goods are fabricated into towels and washcloths, duplication exists in production of these items.









**HISTORICAL NOTE**

Data on sheets, pillowcases, and towels have been collected by the Bureau of the Census since 1960. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Karen Harshbarger, 301-457-4674.

## CARPET AND RUGS (MA22Q)

### INTRODUCTION

The data shown for carpet and rugs represent primary production and shipments of carpet and rugs. Data are not included for those rugs or carpet tiles that are cut from purchased roll goods. Data from those establishments that are dyeing and/or finishing carpets or rugs only are excluded

also. Data are shown for type of carpet or rug and for tufted roll goods, the fiber of the face yarn.

### EXPLANATION OF TERMS

See explanation of terms at the beginning of this chapter.

**Table 64. Shipments of Carpet and Rugs: 1985 to 1995**

[Millions of dollars]

Year	Rugs, carpet, and carpeting	Woven carpet and rugs	Tufted carpet and rugs	Other carpet and rugs
1995.....	9,538.0	347.1	8,834.0	356.9
1994.....	9,530.6	307.3	8,885.9	337.4
1993.....	9,282.5	281.6	8,653.2	347.8
1992.....	8,749.3	301.1	8,135.9	312.3
1991.....	7,980.4	295.6	7,407.3	277.5
1990.....	8,527.1	293.2	7,977.5	256.4
1989.....	8,431.1	299.0	7,932.8	199.3
1988.....	8,417.3	286.3	7,891.3	239.7
1987.....	7,929.1	266.3	7,415.4	247.4
1986.....	7,311.6	240.2	6,890.0	181.4
1985.....	6,605.7	227.8	6,224.7	153.2

<sup>1</sup>Revised by 5 percent or more from previously published data.

Note: For 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were received from these companies for 1993; therefore, information shown for years prior to 1993 may not be directly comparable. These changes represent approximately 3.5 percent of total woven, tufted, and other carpet and rugs.

**Table 65. Shipments, Exports, Imports, and Apparent Consumption of Carpet and Rugs: 1995 and 1994**

[Quantity in millions of square meters. Value and calculated import duty in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Percent exports to manufacturers' shipments		Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup>		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value at port	Quantity	Value	Quantity	Value <sup>3</sup>	Quantity	Value	Quantity	Value
<b>1995</b>													
22731	Carpet and rugs .....	1,312.5	9,538.0	95.6	686.4	7.3	7.2	73.7	950.7	1,290.6	9,802.3	5.7	9.7
22732	Woven carpet and rugs ..	21.9	347.1	5.9	60.3	26.9	17.4	38.9	308.5	54.9	595.3	70.8	51.8
22732	Tufted carpet and rugs ..	1,203.2	8,834.0	70.1	479.9	5.8	5.4	23.6	289.2	1,156.7	8,643.3	2.0	3.3
22733	Other carpet and rugs ..	87.4	356.9	19.6	146.2	22.4	41.0	11.2	353.0	79.0	563.7	14.2	62.6
<b>1994</b>													
22731	Carpet and rugs .....	1,316.5	9,530.6	104.4	713.1	7.9	7.5	74.6	832.4	1,286.7	9,649.9	5.8	8.6
22732	Woven carpet and rugs ..	19.5	307.3	7.6	57.9	38.9	18.8	44.1	292.1	56.0	541.5	78.7	53.9
22732	Tufted carpet and rugs ..	1,208.9	8,885.9	77.0	509.6	6.4	5.7	20.3	228.9	1,152.2	8,605.2	1.8	2.7
22733	Other carpet and rugs ..	88.0	337.4	19.8	145.6	22.5	43.2	10.2	311.4	78.4	503.2	13.0	61.9

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

<sup>4</sup>Apparent consumption is derived by subtracting exports from the total manufacturers' shipments plus imports.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.



Table 66. Shipments of Carpet and Rugs: 1995 and 1994

[Quantity in thousands of square yards. Value in thousands of dollars]

Product code	Product description	1995		1994	
		Quantity	Value	Quantity	Value
	<b>Total .....</b>	<b>1,570,025</b>	<b>9,538,036</b>	<b>1,574,703</b>	<b>9,530,598</b>
22731 00	Woven carpet and rugs .....	26,236	347,115	'23,384	307,283
	By fiber of face yarn:				
22731 01	Cotton .....	-	-	-	-
22731 03	Manmade .....	22,172	254,315	'19,778	'224,903
22731 05	Wool .....	(D)	(D)	(D)	(D)
22731 07	Other .....	(D)	(D)	(D)	(D)
22732 20	Tufted carpet and rugs .....	1,439,279	8,834,043	1,446,030	8,885,901
	By type:				
22732 01	Scatter rugs, bathmats, and sets (rugs 6' x 9' and smaller) .....	73,013	589,166	'84,051	'650,080
22732 02	Hard-backed nonwashable accent/area rugs (6' x 9' and smaller) .....	7,090	50,082	( <sup>1</sup> )	( <sup>1</sup> )
22732 03	Room size rugs over 6' x 9' .....	4,467	27,568	( <sup>2</sup> )	( <sup>2</sup> )
22732 04	Roll goods and rugs larger than 6' x 9', excluding artificial grass .....	1,268,749	7,708,605	<sup>2</sup> 1,282,665	<sup>2</sup> 7,800,719
22732 05	Tufted artificial grass for nonathletic surface .....	21,106	44,865	'21,675	'48,171
22732 07	Automobile and aircraft carpeting .....	64,854	413,757	'57,639	'386,931
	By fiber of face yarn:				
22732 11	Nylon .....	947,852	6,423,393	933,859	6,369,206
22732 13	Polyester .....	78,538	452,797	'99,782	'579,543
22732 17	Polypropylene .....	273,856	1,150,622	'308,976	1,335,586
22732 19	All other .....	139,033	807,231	'103,413	'601,566
	Other carpet and rugs .....	104,510	356,878	'105,289	'337,414
22733 10	Knitted .....	(D)	(D)	(D)	(D)
22733 20	Needle punched .....	91,020	211,139	'92,722	'204,178
22733 30	Felt .....	-	-	-	-
22733 90	Braided, hooked, and other carpet and rugs, n.e.c. ....	(D)	(D)	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. 'Revised by 5 percent or more from previously published data.

<sup>1</sup>Prior to 1995, data for product codes 22732 01 and 22732 02 were collected as a single product under product code 22732 01.

<sup>2</sup>Prior to 1995, data for product codes 22732 03 and 22732 04 were collected as a single product under product code 22732 03.

## HISTORICAL NOTE

The annual MA22Q, Carpet and Rugs, was published for 6 years, 1962 to 1967. The semiannual, M22L, Tufted Textile Products, was initiated in 1951 and was published for 17 consecutive years. Both of these surveys were discontinued at the end of 1967 when the quarterly survey, MQ22Q, was established. The collection of data on a quarterly basis, for this series, began with the first quarter of 1968 and continued until 1985. (Also, for the years 1988

and 1989, the quarterly survey was conducted.) Since 1986, the series has been published as an annual, MA22Q, Carpet and Rugs. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Kay Hanks, 301-457-4620.

## FOOTWEAR (MQ31A/MA31A)

### INTRODUCTION

The "Footwear" series includes data on the production, quantity, and value of shipments for various types of footwear. Included in these data are footwear that are cut in the United States, exported for sewing, and imported under special tariff provisions number 9802.

These data are intended to represent domestic manufacturing. In some cases, domestic manufacturers who also import completed products have difficulty separating their shipment data. Every effort is made to ensure that the shipment data include only domestically manufactured footwear, but the data user should be aware that the shipment data could include some imported footwear.

### SUMMARY OF FINDINGS

Nonrubber footwear production for 1995 totaled 147.6 million pairs, a 9.5-percent decrease from the 1994 production of 163.0 million pairs. Of the total 1995 production, 38.7 million pairs were men's, 0.6 million pairs were youth's and boys', 41.3 million were women's, 0.6 million were misses', and 3.5 million were children's shoes.

In 1995, 48.2 million pairs of slippers were produced, a 8.3-percent increase from the 1994 production of 44.6 million pairs.

### EXPLANATION OF TERMS

**Athletic shoes.** Includes skating shoes, shoes with cleats, and joggers whether for organized sports or street wear.

#### Footwear With Rubber or Plastics Soles/Fabrics Uppers

*Fabric upper espadrilles.* Footwear with open toes or open heels, or of the slip on type, that is, held to the foot without the use of laces or buckles or other fasteners, except footwear having foxing or foxing-like band that is wholly or almost wholly of rubber or plastics applied or molded at the sole and overlapping the upper.

*Fabrics upper cement process shoes.* Footwear having soles (or midsoles, if any) of rubber or plastics that are affixed to the upper exclusively with an adhesive (any midsoles also being affixed exclusively to one another and to the out sole with an adhesive), except footwear having a foxing or foxing-like band applied to or molded at the sole and overlapping the upper and except footwear with soles that overlap the upper other than the toe or heel.

*Other fabrics shoes.* This includes all fabrics shoes with rubber or plastics soles vulcanized or molded to a fabrics upper, except slippers primarily intended for indoor household use, and sandals. Includes sneakers.

**Men's workshoes.** Includes safety shoes with sole that is an inch or more thick.

**Nonrubber footwear.** Includes shoes made by conventional processes, such as cemented, welt, slip-lasted, and shoes with rubber sole vulcanized to leather uppers. Includes slippers, except slipper socks, regardless of material or construction. Excludes all other rubber or plastic boots and shoes, whether sold for over-the-foot wear or not.

**Other footwear, except footwear with rubber or plastics soles/fabrics uppers.** Includes ballet and other theatrical shoes.

**Protective footwear.** Boots, lumberman and PACS, arctics and gaiters, rubbers, and other footwear designed to be worn over, or in lieu of, other footwear as a protection against water, oil, grease, or chemicals, or cold or inclement weather.

*Boots.* These are worn over the foot or over the sock and are normally worn for industrial, commercial, or sporting use, but boots for dress or commuter use are also included if they are over the sock and not over the shoe. No distinction is made to reflect varying processes of manufacture.

*Lumberman and PACS.* These are worn over the foot and are normally used for industrial, commercial, or sporting purposes. They include PACS, work shoes, and lumberman overs, with or without tops. No distinction is made to reflect varying processes of manufacture.

*Arctics and gaiters.* These are worn over the shoes and are above ankle height, all weights, work and dress, with or without fasteners.

*Light and heavy rubbers.* These are worn over the shoe and are ankle height or below and include work and dress weights, with or without fasteners.

*Protective footwear with fabrics upper.* Boots, lumberman and PACS, and arctics and gaiters designed to be worn over, or in lieu of, other footwear as a protection against water, oil, grease, chemicals, or cold or inclement weather, having upper of more than 10 percent fabric.

### Sizes

Men's shoes: sizes 6 and over, including big boys' shoes.

Youth's and boys' shoes: sizes 12-1/2 to 5-1/2.

Women's shoes: sizes 4 and over, including growing girls' shoes.

Misses' shoes: sizes 12-1/2 to 3-1/2.

Children's shoes: sizes 8-1/2 to 12, including little boys' shoes.

Infants' shoes: sizes 0 to 8.

**Slippers.** Includes foldable and packable slippers.

Table 67. Footwear Production: 1981 to 1995

[Million pairs]

Year	Total	Nonrubber footwear	Rubber or plastics soles/fabrics uppers	Rubber and plastics footwear
1995.....	227.2	147.6	62.2	17.4
1994.....	242.5	163.0	59.3	20.2
1993 <sup>1</sup> .....	252.0	171.7	62.5	17.8
1992.....	273.6	164.8	92.7	16.1
1991.....	282.1	169.0	97.5	15.6
1990.....	290.3	184.6	89.7	16.0
1989.....	312.8	221.9	76.8	14.1
1988.....	325.3	234.8	76.7	13.8
1987.....	312.1	230.0	71.0	11.1
1986.....	310.9	240.9	57.9	12.1
1985.....	336.5	265.1	54.9	16.5
1984.....	383.5	303.2	62.8	17.5
1983.....	432.8	339.2	78.1	15.5
1982.....	465.9	359.1	92.9	13.9
1981.....	478.1	372.0	95.4	10.7

<sup>1</sup>For 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were not collected from these establishments for 1992; therefore, information shown for years prior to 1992 may not be directly comparable. These changes represent approximately 2.7 percent of total rubber and plastics footwear production. Puerto Rican manufacturing facilities, also newly included for 1993, represent approximately 1.3 percent of nonrubber footwear production and less than 1 percent of total footwear production.

Note: For 1994, Puerto Rican manufacturing facilities accounted for approximately 1 percent of nonrubber footwear production and less than 1 percent of total footwear production.

Table 68. Quantity and Value of Shipments of Nonrubber Footwear: 1995 and 1994

[Production and quantity in thousands of pairs. Value in thousands of dollars]

Product description	1995			1994		
	Production	Quantity	Value	Production	Quantity	Value
Footwear (except rubber).....	147,550	149,465	3,219,469	163,005	164,728	3,824,745
Shoes (except slippers).....	99,307	103,737	3,029,099	118,440	121,047	3,605,181
Men's (except athletic).....	38,729	40,442	1,861,440	46,419	'47,437	2,143,246
Dress and casual.....	19,486	20,128	683,511	'23,868	'23,565	807,463
Boots, dress and casual (except western style).....	1,025	1,091	37,962	2,160	1,964	86,037
Western style boots.....	5,829	6,225	460,387	6,200	'6,531	494,548
Work oxfords.....	1,792	1,895	79,085	1,962	2,088	87,268
Workboots, ankle height or higher.....	10,597	11,103	600,495	12,229	'13,289	667,930
Youth's and boys' (except athletic).....	609	635	13,046	'1,121	'996	'21,114
Women's (except athletic).....	41,272	43,946	951,185	49,263	51,185	1,194,183
Sandals.....	2,242	2,177	42,083	'4,122	'3,522	'63,551
Dress and casual (except sandals).....	36,699	39,357	774,940	42,340	44,913	971,714
Uniform duty shoes.....	413	438	12,953	338	325	8,940
Boots, ankle height or higher.....	1,918	1,974	121,209	2,463	2,425	149,978
Misses' shoes and boots (except athletic)...	602	618	8,948	833	821	13,604
Children's shoes and boots (except athletic)...	3,474	3,521	55,629	4,683	4,513	57,437
Infants' and babies'.....	6,882	6,761	44,068	7,229	7,097	46,620
Athletic.....	5,558	5,585	74,394	6,138	6,083	102,578
Men's.....	401	410	35,464	420	374	36,404
Women's.....	(D)	(D)	(D)	239	226	29,895
All other.....	(D)	(D)	(D)	(D)	(D)	(D)
Not specified by kind (n.s.k.).....	(D)	(D)	(D)	(D)	(D)	(D)
All other shoes (ballet, theatrical, etc.).....	2,181	2,229	20,389	2,754	'2,915	26,399
Slippers.....	48,243	45,728	190,370	44,565	43,681	219,564
Men's.....	6,728	6,633	52,352	6,504	6,538	51,615
Women's.....	39,509	37,070	130,806	35,395	34,213	153,947
All other.....	2,006	2,025	7,212	2,666	2,930	14,002

D Withheld to avoid disclosing data for individual companies. 'Revised by 5 percent or more from previously published data.

Note: Some companies are unable to exclude resales from their shipments' data.

Table 69. Production of Shoes and Slippers: 1995 and 1994

[Thousands of pairs]

Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter	
<b>1995</b>						
Shoes and slippers . . . . .	As published..	159,079	40,346	41,521	37,574	39,638
	As revised..	147,550	37,326	38,347	35,024	36,853
Shoes, including athletics . . . . .	As published..	111,525	29,278	30,409	25,014	26,824
	As revised..	99,307	26,098	27,074	22,282	23,853
Men's shoes (except athletic) . . . . .	As published..	41,051	10,754	11,226	9,398	9,673
	As revised..	38,729	10,164	10,609	8,840	9,116
Work shoes . . . . .	As published..	14,870	3,789	3,963	3,558	3,560
	As revised..	12,389	3,157	3,302	2,964	2,966
Shoes and boots (except work and athletic) . . . . .	As published..	26,181	6,965	7,263	5,840	6,113
	As revised..	26,340	7,007	7,307	5,876	6,150
Youth's and boys' . . . . .	As published..	1,289	353	387	328	221
	As revised..	609	167	183	155	104
Women's . . . . .	As published..	49,396	13,155	13,542	10,653	12,046
	As revised..	41,272	10,991	11,315	8,901	10,065
Misses' . . . . .	As published..	1,284	249	347	276	412
	As revised..	602	117	163	129	193
Children's . . . . .	As published..	3,871	960	910	1,004	997
	As revised..	3,474	862	817	900	895
Infants' and babies' . . . . .	As published..	6,722	1,741	1,775	1,622	1,584
	As revised..	6,882	1,782	1,817	1,661	1,622
Athletic shoes . . . . .	As published..	5,468	1,382	1,495	1,217	1,374
	As revised..	5,558	1,405	1,520	1,236	1,397
All other footwear . . . . .	As published..	2,444	684	727	516	517
	As revised..	2,181	610	650	460	461
Slippers . . . . .	As published..	47,554	11,068	11,112	12,560	12,814
	As revised..	48,243	11,228	11,273	12,742	13,000
<b>1994</b>						
Shoes and slippers . . . . .	As published..	161,711	42,157	40,504	39,816	39,234
	As revised..	163,005	42,509	40,812	40,141	39,543
Shoes, including athletics . . . . .	As published..	118,086	31,987	30,461	27,591	28,047
	As revised..	118,440	32,120	30,553	27,653	28,114
Men's shoes (except athletic) . . . . .	As published..	45,363	12,570	11,731	10,356	10,706
	As revised..	46,419	12,893	12,001	10,585	10,940
Work shoes . . . . .	As published..	14,656	3,681	3,832	3,491	3,652
	As revised..	14,191	3,564	3,711	3,380	3,536
Shoes and boots (except work and athletic) . . . . .	As published..	30,707	8,889	7,899	6,865	7,054
	As revised..	32,228	9,329	8,290	7,205	7,404
Youth's and boys' . . . . .	As published..	1,060	262	277	218	303
	As revised..	1,121	277	293	231	320
Women's . . . . .	As published..	49,849	13,583	12,972	11,626	11,668
	As revised..	49,263	13,423	12,820	11,489	11,531
Misses' . . . . .	As published..	827	195	209	218	205
	As revised..	833	196	211	220	206
Children's . . . . .	As published..	4,828	1,195	1,165	1,215	1,253
	As revised..	4,683	1,159	1,130	1,179	1,215
Infants' and babies' . . . . .	As published..	7,259	1,983	1,775	1,611	1,890
	As revised..	7,229	1,975	1,768	1,604	1,882
Athletic shoes . . . . .	As published..	6,146	1,454	1,596	1,699	1,397
	As revised..	6,138	1,452	1,594	1,697	1,395
All other footwear . . . . .	As published..	2,754	745	736	648	625
	As revised..	(NC)	(NC)	(NC)	(NC)	(NC)
Slippers . . . . .	As published..	43,625	10,170	10,043	12,225	11,187
	As revised..	44,565	10,389	10,259	12,488	11,429

NC No change.

Note: Detail may not add to total because of independent rounding.

Table 70. **Production for Nonrubber Footwear by State: 1995 and 1994**

[Thousands of pairs]

State	Production	
	1995	1994
<b>United States</b> .....	<b>147,550</b>	<b>163,005</b>
Arkansas .....	7,635	8,726
California .....	3,183	3,896
Georgia .....	(D)	(D)
Illinois .....	1,110	1,168
Maine .....	21,732	32,442
Missouri .....	9,266	10,339
New Hampshire .....	3,070	5,442
New York .....	6,387	5,506
North Carolina .....	2,729	4,405
Ohio .....	(D)	(D)
Pennsylvania .....	8,059	9,240
Tennessee .....	6,514	6,600
Texas .....	33,726	29,981
Wisconsin .....	2,782	3,570
All other States .....	36,603	37,517

D Withheld to avoid disclosing data for individual companies.

Note: Each State not shown separately has been withheld to avoid disclosing data for individual companies.

Table 71. **Quantity and Value of Shipments of Shoes and Slippers: 1995 and 1994**

[Quantity in thousands of pairs. Value in thousands of dollars]

Item	Total	First quarter	Second quarter	Third quarter	Fourth quarter
<b>1995</b>					
Quantity .....					
As published..	160,002	42,926	38,510	35,959	42,607
As revised..	149,465	40,099	35,974	33,591	39,801
Value .....					
As published..	3,500,265	909,377	916,076	829,777	845,035
As revised..	3,219,469	836,426	842,587	763,211	777,245
<b>1994</b>					
Quantity .....					
As published..	158,819	36,731	36,344	42,709	43,035
As revised..	164,728	38,098	37,696	44,298	44,636
Value .....					
As published..	3,788,798	972,432	881,430	942,846	992,090
As revised..	3,824,745	981,658	889,793	951,791	1,001,503

Table 72. **Production and Shipments of Shoes With Rubber or Plastics Soles/Fabrics Uppers and Rubber and Plastics Footwear: 1995 and 1994**

[Production and quantity in thousands of pairs. Value in thousands of dollars]

Product description	1995			1994		
	Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value
<b>SHOES WITH RUBBER OR PLASTICS SOLES/ FABRICS UPPERS</b>						
<b>Total.....</b>	<b>62,177</b>	<b>63,505</b>	<b>521,866</b>	<b>59,303</b>	<b>'61,280</b>	<b>'599,154</b>
Athletic.....	23,232	23,840	274,591	23,276	'25,184	'333,595
Men's.....	17,956	18,662	219,538	18,749	'20,777	'275,417
Women's.....	2,584	2,472	41,680	2,290	2,232	46,506
Other.....	2,692	2,706	13,373	2,237	2,175	11,672
Nonathletic.....	38,945	39,665	247,275	'36,027	'36,096	'265,559
Men's.....	13,758	13,479	95,494	12,180	'12,516	'80,388
Women's.....	15,573	15,382	67,357	13,263	'13,237	'77,186
Other.....	9,614	10,804	84,424	10,584	10,343	107,985
<b>RUBBER AND PLASTICS FOOTWEAR</b>						
<b>Total.....</b>	<b>17,381</b>	<b>16,876</b>	<b>253,792</b>	<b>20,245</b>	<b>18,796</b>	<b>276,956</b>
Rubber upper protective footwear.....	4,759	3,985	94,027	8,467	7,392	138,495
Boots, lumberman, and PACS.....	(D)	(D)	(D)	4,609	4,348	106,731
Arctics and gaiters, light and heavy rubbers...	(D)	(D)	(D)	3,858	3,044	31,764
Plastics or fabrics protective footwear.....	12,622	12,891	159,765	11,778	11,404	138,461
Slush molded.....	(D)	(D)	(D)	(D)	(D)	(D)
Injection molded.....	8,374	8,321	77,116	5,402	5,210	46,429
Other.....	(D)	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies.

'Revised by 5 percent or more from previously published data.

Table 73. **Production of Shoes With Rubber or Plastics Soles/Fabrics Uppers and Rubber and Plastics Protective Footwear by Quarter: 1995 and 1994**

[Thousand of pairs]

Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
<b>1995</b>					
Shoes with rubber or plastics soles/fabrics uppers . . .As published..	61,133	16,261	15,112	13,422	16,338
As revised..	62,177	16,539	15,370	13,651	16,617
Rubber and plastics protective footwear . . . . .As published..	15,607	4,406	4,001	3,678	3,522
As revised..	17,381	4,907	4,456	4,096	3,922
<b>1994</b>					
Shoes with rubber or plastics soles/fabrics uppers . .As published..	56,718	17,195	15,366	11,173	12,984
As revised..	59,303	17,979	16,066	11,682	13,576
Rubber and plastics protective footwear . . . . .As published..	20,245	5,305	5,822	4,391	4,727
As revised..	20,245	5,305	5,822	4,391	4,727

Table 74. **Production of Footwear by Type of Upper and Type of Sole: 1995 and 1994**

[Thousands of pairs]

Product description	1995	1994
<b>Total. . . . .</b>	<b>227,108</b>	<b>242,553</b>
Rubber or plastics uppers and rubber or plastics soles, including rubber or plastics coated fabrics uppers . . . . .	30,312	37,292
Waterproof . . . . .	13,216	14,930
Made with steel safety toes. . . . .	2,102	1,350
Boots (except with steel safety toes) . . . . .	9,013	9,974
All other. . . . .	2,101	3,606
Not waterproof . . . . .	17,096	22,362
Athletic:		
Made with cleats, spikes, sprigs, stops, etc. . . . .	(D)	(D)
Other . . . . .	(D)	(D)
Made with steel safety toes. . . . .	(D)	(D)
Boots (except with steel safety toes) . . . . .	1,050	1,136
All other. . . . .	8,803	13,318
Leather uppers. . . . .	83,720	99,845
Athletic. . . . .	6,499	7,578
Made with cleats, spikes, sprigs, stops, etc. . . . .	456	414
Other . . . . .	6,043	7,164
Leather soles . . . . .	27,492	26,194
Made with steel safety toes. . . . .	1,579	1,925
Boots (except with steel safety toes) . . . . .	7,718	7,974
Shoes (except with steel safety toes) . . . . .	18,195	16,295
Other soles . . . . .	49,729	66,073
Made with steel safety toes. . . . .	2,659	3,014
Boots (except with steel safety toes) . . . . .	7,890	10,105
Shoes (except with steel safety toes) . . . . .	39,180	52,954
Fabric uppers . . . . .	112,203	105,416
Rubber or plastics soles. . . . .	72,983	82,193
Athletic. . . . .	20,791	23,965
All other. . . . .	52,192	58,228
With all other soles . . . . .	39,220	23,223
Footwear not specified by type of material. . . . .	885	-

- Represents zero. D Withheld to avoid disclosing data for individual companies. † Revised by 5 percent or more from previously published data.

Table 75. Production, Exports, Imports, and Apparent Consumption of Footwear: 1995 and 1994

[Quantity in thousands of pairs. Value in thousands of dollars]

Product description	Manufacturers' shipments <sup>1</sup> (quantity)	Exports of domestic merchandise <sup>2</sup>		Percent exports to domestic production	Imports for consumption <sup>3</sup>		Apparent consumption <sup>5</sup>	Percent imports to apparent consumption
		Quantity	Value		Quantity	Value <sup>4</sup>		
<b>1995</b>								
<b>Total</b> .....	<b>227,108</b>	<b>27,679</b>	<b>387,685</b>	<b>12.2</b>	<b>1,390,614</b>	<b>13,365,237</b>	<b>1,590,043</b>	<b>87.5</b>
Rubber or plastics uppers and rubber or plastics soles, including rubber or plastics coated fabrics uppers .....	30,312	4,938	50,927	16.3	458,744	2,950,431	484,118	94.8
Waterproof .....	13,216	434	5,662	3.3	3,110	21,427	15,892	19.6
Made with steel safety toes .....	2,102	178	2,432	8.5	92	1,238	2,016	4.6
All other .....	11,114	256	3,230	2.3	3,018	20,189	13,876	21.7
Not waterproof .....	17,096	4,504	45,265	26.3	455,634	2,929,004	468,226	97.3
Athletic:								
Made with cleats, spikes, sprigs, stops, etc. ....	(D)	814	7,972	(D)	12,590	220,213	(D)	(D)
Other .....	(D)	877	17,010	(D)	29,860	168,467	(D)	(D)
Made with steel safety toes .....	(D)	276	1,590	(D)	868	9,600	(D)	(D)
Boots (except with steel safety toes) .....	1,050	321	3,357	30.6	91,842	945,518	91,502	100.4
All other .....	8,803	2,216	15,336	25.2	320,474	1,585,206	327,061	98.0
Leather uppers .....	83,720	9,515	242,353	11.4	579,078	8,512,081	653,283	88.6
Athletic .....	6,499	4,426	155,767	68.1	405,706	5,193,728	407,779	99.5
Made with cleats, spikes, sprigs, stops, etc. ....	456	4,241	79,564	930.0	8,240	200,882	7,766	106.1
Other .....	6,043	3,496	76,203	57.9	397,466	4,992,846	400,013	99.4
Leather soles .....	27,492	3,454	44,907	12.6	51,374	1,255,710	75,412	68.1
Made with steel safety toes .....	1,579	233	12,147	(D)	6,068	126,875	(D)	(D)
Boots (except with steel safety toes) .....	7,718	552	16,380	(D)	5,213	123,236	(D)	(D)
Shoes (except with steel safety toes) .....	18,195	2,669	16,380	14.7	40,093	1,005,599	55,619	72.1
Other soles .....	49,729	1,635	41,679	3.3	121,998	2,062,643	170,092	71.7
Made with steel safety toes .....	2,659	-	-	(NA)	-	-	2,659	(NA)
Boots (except with steel safety toes) .....	7,890	1,635	41,679	20.7	121,998	2,062,643	128,253	95.1
Shoes (except with steel safety toes) .....	39,180	-	-	(NA)	-	-	39,180	(NA)
Fabrics uppers .....	112,203	13,226	94,405	11.8	352,792	1,902,725	451,769	78.1
Rubber or plastics soles .....	72,983	11,894	83,987	16.3	300,445	1,630,495	361,534	83.1
Athletic .....	20,791	6,757	68,289	32.5	83,382	813,208	97,416	85.6
All other .....	52,192	5,137	15,698	9.8	217,063	817,287	264,118	82.2
With all other soles .....	39,220	1,332	10,418	3.4	52,347	272,230	90,235	58.0
Footwear not specified by type of material .....	885	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1994</b>								
<b>Total</b> .....	<b>242,553</b>	<b>25,918</b>	<b>445,509</b>	<b>10.7</b>	<b>1,440,863</b>	<b>12,843,540</b>	<b>1,657,498</b>	<b>86.9</b>
Rubber or plastics uppers and rubber or plastics soles, including rubber or plastics coated fabrics uppers .....	37,292	5,582	56,460	15.0	488,516	2,799,568	520,226	93.9
Waterproof .....	14,930	530	6,010	3.5	40,766	22,277	55,166	73.9
Made with steel safety toes .....	1,350	157	2,435	11.6	37,695	569	38,888	96.9
All other .....	13,580	373	3,575	2.7	3,071	21,708	16,278	18.9
Not waterproof .....	22,362	5,052	50,450	22.6	447,750	2,777,291	465,060	96.3
Athletic:								
Made with cleats, spikes, sprigs, stops, etc. ....	(D)	455	3,778	(D)	13,388	216,914	(D)	(D)
Other .....	(D)	1,526	27,168	(D)	37,499	207,444	(D)	(D)
Made with steel safety toes .....	(D)	397	1,925	(D)	761	8,103	(D)	(D)
Boots (except with steel safety toes) .....	1,136	723	4,808	63.6	90,621	941,880	91,034	99.5
All other .....	13,318	1,951	12,771	14.6	305,481	1,402,950	316,848	96.4

See footnotes at end of table.



Table 75. **Production, Exports, Imports, and Apparent Consumption of Footwear: 1995 and 1994—Con.**

[Quantity in thousands of pairs. Value in thousands of dollars]

Product description	Manufacturers' shipments <sup>1</sup> (quantity)	Exports of domestic merchandise <sup>2</sup>		Percent exports to domestic production	Imports for consumption <sup>3</sup>		Apparent consumption <sup>5</sup>	Percent imports to apparent consumption
		Quantity	Value		Quantity	Value <sup>4</sup>		
<b>1994—Con.</b>								
Leather uppers .....	99,845	9,887	290,668	9.9	597,045	8,228,406	687,003	86.9
Athletic .....	7,578	4,363	142,855	57.6	411,762	4,848,861	414,977	99.2
Made with cleats, spikes, sprigs, stops, etc. ....	414	3,673	67,762	887.2	7,438	170,499	4,179	178.0
Other .....	7,164	3,476	75,093	48.5	404,324	4,678,362	408,012	99.1
Leather soles .....	26,194	3,845	102,931	14.7	48,891	1,163,020	71,240	68.6
Made with steel safety toes .....	1,925	210	11,162	10.9	5,787	114,620	7,502	77.1
Boots (except with steel safety toes) .....	7,974	614	18,185	7.7	5,278	127,175	12,638	41.8
Shoes (except with steel safety toes) .....	16,295	3,021	73,584	18.5	37,826	921,225	51,100	74.0
Other soles .....	66,073	1,679	44,882	2.5	136,392	2,216,525	200,786	67.9
Made with steel safety toes .....	3,014	-	-	(NA)	-	-	3,014	(NA)
Boots (except with steel safety toes) .....	10,105	1,679	44,882	16.6	136,392	2,216,525	144,818	94.2
Shoes (except with steel safety toes) .....	52,954	-	-	(NA)	-	-	52,954	(NA)
Fabrics uppers .....	105,416	10,449	98,381	9.9	355,302	1,815,566	450,269	78.9
Rubber or plastics soles .....	82,193	7,265	82,530	8.8	297,707	1,538,466	372,635	79.9
Athletic .....	23,965	5,379	66,877	22.4	67,942	696,213	86,528	78.5
All other .....	58,228	1,886	15,653	3.2	229,765	842,253	286,107	80.3
With all other soles .....	23,223	3,184	15,851	13.7	57,595	277,100	77,634	74.2
Footwear not specified by type of material .....	-	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available.

<sup>1</sup>Represents production.<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>3</sup>Source: Bureau of the Census report EM 145, *U.S. Imports for Consumption*.<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.<sup>5</sup>Apparent consumption is derived by subtracting exports from total production plus imports.<sup>6</sup>Includes "Leather uppers, other soles, shoes (except with steel safety toes)."<sup>7</sup>Includes "Leather uppers, other soles, made with steel safety toes."

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

## HISTORICAL NOTE

Data on footwear have been collected in this program since 1921. For some period, data were collected monthly, with a more comprehensive survey done annually. In 1991, due to budget reductions, the monthly program was canceled and replaced with a quarterly survey that collected similar data. Historical data may be obtained from Current

Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Ronanne Vinson, 301-457-4647.

## Chapter 3. Building Materials

### LUMBER PRODUCTION AND MILL STOCKS (MA24T)

#### INTRODUCTION

The Current Industrial Report on lumber production and mill stocks is a cut-off sample survey that canvasses approximately 2,000 establishments engaging in sawmill activity. Establishments are included in this survey even if the operation of the sawmill is a secondary activity. For example, a furniture manufacturer that manufactures the lumber they use to make furniture is considered as operating a sawmill and is in scope of this survey.

All sawmills producing lumber, sawed ties, and timbers from roundwood, whether sawed for their own use, sawed on contract for others, custom sawed, or sawed for sale are considered in scope of this survey. All sawmills with hardwood lumber production greater than or equal to 2 million board feet or softwood lumber production greater than or equal to 5 million board feet are included in this survey.

Since the MA24T survey is a cut-off sample, the panel does not include the entire universe of lumber manufacturers. The universe was calculated for 1994 based on the MA24T database, the 1992 Census of Manufactures, and State sawmill directories. The difference between the universe and the sample is the block estimate. The block estimate is carried forward by multiplying each cell of the block estimate by the rate of change of each cell for the sample. This new block estimate will be added to the figures for the sample and any new lumber producers, to calculate subsequent total production and inventories for all U.S. sawmills.

#### SUMMARY OF FINDINGS

Production of lumber in the United States amounted to 44.0 billion board feet in 1995, 5.2 percent below the 1994 level of 46.5 billion board feet.

Eastern lumber production was 28.1 billion board feet in 1995, 1.3 percent below the 1994 level of 28.5 billion board feet. Southern yellow pine production amounted to 14.9

billion board feet in 1995, a 2.3-percent decrease from the 15.2 billion board feet in 1994. Production of eastern hardwoods, at 10.5 billion board feet in 1995, was 0.1 percent below the 1994 level of 10.5 billion board feet.

Western lumber production was 15.9 billion board feet in 1995, a decrease of 11.4 percent, from the 1994 production level of 18.0 billion board feet. Production of western softwoods decreased in 1995 by 11.6 percent to 15.5 billion board feet. Total western hardwood production decreased by 3.4 percent in 1995.

#### EXPLANATION OF TERMS

**Lumber.** Timber sawed into beams, planks, boards, pallets stock, etc., of convenient sizes. Lumber is collected in this report in board feet. A board foot is a linear measure of lumber equal to a board 1-foot square and 1-inch thick.

**Hardwood lumber.** Wood obtained from a class of trees known as angiosperms (having seeds produced within a closed pod). These trees are characterized by broad leaves and are usually deciduous in the temperate zones. Some examples of hardwood lumber include such trees as oak, yellow-poplar, maple, gum, and ash.

**Softwood lumber.** Wood from coniferous trees whose leaves are needle-like. Some examples of softwood trees are pine, fir, cedar, redwood, and spruce.

**Eastern hardwoods and softwoods.** Those species of trees that are grown and harvested in States considered part of the eastern United States.

**Western softwoods.** Those species of trees that are grown and harvested in States considered part of the western United States.

## LUMBER INDUSTRY REGIONS

### Eastern Lumber Regions

#### Southern Pine:

Southern yellow pine.

#### Southern Hardwood:

All hardwoods in Alabama, Arkansas, Delaware, Florida, Louisiana, Mississippi, Missouri, Oklahoma, and Texas; and the lowland counties of Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, and Virginia.

#### Appalachian:

All hardwoods and softwoods, except southern yellow pine, in West Virginia, and the Appalachian range counties of Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, and Virginia.

#### Northern Hemlock and Hardwood:

All hardwoods and softwoods, except southern yellow pine, in Michigan and the Wisconsin.

#### Northeastern:

All hardwoods and softwoods, except southern yellow pine, in Connecticut, Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Rhode Island, and Vermont.

#### Other:

All hardwoods and softwoods, except southern yellow pine, in Illinois, Indiana, Iowa, Kansas, Minnesota,

Nebraska, New Jersey, North Dakota, and Ohio; all softwoods, except southern yellow pine, in the lowland counties of Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, and Virginia; and all softwoods, except southern yellow pine, in Alabama, Arkansas, Delaware, Florida, Louisiana, Mississippi, Missouri, Oklahoma, and Texas.

### Western Lumber Regions

#### Douglas Fir:

All softwoods and hardwoods in Oregon and Washington west of the Cascades, and in Jackson and Josephine counties in Oregon.

#### Western Pine:

All softwoods and hardwoods in Oregon and Washington east of the Cascades; in California, except the Redwood Region counties; and in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, South Dakota, Utah, and Wyoming.

#### California Redwood:

All softwoods and hardwoods in the following 12 counties of California: Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, Monterey, San Francisco, San Mateo, Santa Clara, Santa Cruz, and Sonoma.

#### Alaska and Hawaii:

All softwoods and hardwoods in Alaska and Hawaii.

Table 1. **Production and Mill Stocks of Lumber: 1985 to 1995**

[Millions of board feet, lumber tally]

Year	Production					Mill stocks		
	Total production	Softwoods			Total hardwoods	Total mill stocks	Softwoods	Hardwoods
		Total softwoods	Southern yellow pine	Other				
1995.....	44,038	33,151	14,868	18,283	10,887	4,662	3,322	1,340
1994.....	46,466	35,556	15,221	20,335	10,910	4,600	3,302	1,298
1993.....	45,356	34,725	14,698	20,027	10,631	4,420	3,069	1,351
1992.....	40,754	33,704	13,224	20,480	7,050	3,513	2,836	677
1991.....	39,830	33,064	12,233	20,831	6,766	3,928	3,178	750
1990 NEW SAMPLE .....	43,466	36,224	12,989	23,235	7,242	4,194	3,402	792
1990 OLD SAMPLE .....	40,704	33,257	12,781	20,476	7,447	(NA)	(NA)	(NA)
1989.....	43,576	36,040	12,031	24,009	7,536	4,273	3,419	854
1988.....	44,576	36,845	12,474	24,371	7,731	4,540	3,611	929
1987.....	44,886	37,410	12,043	25,367	7,476	4,392	3,566	826
1986.....	41,999	34,815	11,443	23,372	7,184	4,584	3,679	905
1985.....	36,445	30,479	10,230	20,249	5,966	4,374	3,527	847

NA Not available. <sup>†</sup>Revised by 5 percent or more from previously published data.

Note: 1990 represents the bridge year between the old and the new MA24T samples.

Table 2. **Production of Softwoods and Hardwoods by States: 1995 and 1994**

[Millions of board feet, lumber tally]

Geographic area	Total		Softwoods		Hardwoods	
	1995	1994	1995	1994	1995	1994
<b>United States</b> .....	<b>44,038</b>	<b>46,466</b>	<b>33,151</b>	<b>35,556</b>	<b>10,887</b>	<b>10,910</b>
Eastern United States .....	28,111	28,486	17,654	18,021	10,457	10,465
Alabama .....	2,553	2,623	2,175	2,218	378	405
Arkansas .....	2,194	2,200	1,730	1,727	464	473
Connecticut .....	37	'34	5	4	32	'30
Delaware .....	15	'15	(D)	(Z)	(D)	15
Florida .....	720	738	708	727	12	11
Georgia .....	2,937	2,983	2,577	2,641	360	'342
Illinois .....	88	85	-	-	88	85
Indiana .....	380	374	(Z)	(Z)	380	374
Iowa .....	74	65	(Z)	(Z)	74	65
Kansas .....	10	10	-	-	10	10
Kentucky .....	773	756	12	'11	761	745
Louisiana .....	1,288	1,470	1,073	1,242	215	'228
Maine .....	1,033	1,042	894	898	139	144
Maryland .....	234	243	72	80	162	163
Massachusetts .....	(D)	(D)	(D)	(D)	(D)	(D)
Michigan .....	652	652	138	112	514	540
Minnesota .....	310	312	161	159	149	153
Mississippi .....	2,720	2,811	2,220	2,267	500	544
Missouri .....	578	538	28	29	550	509
Nebraska .....	27	30	5	8	22	22
New Hampshire .....	274	273	234	232	40	41
New Jersey .....	8	8	1	1	7	7
New York .....	478	504	87	98	391	406
North Carolina .....	2,184	2,146	1,630	1,566	554	580
North Dakota .....	4	4	(Z)	(Z)	4	4
Ohio .....	412	398	3	3	409	395
Oklahoma .....	(D)	(D)	(D)	(D)	(D)	(D)
Pennsylvania .....	1,083	1,047	39	38	1,044	1,009
Rhode Island .....	10	9	3	3	7	6
South Carolina .....	1,323	1,386	1,219	1,281	104	105
Tennessee .....	920	931	123	127	797	804
Texas .....	1,605	1,654	1,446	1,486	159	'168
Vermont .....	246	232	138	135	108	97
Virginia .....	1,299	1,293	583	594	716	699
West Virginia .....	699	672	4	5	695	667
Wisconsin .....	633	645	98	89	535	556
Western United States .....	15,927	17,980	15,497	17,535	430	445
Alaska .....	(D)	(D)	(D)	(D)	-	-
Arizona .....	118	199	118	199	-	(Z)
California .....	3,237	3,655	3,237	3,655	(Z)	(Z)
Colorado .....	116	128	(D)	128	(D)	(Z)
Hawaii .....	(Z)	(Z)	-	-	(Z)	(Z)
Idaho .....	1,693	1,880	1,693	1,880	-	-
Montana .....	1,284	1,405	1,284	1,405	-	-
Nevada .....	(Z)	(Z)	(Z)	(Z)	-	-
New Mexico .....	95	151	95	151	-	-
Oregon .....	4,918	5,700	4,829	5,585	89	115
South Dakota .....	(D)	(D)	(D)	(D)	(Z)	(Z)
Utah .....	44	40	(D)	40	(D)	-
Washington .....	3,978	4,309	3,638	3,979	340	330
Wyoming .....	226	246	226	246	-	-

- Represents zero. D Withheld to avoid disclosing data for individual companies. 'Revised by 5 percent or more from previously published data. Z Represents less than 500,000 board feet.

Table 3. Lumber Production by Species: 1995 and 1994

[Millions of board feet, lumber talley]

Product description	1995	1994
<b>United States</b> .....	<b>44,038</b>	<b>46,466</b>
All eastern species .....	28,111	28,486
Eastern softwoods .....	17,654	18,021
Pine, southern yellow .....	14,868	15,221
Pine, eastern white .....	466	464
Pine, other <sup>1</sup> .....	247	226
Spruce or fir <sup>2</sup> .....	583	586
Other eastern softwood <sup>3</sup> .....	149	159
Eastern softwoods, n.s.k. ....	1,341	<sup>1</sup> 1,365
Eastern hardwoods .....	10,457	10,465
Ash .....	207	192
Beech .....	70	<sup>72</sup>
Birch .....	68	<sup>70</sup>
Cherry .....	178	<sup>170</sup>
Cottonwood .....	95	<sup>100</sup>
Aspen .....	141	162
Gum, black, tupelo, and sweet .....	218	243
Hickory and pecan .....	95	103
Hard maple .....	380	349
Soft maple .....	228	233
Oak, red .....	1,943	1,914
Oak, white .....	928	884
Black walnut .....	34	<sup>33</sup>
Yellow-poplar .....	860	858
Other eastern hardwoods <sup>4</sup> .....	331	336
Mixed hardwoods <sup>5</sup> .....	1,282	<sup>1</sup> 1,376
Eastern hardwoods, n.s.k. ....	3,399	3,370
All western species .....	15,927	17,980
Western softwoods .....	15,497	17,535
Cedar, western red .....	613	673
Cedar, other <sup>6</sup> .....	184	178
Douglas fir .....	6,381	6,959
Fir, white, hemfir, and other <sup>7</sup> .....	2,740	3,382
Pine, ponderosa (western yellow) .....	2,416	2,819
Pine, western white .....	49	<sup>68</sup>
Pine, lodgepole .....	598	814
Pine, sugar .....	131	166
Redwood .....	762	808
Spruce <sup>8</sup> .....	299	355
Other western softwoods <sup>9</sup> .....	900	853
Western softwoods, n.s.k. ....	424	<sup>460</sup>
Western hardwoods <sup>10</sup> .....	430	445

n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Includes jack and Norway (red) pines.<sup>2</sup>Includes balsam fir and eastern spruce.<sup>3</sup>Includes eastern red cedar, northern white cedar, southern white cedar, cypress, eastern hemlock, tamarack, and mixed woods.<sup>4</sup>Includes basswood, boxwood, butternut, elm, hackberry, and sycamore.<sup>5</sup>"Mixed hardwoods" includes mixed, ungraded hardwoods sawn for ties, timbers, blocking cants, and pallet stock.<sup>6</sup>Includes Alaska, incense, and Port Orford cedars.<sup>7</sup>Prior to 1989, hemfir was included with "Other western softwoods." This category now includes hemfir, white fir, and other western true firs; therefore, figures for 1988 and earlier years may not be compatible with those for 1989 and later years.<sup>8</sup>Includes Sitka and western/Engelmann spruce.<sup>9</sup>Includes western hemlock, western larch, and mixed woods.<sup>10</sup>Includes alder, aspen, birch, cottonwood, maple, oak, mixed woods, and western hardwoods not specified.

Table 4. Production of Softwoods and Hardwoods by Lumber Industry Regions: 1995 and 1994

[Millions of board feet, lumber talley]

Lumber industry region	Total		Softwoods		Hardwoods	
	1995	1994	1995	1994	1995	1994
<b>United States</b> .....	<b>44,038</b>	<b>46,466</b>	<b>33,151</b>	<b>35,556</b>	<b>10,887</b>	<b>10,910</b>
Eastern lumber regions .....	28,111	28,486	17,654	18,021	10,457	10,465
Southern pine .....	14,868	15,221	14,868	15,221	-	-
Southern hardwood .....	4,628	4,663	-	-	4,628	4,663
Appalachian .....	(D)	(D)	(D)	(D)	(D)	(D)
Northern hemlock and hardwood .....	1,285	1,297	236	201	1,049	1,096
Northeastern .....	(D)	(D)	(D)	(D)	(D)	(D)
Other .....	1,971	<sup>1</sup> 1,977	828	<sup>862</sup>	1,143	1,115
Western lumber regions .....	15,927	17,980	15,497	17,535	430	445
Douglas fir .....	6,914	7,616	6,486	7,173	428	443
Western pine .....	7,850	9,040	7,848	9,038	2	2
California redwood .....	(D)	(D)	(D)	(D)	(Z)	(Z)
Alaska and Hawaii .....	(D)	(D)	(D)	(D)	(Z)	(Z)

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.  
Z Represents less than 500,000 board feet.

**Table 5. Production, Exports, Imports, and Apparent Consumption of Softwoods and Hardwoods: 1995 and 1994**

[Thousands of cubic meters]

Product code	Product description	Production <sup>1</sup>	Exports of domestic merchandise <sup>2</sup>	Percent exports to production	Imports for consumption <sup>2</sup>	Apparent consumption <sup>3</sup>	Percent imports to apparent consumption
<b>1995</b>							
<b>Total softwoods and hardwoods . . . . .</b>		<b>103,929</b>	<b>6,885</b>	<b>6.6</b>	<b>41,118</b>	<b>138,162</b>	<b>29.8</b>
Softwoods <sup>4</sup> . . . . .		78,236	4,419	5.6	40,519	114,336	35.4
Pine . . . . .		44,309	1,270	2.9	1,306	44,345	2.9
24212 74	Lodgepole pine . . . . .	1,411	48	3.4	48	1,411	3.4
24212 71	Ponderosa pine (western yellow pine) . . . . .	5,702	141	2.5	199	5,760	3.5
24212 14, 16, 17, 72, 76	Other pine, including southern yellow and eastern white pine . . . . .	37,196	1,081	2.9	1,059	37,174	2.8
24212 63	Douglas fir . . . . .	15,059	1,506	10.0	933	14,486	6.4
24212 60	Western red cedar . . . . .	1,447	61	4.2	1,748	3,134	55.8
24212 18, 20, 62, 66, 75, 78-80	Other softwoods, including hemlock, spruce, fir (other than Douglas fir), cedar (other than western red cedar), and mixed softwoods . . . . .	13,256	1,582	11.9	36,532	48,206	75.8
24212 00	Softwoods, n.s.k. . . . .	4,165	(NA)	(NA)	(NA)	(NA)	(NA)
Hardwoods <sup>4</sup> . . . . .		25,693	2,466	9.6	599	23,826	2.5
24211 51	Ash . . . . .	489	158	32.3	10	341	2.9
24211 53	Beech . . . . .	165	22	13.3	5	148	3.4
24211 55	Birch . . . . .	160	25	15.6	51	186	27.4
24211 57	Cherry . . . . .	420	75	17.9	8	353	2.3
24211 65	Hickory and pecan . . . . .	224	15	6.7	1	210	0.5
24211 67, 69	Maple . . . . .	1,435	313	21.8	129	1,251	10.3
24211 71	Red oak . . . . .	4,585	638	13.9	16	3,963	0.4
24211 73	White oak . . . . .	2,190	600	27.4	6	1,596	0.4
24211 75	Black walnut . . . . .	80	21	26.3	1	60	1.7
24211 77	Yellow-poplar . . . . .	2,030	162	8.0	3	1,871	0.2
24211 59, 61, 63, 79, 83, 99	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods . . . . .	5,872	437	7.4	369	5,804	6.4
24211 00	Hardwoods, n.s.k. . . . .	8,043	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1994</b>							
<b>Total softwoods and hardwoods . . . . .</b>		<b>109,660</b>	<b>7,247</b>	<b>6.6</b>	<b>38,795</b>	<b>141,208</b>	<b>27.5</b>
Softwoods <sup>4</sup> . . . . .		83,912	4,905	5.8	38,149	117,156	32.6
Pine . . . . .		46,676	1,574	3.4	1,111	46,213	2.4
24212 74	Lodgepole pine . . . . .	1,921	57	3.0	53	1,917	2.8
24212 71	Ponderosa pine (western yellow pine) . . . . .	6,653	216	3.2	90	6,527	1.4
24212 14, 16, 17, 72, 76	Other pine, including southern yellow and eastern white pine . . . . .	38,102	1,301	3.4	968	37,769	2.6
24212 63	Douglas fir . . . . .	16,423	1,397	8.5	793	15,819	5.0
24212 60	Western red cedar . . . . .	1,588	52	3.3	1,580	3,116	50.7
24212 18, 20, 62, 66, 75, 78-80	Other softwoods, including hemlock, spruce, fir (other than Douglas fir), cedar (other than western red cedar), and mixed softwoods . . . . .	14,918	1,882	12.6	34,665	47,701	72.7
24212 00	Softwoods, n.s.k. . . . .	4,307	(NA)	(NA)	(NA)	(NA)	(NA)
Hardwoods <sup>4</sup> . . . . .		25,748	2,342	9.1	646	24,052	2.7
24211 51	Ash . . . . .	453	157	34.7	14	310	4.5
24211 53	Beech . . . . .	'170	27	15.9	6	'149	4.0
24211 55	Birch . . . . .	'165	21	12.7	62	'206	30.1
24211 57	Cherry . . . . .	'401	75	18.7	7	'333	2.1
24211 65	Hickory and pecan . . . . .	243	9	3.7	1	235	0.4
24211 67, 69	Maple . . . . .	1,374	259	18.9	133	1,248	10.7
24211 71	Red oak . . . . .	4,517	662	14.7	13	3,868	0.3
24211 73	White oak . . . . .	2,086	548	26.3	5	1,543	0.3
24211 75	Black walnut . . . . .	'78	22	28.2	(Z)	'56	-
24211 77	Yellow-poplar . . . . .	2,025	150	7.4	9	1,884	0.5
24211 59, 61, 63, 79, 83, 99	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods . . . . .	'6,247	412	6.6	396	'6,231	6.4
24211 00	Hardwoods, n.s.k. . . . .	7,989	(NA)	(NA)	(NA)	(NA)	(NA)

- Represents zero. NA Not available. n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data. Z Represents less than 500,000 cubic meters.

<sup>1</sup>Harmonized import and export figures for 1995 and 1994 were collected in cubic meters. A conversion factor 1 thousand cubic meters/(.423729 million board feet) was used to convert from millions of board feet to thousands of cubic meters.

<sup>2</sup>Import and export numbers do not include tropical woods (e.g. meranti and mahogany), cross-ties, or treated lumber.

<sup>3</sup>Apparent consumption is equal to production plus imports minus exports.

<sup>4</sup>1995 and 1994 totals for "Hardwoods and Softwoods" include n.s.k. production figures.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

**HISTORICAL NOTE**

Data on lumber production and stocks have been collected by the Bureau of the Census since 1904. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also

available on microfiche; contact the Bureau of the Census, Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Jim Jamski, 301-457-1603.

## REFRACTORIES (MA32C)

### INTRODUCTION

The data in this section are from a survey of all companies engaged in the manufacture of refractories. The survey panel for this survey includes all known manufacturers of refractories, approximately 200 companies. Data are collected in quantity and value of shipments. Quantity of shipments is measured in short tons, metric tons, and M bricks (thousand 9-inch equivalent). Related imports and exports are also shown.

### SUMMARY OF FINDINGS

In 1995, total manufacturers' shipments of refractories amounted to \$2,218 million, an increase of 8.4 percent, from \$2,047 million in 1994.

Shipments of clay refractories increased 2.5 percent to \$929 million in 1995, from \$906 million in 1994. Clay refractories shipments accounted for 42 percent of total refractories shipments in 1995, down from 44 percent in 1994.

Shipments of nonclay refractories increased 13.0 percent to \$1,289 million in 1995, from \$1,141 million in 1994. Nonclay refractories shipments accounted for 58 percent of total refractories shipments in 1995, up from 56 percent in 1994.

Brick and shapes continue to be the dominate form of refractories, showing an increase of 9.6 percent to \$1,283 million in 1995, from \$1,171 million in 1994. Unshaped clay refractories decreased 2.7 percent to \$320 million in 1995, from \$329 million in 1994. Mortars increased 12.6 percent to \$22 million in 1995, from \$19 million in 1994. Plastic refractories and ramming mixes increased 10.6 percent to \$122 million in 1995, from \$110 million in 1994.

### EXPLANATION OF TERMS

**Unit of measure.** Data for quantity of shipments have been collected in two distinct units of measure. Shipments of all refractories are collected in metric tons, and shipments of brick and shapes are also collected in thousand 9-inch equivalents. (A 9-inch equivalent is a solid volume of 101.25 cubic inches.) For ease of comparison, the metric tons data have been multiplied by the appropriate factor (1.103) to derive the short tons figures.

**High alumina brick and shapes (50 percent  $Al_2O_3$ ).** Brick and shapes made substantially of calcined diaspore or bauxite. Calcined as applied to diaspore and bauxite implies heat treatment short of fusion for volume stability prior to use in a refractory product. In the process, volatile materials are driven off and chemical changes take place.

**Ladle brick.** Alumina ladle brick less than 50 percent  $Al_2O_3$ .

**High alumina ladle brick.** Ladle brick containing 50 percent or more  $Al_2O_3$ .

**Sleeves, nozzles, runner brick, tuyeres, and side grate brick.** Includes nozzles and sleeves described in American Society of Testing and Materials (ASTM) C-435, runner brick, tuyeres, and slide gate brick, externally applied, all compositions.

**Refractory bonding mortars, wet and dry tapes.** Includes both air-setting and heatsetting bonding mortars that contain up to 60 percent  $Al_2O_3$ , dry basis, by analysis.

**Plastic refractories and ramming mixes.** Includes products referred to as plastic fire brick and the less-plastic materials intended for ramming into place after the addition of water (when shipped in dry form) containing less than 50 percent  $Al_2O_3$ .

**High alumina plastic refractories and ramming mixes.** Plastic refractories and ramming mixes containing 50 percent to 87.5 percent  $Al_2O_3$ .

**Clay castable refractories (hydraulic setting).** Hydraulic setting castables containing up to 50 percent  $Al_2O_3$  and made from calcined fireclay, diaspore or bauxite base, and Portland or calcium aluminate cements. Castables based on mullite, fused or tabular alumina, or other nonclay materials are excluded.

**High alumina castable refractories (hydraulic setting).** Castable refractories containing more than 50 percent  $Al_2O_3$  excluding those based on mullite or extra high alumina.

**Insulating castables.** Hydraulic setting castables designed for low thermal conductivity and having bulk densities as defined in ASTM Classification C-401 no greater than 105 pounds per cubic foot.

**Fireclay gunning mixes.** Alumina-silicate compositions up to 50 percent  $Al_2O_3$ , specifically engineered for gunning applications; may include hydraulic setting or other chemical bonding agents.

**Molten cast refractories.** Products made by fusing refractory oxides, as in an electric furnace, and pouring the molten material into molds to form finished shapes.

**Magnesite and magnesite-chrome brick and shapes (magnesite predominating; products analyzing greater than 55 percent Mg).** Pitch-bonded magnesite and magnesite-dolomite brick (magnesite predominating), not including burned impregnated brick, molten cast magnesite and magnesite-chrome brick and shapes, or those made of fused magnesia.



**Chrome and chrome-magnesite brick and shapes.** Chrome predominating products analyzing no more than 55 percent Mg. Molten cast chrome and shapes are excluded.

**Mullite brick and shapes.** Mullite brick and shapes made predominantly of kyanite, sillimanite, and alusite, or synthetic mullite (excluding molten cast).

**Extra-high alumina brick and shapes (over 87.5 percent  $Al_2O_3$ ).** Products made predominantly of fused bauxite or fused or dense-sintered alumina. Molten cast extra high alumina brick and shapes are excluded.

**Fused.** As applied to bauxite and alumina, fused means melting, as in an electric furnace; after cooling, the product is crushed and graded for use in the refractory.

**Dense-sintered alumina.** Refers to heat treatment (short of melting) of alumina to render it relatively volume-stable for use in a refractory.

**High alumina mortars.** Mortars containing more than 60 percent  $Al_2O_3$ .

**Other nonclay mortars.** Includes sterite, zircon, zirconia, and mullite.

**Nonclay castable refractories (hydraulic setting).** Hydraulic setting castables made from nonclay refractory materials and Portland or calcium aluminate cements.

**Basic nonclay gunning mixes.** Includes chrome, chrome-magnesia, and dolomite gunning mixes.

**Other nonclay gunning mixes.** Includes extra high alumina, mullite, zircon, and other gunning mixes.

Table 6. Value of Shipments of Refractories: 1988 to 1995

[Thousands of dollars]

Year	Total	Clay	Nonclay
1995 .....	2,218,226	929,240	1,288,986
1994 .....	2,046,979	906,165	1,140,814
1993 .....	1,930,233	772,986	1,157,247
1992 .....	1,956,083	786,078	1,170,005
1991 .....	1,946,842	784,331	1,162,511
1990 .....	2,002,833	771,315	1,231,518
1989 .....	2,010,947	823,266	1,187,681
1988 .....	1,950,032	813,739	1,136,293

Table 7. Quantity and Value of Shipments of Refractories by Type: 1995 and 1994

[Value in thousands of dollars]

Product code	Product description	Number of companies	Quantity shipped (unit of measure)			Value of shipments
			Short tons	Metric tons	M bricks (1,000 9-inch equivalent)	
<b>1995</b>						
3255—	Clay and nonclay refractories .....	(X)	(X)	(X)	(X)	2,218,226
	Clay refractories .....	(X)	(X)	(X)	(X)	929,240
32550 11	Brick and shapes .....	(X)	958,168	868,692	301,907	565,186
32550 14	Fireclay, including semisilica, bloating and superduty fireclay brick and shapes, fireclay and high alumina pouring pit refractories; clay kiln furniture; radiant heater elements; and other miscellaneous clay refractory shapes .....	31	467,090	423,472	148,431	212,882
32550 35	High alumina brick and shapes containing 50 percent alumina and over, including glass-house pots, tank blocks, feeder parts, and upper structure shapes, made predominantly of calcined bauxite, kyanite, andalusite, and similar raw materials. Includes high alumina pouring pit refractories (containing 50 percent alumina and over), sleeves, nozzles, runners, and ladle gate parts <sup>1</sup> .....	32	430,470	390,272	104,342	293,740
32550 55	Insulating brick and shapes .....	15	60,608	54,948	49,134	58,564
32550 61	Unshaped clay refractories .....	(X)	662,093	600,266	(X)	320,080
32550 65	Refractory bonding mortars, wet and dry, including clay and high alumina .....	30	52,151	47,281	(X)	28,868
32550 70	Plastic refractories and ramming mixes, less than 50 percent alumina; high alumina plastic refractories and ramming mixes; 50 percent alumina and over; and high alumina phosphate bonded plastic refractories and ramming mixes, 50 percent alumina and over <sup>2</sup> .....	24	169,941	154,072	(X)	82,749
32550 85	Castable refractories (hydraulic setting): Castable refractories less than 50 percent alumina; high alumina castables 50 percent alumina and over; and insulating castables (hydraulic setting), density up to 105 pounds/cubic foot <sup>3</sup> .....	38	314,680	285,295	(X)	161,822
32550 95	Fireclay gunning mixes, including hydraulic setting gunning mixes, less than 50 percent alumina; high alumina gunning mixes, 50 percent alumina and over; and insulating gunning mixes (hydraulic setting) .....	27	125,321	113,618	(X)	46,641
32550 00	Other refractory raw materials and refractory materials sold in lump or ground form, either for direct use by customer as a finished refractory product or as exported material .....	(X)	191,545	173,658	(X)	22,522
3297—	Clay and high alumina refractory raw materials <sup>4</sup> .....	15	171,960	155,902	(X)	17,546
32970 12	Clay and high alumina refractory materials <sup>5</sup> .....	10	19,585	17,756	(X)	4,976
32970 13	Clay refractories, n.s.k. <sup>6</sup> .....	(X)	(X)	(X)	(X)	21,452
32970 15	Nonclay refractories .....	(X)	(X)	(X)	(X)	1,288,986
32970 19	Brick and shapes .....	(X)	482,540	437,480	110,061	718,079
32970 48	All silica brick and shapes, excluding semisilica .....	16	55,957	50,732	26,708	36,061
32970 50	Magnesite-carbon brick and shapes, both less than 7 percent carbon, 7 percent carbon and over, predominantly pitch and resin bonded, and carbon magnesite brick .....	8	96,725	87,693	18,131	104,756
32970 55	Magnesite brick and shapes, burned and unburned .....	10	31,222	28,306	5,646	23,801
32970 58	Magnesite-chrome, chrome-magnesite, including high fires, burned and unburned brick, and chrome brick .....	8	40,274	36,513	7,341	51,894
32970 61	Silicon-carbide brick and shapes (made predominantly of silicon carbide), including kiln furniture .....	13	14,123	12,804	1,894	89,582
32970 65	Extra-high alumina brick and shapes containing 87.5 percent alumina and higher, and extra-high alumina pouring pit refractories, including sleeves, nozzles, runners, tuyeres, ladle gate parts, and mullite brick and shapes .....	29	31,417	28,483	8,085	123,503
32970 70	Zircon and zirconia brick and shapes (made predominantly of either of these materials, including electrocast) .....	16	3,570	3,237	1,542	38,189
32970 75	All other brick and shapes, including dolomite, dolomite-magnesite, forsterite, pyrophyllite-zircon, carbon and graphite crucibles, retorts, stopper heads, natural graphite, refractories, and molten cast .....	21	209,252	189,712	40,714	250,293
32970 80	Mortars .....	(X)	26,123	23,683	(X)	21,921
32970 85	Unshaped nonclay refractories basic bonding mortars made predominantly of magnesite or chrome ore, dolomite, and other nonclay mortars (made predominantly of forsterite, zircon, and silica) .....	11	18,438	16,716	(X)	15,313

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refractories by Type: 1995 and 1994—Con.

[Value in thousands of dollars]

Product code	Product description	Number of companies	Quantity shipped (unit of measure)			Value of shipments
			Short tons	Metric tons	M bricks (1,000 9-inch equivalent)	
<b>1995—Con.</b>						
Clay and nonclay refractories—Con.						
Nonclay refractories—Con.						
Mortars—Con.						
32970 63	Extra-high alumina refractory mortars (made predominantly of fused or synthetic alumina and mullite) <sup>7</sup> .....	20	7,685	6,967	(X)	6,608
	Plastic refractories and ramming mixes .....	(X)	158,851	144,017	(X)	121,785
32970 65	Basic castable mixes, including chrome, chrome-magnesia, magnesia-chrome, magnesia, and dolomite .....	14	55,774	50,566	(X)	38,055
32970 67	Extra-high alumina plastic refractories and ramming mixes, 87.5 percent alumina and higher (made predominantly of fused or synthetic aluminas and mullites), and extra-high alumina phosphate bonded plastic refractories and ramming mixes <sup>7</sup> .....	22	63,271	57,363	(X)	60,730
32970 70	Extra high alumina castable and gunning mixes .....	9	9,087	8,238	(X)	10,716
32970 69	Other nonclay plastic refractories and ramming mixes .....	14	30,719	27,850	(X)	12,284
32970 68	Other nonclay refractory castables and plastic refractories .....	12	15,404	13,966	(X)	20,855
Gunning mixes:						
32970 72	Basic nonclay gunning mixes, including chrome, chrome-magnesia, magnesia-chrome, magnesia, and dolomite and other nonclay gunning mixes .....	15	211,518	191,766	(X)	91,192
32970 75	Ceramic refractory fibers, 1,500 <sup>0</sup> F and higher .....	11	45,010	40,807	(X)	152,813
	Other nonclay refractory materials sold in lump or ground form, including ground silica .....	(X)	386,339	350,262	(X)	146,736
32970 94	Domestic shipments for direct use by customers as a finished refractory and all exported material <sup>5</sup> .....	18	(D)	(D)	(X)	82,968
32970 96	All other domestic shipments of nonclay refractory materials sold in lump or ground form as a refractory raw material <sup>4</sup> .....	9	(D)	(D)	(X)	63,768
32970 00	Nonclay refractories, n.s.k. <sup>6</sup> .....	(X)	(X)	(X)	(X)	15,605
	Dead-burned magnesia or magnesite <sup>5 8</sup> .....	(X)	(D)	(D)	(X)	(D)
32950 23	Domestic shipments for direct use as finished refractory products and all exported material .....	6	(D)	(D)	(X)	(D)
32950 25	All other domestic shipments predominantly for use as a refractory raw material .....	7	(D)	(D)	(X)	(D)
32740 71	Dead-burned dolomite .....	4	326,982	296,448	(X)	22,125
<b>1994</b>						
	Clay and nonclay refractories .....	(X)	(X)	(X)	(X)	2,046,979
3255—	Clay refractories .....	(X)	(X)	(X)	(X)	'906,165
	Brick and shapes .....	(X)	926,448	839,935	302,269	'537,266
32550 11	Fireclay, including semisilica, bloating and superduty fireclay brick and shapes, fireclay and high alumina pouring pit refractories; clay kiln furniture; radiant heater elements; and other miscellaneous clay refractory shapes .....	31	451,667	409,490	144,195	195,803
32550 14	High alumina brick and shapes containing 50 percent alumina and over, including glass-house pots, tank blocks, feeder parts, and upper structure shapes, made predominantly of calcined bauxite, kyanite, andalusite, and similar raw materials. Includes high alumina pouring pit refractories (containing 50 percent alumina and over), sleeves, nozzles, runners, and ladle gate parts <sup>1</sup> .....	32	427,396	387,485	120,583	'295,271
32550 35	Insulating brick and shapes .....	15	47,385	42,960	37,491	46,192
	Unshaped clay refractories .....	(X)	736,142	667,400	(X)	328,990
32550 55	Refractory bonding mortars, wet and dry, including clay and high alumina .....	30	55,535	50,349	(X)	'29,097
32550 61	Plastic refractories and ramming mixes, less than 50 percent alumina; high alumina plastic refractories and ramming mixes; 50 percent alumina and over; and high alumina phosphate bonded plastic refractories and ramming mixes, 50 percent alumina and over <sup>2</sup> .....	24	178,950	162,239	(X)	'80,202

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refractories by Type: 1995 and 1994—Con.

[Value in thousands of dollars]

Product code	Product description	Number of companies	Quantity shipped (unit of measure)			Value of shipments
			Short tons	Metric tons	M bricks (1,000 9-inch equivalent)	
<b>1994—Con.</b>						
Clay and nonclay refractories—Con.						
Clay refractories—Con.						
Castable refractories (hydraulic setting):						
32550 65	Castable refractories less than 50 percent alumina; high alumina castables 50 percent alumina and over; and insulating castables (hydraulic setting), density up to 105 pounds/cubic foot <sup>3</sup> .....	38	327,059	296,518	(X)	167,238
32550 70	Fireclay gunning mixes, including hydraulic setting gunning mixes, less than 50 percent alumina; high alumina gunning mixes, 50 percent alumina and over; and insulating gunning mixes (hydraulic setting) .....	27	174,598	158,294	(X)	52,453
Other refractory raw materials and refractory materials sold in lump or ground form, either for direct use by customer as a finished refractory product or as exported material .....						
32550 85	Clay and high alumina refractory raw materials <sup>4</sup> .....	(X) 15	217,363	197,066	(X)	18,475
32550 95	Clay and high alumina refractory materials <sup>5</sup> .....	10	204,081	185,024	(X)	16,336
32550 00	Clay refractories, n.s.k. <sup>6</sup> .....	(X)	13,282	12,042	(X)	2,139
3297—	Nonclay refractories .....	(X)	(X)	(X)	(X)	1,140,814
Brick and shapes .....						
32970 12	All silica brick and shapes, excluding semi-silica .....	(X) 16	458,149	415,366	103,197	633,941
32970 13	Magnesite-carbon brick and shapes, both less than 7 percent carbon, 7 percent carbon and over, predominantly pitch and resin bonded, and carbon magnesite brick .....	8	42,447	38,483	20,836	25,399
32970 15	Magnesite brick and shapes, burned and unburned .....	10	99,866	90,540	18,981	111,394
32970 19	Magnesite-chrome, chrome-magnesite, including high fires, burned and unburned brick, and chrome brick .....	8	25,157	22,808	4,675	19,790
32970 48	Silicon-carbide brick and shapes (made predominantly of silicon carbide), including kiln furniture .....	13	57,685	52,298	9,714	54,180
32970 50	Extra-high alumina brick and shapes containing 87.5 percent alumina and higher, and extra-high alumina pouring pit refractories, including sleeves, nozzles, runners, tuyeres, ladle gate parts, and mullite brick and shapes .....	29	11,904	10,792	1,558	68,863
32970 55	Zircon and zirconia brick and shapes (made predominantly of either of these materials, including electrocast) .....	16	31,080	28,178	8,373	112,064
32970 58	All other brick and shapes, including dolomite, dolomite-magnesite, forsterite, pyrophyllite-zircon, carbon and graphite crucibles, retorts, stopper heads, natural graphite, refractories, and molten cast .....	21	3,098	2,809	1,227	30,371
Mortars .....						
32970 61	Unshaped nonclay refractories basic bonding mortars made predominantly of magnesite or chrome ore, dolomite, and other nonclay mortars (made predominantly of forsterite, zircon, and silica) .....	(X) 11	186,912	169,458	37,833	211,880
32970 63	Extra-high alumina refractory mortars (made predominantly of fused or synthetic alumina and mullite) <sup>7</sup> .....	20	22,589	20,480	(X)	19,459
32970 65	Plastic refractories and ramming mixes .....	(X) 14	15,947	14,458	(X)	13,308
32970 67	Basic castable mixes, including chrome, chrome-magnesia, magnesia-chrome, magnesia, and dolomite .....	14	6,642	6,022	(X)	6,151
32970 70	Extra-high alumina plastic refractories and ramming mixes, 87.5 percent alumina and higher (made predominantly of fused or synthetic aluminas and mullites), and extra-high alumina phosphate bonded plastic refractories and ramming mixes <sup>7</sup> .....	22	137,304	124,483	(X)	110,097
32970 70	Extra-high alumina castable and gunning mixes .....	9	36,275	32,888	(X)	25,503
32970 69	Other nonclay plastic refractories and ramming mixes .....	14	66,205	60,023	(X)	67,647
32970 68	Other nonclay refractory castables and plastic refractories .....	12	3,542	3,211	(X)	3,602
Gunning mixes:						
32970 72	Basic nonclay gunning mixes, including chrome, chrome-magnesia, magnesia-chrome, magnesia, and dolomite and other nonclay gunning mixes .....	15	31,282	28,361	(X)	13,345
32970 75	Ceramic refractory fibers, 1,500 <sup>0</sup> F and higher .....	11	15,202	13,782	(X)	18,667

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refractories by Type: 1995 and 1994—Con.

[Value in thousands of dollars]

Product code	Product description	Number of companies	Quantity shipped (unit of measure)			Value of shipments
			Short tons	Metric tons	M bricks (1,000 9-inch equivalent)	
	<b>1994—Con.</b>					
	Clay and nonclay refractories—Con.					
	Nonclay refractories—Con.					
	Other nonclay refractory materials sold in lump or ground form, including ground silica. ....	(X)	343,586	311,501	(X)	113,062
32970 94	Domestic shipments for direct use by customers as a finished refractory and all exported material <sup>5</sup> .....	18	(D)	(D)	(X)	70,348
32970 96	All other domestic shipments of nonclay refractory materials sold in lump or ground form as a refractory raw material <sup>4</sup> .....	9	(D)	(D)	(X)	42,714
32970 00	Nonclay refractories, n.s.k. <sup>6</sup> .....	(X)	(X)	(X)	(X)	14,913
	Dead-burned magnesia or magnesite <sup>5 8</sup> .....	(X)	(D)	(D)	(X)	(D)
32950 23	Domestic shipments for direct use as finished refractory products and all exported material .....	6	(D)	(D)	(X)	(D)
32950 25	All other domestic shipments predominantly for use as a refractory raw material .....	7	(D)	(D)	(X)	(D)
32740 71	Dead-burned dolomite .....	4	307,606	278,881	(X)	21,360

D Withheld to avoid disclosing data for individual companies. n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Excludes data for mullite and extra-high alumina refractories. These products are included in the nonclay refractories section.

<sup>2</sup>Includes products referred to as plastic firebrick and the less plastic materials intended for ramming into place after the addition of water (when shipped in dry form).

<sup>3</sup>Includes hydraulic setting castables designed for low thermal conductivity and having bulk densities as defined in ASTM classification C-401, not greater than 105 pounds/cubic foot.

<sup>4</sup>Includes shipments to refractory producers for reprocessing the manufacture of brick and other refractories.

<sup>5</sup>Includes shipments for direct use as finished refractory products by establishments classified in manufacturing industries and excludes shipments to refractory producers for reprocessing in the manufacture of brick and other refractories. Includes all exports.

<sup>6</sup>Not specified by kind (n.s.k.) represents value of shipments for establishments that did not report detailed information and establishments, typically with less than five employees that were not included on the MA32C mailing panel.

<sup>7</sup>"Fused" as applied to bauxite and alumina means complete melting, as in an electric furnace; after cooling, product is crushed and graded for use in the refractory.

<sup>8</sup>Total does not include shipments of dead-burned magnesia or magnesite for direct use as finished refractory products, which is not classified as refractories under the Standard Industrial Classification system.

**Table 8. Shipments, Exports, Imports, and Apparent Consumption of Refractories by Type: 1995 and 1994**

[Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Unit of measure	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Percent exports to manufacturers' shipments	
			Quantity	Value	Quantity	Value at port <sup>2</sup>	Quantity	Value
<b>1995</b>								
32550 11,14,35	Clay and nonclay refractories <sup>3</sup> .....	.....(X) .....	(X)	2,011,911	(X)	363,991	(X)	18.0
	Clay refractories .....	.....(X) .....	(X)	885,266	(X)	74,620	(X)	8.0
32550 55,61,65,70	Brick and shapes .....	1,000 standard brick equivalent .....	301,907	565,186	(NA)	60,367	(NA)	11.0
32970 13,15,19	Unshaped clay refractories and gunning mixes .....	Metric tons. ....	600,266	320,080	21,317	14,253	4.0	4.0
	Nonclay refractories .....	.....(X) .....	(X)	1,126,645	(X)	289,371	(X)	26.0
32970 12,48,50, 55,58	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick .....	1,000 standard brick equivalent .....	31,118	180,451	(NA)	90,460	(NA)	50.0
32970 61,63,65, 67,68,69,70,72,75	All other brick and shapes .....	.....do.....	78,943	537,628	(NA)	100,896	(NA)	19.0
	Unshaped nonclay refractories and gunning mixes .....	Metric tons. ....	414,239	408,566	134,279	98,015	32.0	24.0
			Imports for consumption <sup>1 4</sup>		Apparent consumption <sup>6</sup>		Percent imports to apparent consumption	
			Quantity	Value <sup>5</sup>	Quantity	Value	Quantity	Value
32550 11,14,35	Clay and nonclay refractories <sup>3</sup> .....	.....(X) .....	(X)	225,138	(X)	1,873,058	(X)	12.0
	Clay refractories .....	.....(X) .....	(X)	32,222	(X)	842,868	(X)	3.8
32550 55,61,65,70	Brick and shapes .....	1,000 standard brick equivalent .....	(NA)	31,565	(NA)	536,384	(NA)	5.9
32970 13,15,19	Unshaped clay refractories and gunning mixes .....	Metric tons. ....	677	657	579,626	306,484	0.1	0.2
	Nonclay refractories .....	.....(X) .....	(X)	192,916	(X)	1,030,190	(X)	18.7
32970 12,48,50, 55,58	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick .....	1,000 standard brick equivalent .....	(NA)	84,208	(NA)	174,199	(NA)	48.3
32970 61,63,65, 67,68,69,70,72,75	All other brick and shapes .....	.....do.....	(NA)	85,838	(NA)	522,570	(NA)	16.4
	Unshaped nonclay refractories and gunning mixes .....	Metric tons. ....	32,931	22,870	312,891	333,421	10.5	6.9

See footnotes at end of table.

Table 8. Shipments, Exports, Imports and Apparent Consumption of Refractories by Type: 1995 and 1994—Con.

[Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Unit of measure	Manufacturers <sup>1</sup>		Exports of domestic merchandise <sup>1 2</sup>		Percent exports to manufacturers' shipments	
			Quantity	Value	Quantity	Value at port <sup>2</sup>	Quantity	Value
<b>1994</b>								
32550 11,14,35	Clay and nonclay refractories <sup>3</sup> .....	.....(X) .....	(X)	1,908,763	(X)	305,379	(X)	16.0
	Clay refractories .....	.....(X) .....	(X)	866,256	(X)	58,330	(X)	7.0
	Brick and shapes .....	1,000 standard brick equivalent .....	302,269	537,266	(NA)	50,006	(NA)	9.0
32550 55,61,65,70	Unshaped clay refractories and gunning mixes .....	Metric tons. ....	667,400	328,990	11,343	8,324	2.0	3.0
32970 13,15,19	Nonclay refractories .....	.....(X) .....	(X)	1,042,507	(X)	247,049	(X)	24.0
	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick .....	1,000 standard brick equivalent .....	33,370	185,364	(NA)	63,001	(NA)	34.0
	All other brick and shapes .....	.....do.....	69,827	448,577	(NA)	82,188	(NA)	18.0
32970 61,63,65, 67,68,69,70,72,75	Unshaped nonclay refractories and gunning mixes .....	Metric tons. ....	414,239	408,566	141,038	101,860	34.0	25.0
			Imports for consumption <sup>1 4</sup>		Apparent consumption <sup>6</sup>		Percent imports to apparent consumption	
			Quantity	Value <sup>5</sup>	Quantity	Value	Quantity	Value
32550 11,14,35	Clay and nonclay refractories <sup>3</sup> .....	.....(X) .....	(X)	197,389	(X)	1,800,773	(X)	11.0
	Clay refractories .....	.....(X) .....	(X)	24,817	(X)	832,743	(X)	3.0
	Brick and shapes .....	1,000 standard brick equivalent .....	(NA)	24,419	(NA)	511,679	(NA)	4.8
32550 55,61,65,70	Unshaped clay refractories and gunning mixes .....	Metric tons. ....	723	398	656,780	321,064	0.1	0.1
32970 13,15,19	Nonclay refractories .....	.....(X) .....	(X)	172,572	(X)	968,030	(X)	17.8
	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick .....	1,000 standard brick equivalent .....	(NA)	68,907	(NA)	191,270	(NA)	36.0
	All other brick and shapes .....	.....do.....	(NA)	82,133	(NA)	448,522	(NA)	18.3
32970 61,63,65, 67,68,69,70,72,75	Unshaped nonclay refractories and gunning mixes .....	Metric tons. ....	32,640	21,532	305,841	328,238	10.7	6.6

NA Not available. X Not applicable.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>3</sup>"Clay and nonclay refractories" total shown here excludes product codes 32550 00, 32550 85, 32550 95, 32970 00, 32970 94, and 32970 96; therefore, they differ from totals shown in tables 6 and 7.<sup>4</sup>Source: Bureau of the Census report IM 146, *U.S. Imports for Consumption and General Imports*.<sup>5</sup>"Value at port" includes both import value and duty value.<sup>6</sup>Apparent consumption is derived by subtracting exports from total of shipments plus imports (including duty).

**HISTORICAL NOTE**

Data on refractories have been collected by the Bureau of the Census since 1947. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal

Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Robert Miller, 301-457-4787.



## CLAY CONSTRUCTION PRODUCTS (MQ32D)

### INTRODUCTION

The data in this section are from a survey of manufacturers of clay products, including brick, tile, pipe, and fittings. The panel for this survey consists of all known producers of clay construction products, approximately 220 establishments. This survey supplies a regional state break-out of production, quantity of shipments, and value of shipments for brick (building or common and face), by quarter. The tile, pipe, and fittings products are available on an overall industry basis, by quarter. Related imports and exports are also shown.

### SUMMARY OF FINDINGS

Shipments of the principal clay product, brick (building or common), decreased 4.4 percent to \$1,054 million in 1995, from \$1,102 million in 1994. The South Atlantic region accounted for approximately 31 percent of the total value of brick shipments in 1995. More specifically, North Carolina accounted for approximately 14 percent of the total value of brick shipments in 1995.

Shipments of facing tile increased 9.3 percent to \$16.5 million in 1995, from \$15.1 million in 1994.

Shipments of clay floor and wall tile decreased 4.8 percent to \$719.4 million in 1995, from \$755.7 million in 1994. Of this, shipments of glazed floor and wall tile decreased 7.6 percent to \$527.0 million in 1995, from \$570.5 million in 1994.

Shipments of vitrified clay sewer pipe and fittings increased 8.4 percent to \$36.1 million in 1995, from \$33.3 million in 1994.

### EXPLANATION OF TERMS

**Building or common brick.** Any brick made primarily for building purposes and not especially treated for texture or color.

**Facing brick.** Brick made especially for facing purposes, often treated to produce surface texture, and made of selected clays or otherwise treated to produce desired color.

**Production and shipments.** Due to breakage and inventory adjustments, production (quantity) and shipments (quantity) may vary widely on a quarterly basis.

**Facing tile.** Tile designed for use in exterior or interior walls, partitions, or columns where the face of the tile is to be left exposed.

**Ceramic glazed brick.** Brick having a glaze of bright satin or glass finish obtained by spraying the clay body with a compound of metallic oxides, chemicals, and clays, and burning at high temperature, thus fusing the glaze to the body to make them inseparable.

**Structural clay tile.** A hollow masonry building unit composed of burned clay, shale, fireclay, or mixtures thereof, and having parallel air cells.

**Quarry tile.** Glazed or unglazed tile made by the process from natural clay or shale, usually having 6 square inches (39 square centimeters) or more of facial area.

**Vitrified.** This characteristic of a clay product results when the temperature in the kiln is sufficient to fuse all the grains and close all the pores of the clay, making the mass impervious.

Table 9. Production and Shipments of Clay Construction Products: 1992 to 1995

Product code	Product description	Production (quantity)	Shipments	
			Quantity	Value (million dollars)
32510 11	Brick (building or common and face) (million standard brick):			
	1995 .....	7,006.9	6,664.5	1,053.9
	1994 .....	7,200.6	7,238.0	1,102.3
	1993 .....	6,623.3	6,655.4	989.9
	1992 .....	6,109.5	6,230.8	920.0
32510 31	Facing tile (structural), unglazed and salt glazed, ceramic glazed, including glazed brick (million brick equivalent):			
	1995 .....	25.8	24.1	16.5
	1994 .....	26.9	26.6	15.1
	1993 .....	31.2	28.8	16.6
	1992 .....	43.0	46.9	19.1
32510 61	Structural clay tile (except facing) (thousand short tons):			
	1995 .....	54.5	53.7	7.8
	1994 .....	(D)	(D)	(D)
	1993 .....	(D)	(D)	(D)
	1992 .....	(D)	(D)	(D)
32530 00	Clay floor and wall tile, including quarry tile (million sq. ft.):			
	1995 .....	604.3	606.0	719.4
	1994 .....	604.5	604.4	755.7
	1993 .....	536.6	558.7	686.7
	1992 .....	488.0	495.7	645.5
32591 00	Vitrified clay sewer pipe and fittings (short tons):			
	1995 .....	152.3	137.9	36.1
	1994 .....	159.1	134.9	33.3
	1993 .....	151.9	135.9	32.5
	1992 .....	164.0	157.4	37.6

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.

Note: Detail data may not add to totals because of independent rounding.

Table 10. **Production of Brick (Building or Common and Face) by Divisions and States: 1995 and 1994**

[Thousands of brick: 2-1/4 inch x 3-5/8 inch brick equivalent]

Division and State	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1995</b>					
<b>United States</b> .....	<b>7,006,935</b>	<b>1,586,484</b>	<b>1,770,466</b>	<b>1,849,733</b>	<b>1,800,252</b>
New England <sup>1</sup> .....	74,352	15,905	20,071	19,498	18,878
Middle Atlantic <sup>2</sup> .....	382,377	74,703	102,972	105,241	99,461
East North Central .....	658,039	141,010	174,007	176,228	166,794
Ohio .....	416,618	90,949	113,486	108,524	103,659
Other (Illinois, Indiana, Michigan, and Wisconsin) .....	241,421	50,061	60,521	67,704	63,135
West North Central .....	337,114	72,203	88,729	93,024	83,158
Kansas and Missouri .....	116,053	22,962	30,328	32,393	30,370
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) .....	221,061	49,241	58,401	60,631	52,788
South Atlantic .....	2,433,531	581,843	610,662	641,637	599,389
Virginia .....	360,278	80,458	81,050	92,696	106,074
North Carolina .....	1,080,566	257,171	271,776	296,810	254,809
South Carolina .....	362,426	76,018	90,958	97,560	97,890
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) .....	630,261	168,196	166,878	154,571	140,616
East South Central .....	1,389,203	299,102	348,157	363,513	378,431
Alabama .....	713,509	147,614	186,696	188,823	190,376
Other (Kentucky, Mississippi, and Tennessee) .....	675,694	151,488	161,461	174,690	188,055
West South Central .....	1,297,307	308,853	314,023	335,110	339,321
Arkansas .....	242,989	54,527	58,379	67,400	62,683
Louisiana .....	75,839	18,528	18,638	18,991	19,682
Oklahoma .....	239,726	57,834	57,625	61,341	62,926
Texas .....	738,753	177,964	179,381	187,378	194,030
Mountain .....	279,728	59,720	69,469	71,929	78,610
Colorado .....	151,013	29,580	38,883	43,277	39,273
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) .....	128,715	30,140	30,586	28,652	39,337
Pacific <sup>3</sup> .....	155,284	33,145	42,376	43,553	36,210

See footnotes at end of table 12.

Table 10. **Production of Brick (Building or Common and Face) by Divisions and States: 1995 and 1994—Con.**

[Thousands of brick: 2-1/4 inch x 3-5/8 inch brick equivalent]

Division and State	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1994</b>					
<b>United States</b> .....	<b>7,200,574</b>	<b>1,827,721</b>	<b>1,933,009</b>	<b>1,838,662</b>	<b>1,601,182</b>
New England <sup>1</sup> .....	73,030	18,569	19,075	18,410	16,976
Middle Atlantic <sup>2</sup> .....	420,754	102,656	123,957	105,999	88,142
East North Central .....	662,385	168,266	184,083	169,742	140,294
Ohio .....	405,564	100,644	113,560	108,340	83,020
Other (Illinois, Indiana, Michigan, and Wisconsin) .....	256,821	67,622	70,523	61,402	57,274
West North Central .....	338,223	82,026	89,683	87,841	78,673
Kansas and Missouri .....	113,828	27,730	30,258	30,641	25,199
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) .....	224,395	54,296	59,425	57,200	53,474
South Atlantic .....	2,380,260	608,835	648,916	622,596	499,913
Virginia .....	356,177	100,466	96,885	88,381	70,445
North Carolina .....	1,040,251	268,082	285,778	281,242	205,149
South Carolina .....	387,985	99,568	110,880	97,111	80,426
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) .....	595,847	140,719	155,373	155,862	<sup>r</sup> 143,893
East South Central .....	1,550,945	397,696	401,653	397,229	354,367
Alabama .....	793,066	203,166	205,107	204,738	180,055
Other (Kentucky, Mississippi, and Tennessee) .....	757,879	194,530	196,546	192,491	174,312
West South Central .....	1,325,403	332,679	336,671	327,445	328,608
Arkansas .....	232,106	59,498	59,859	58,959	53,790
Louisiana .....	79,426	20,718	20,168	20,402	18,138
Oklahoma .....	232,736	60,460	59,234	58,126	54,916
Texas .....	781,135	192,003	197,410	189,958	201,764
Mountain .....	<sup>r</sup> 290,409	<sup>r</sup> 79,452	<sup>r</sup> 82,690	66,043	62,224
Colorado .....	165,658	41,737	41,986	41,504	40,431
Other (Arizona, Idaho, Montana, Nevada, New Mexico Utah, and Wyoming) .....	<sup>r</sup> 124,751	<sup>r</sup> 37,715	<sup>r</sup> 40,704	24,539	21,793
Pacific <sup>3</sup> .....	159,165	37,542	46,281	43,357	31,985

See footnotes at end of table 12.

Table 11. Quantity of Shipments of Brick (Building or Common and Face) by Divisions and States: 1995 and 1994

[Thousands of brick: 2-1/4 inch x 3-5/8 inch brick equivalent]

Division and State	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1995</b>					
<b>United States</b> .....	<b>6,664,543</b>	<b>1,558,495</b>	<b>1,812,149</b>	<b>1,785,497</b>	<b>1,508,402</b>
New England <sup>1</sup> .....	67,396	16,546	20,117	16,699	14,034
Middle Atlantic <sup>2</sup> .....	365,970	75,096	108,750	110,760	71,364
East North Central .....	623,368	144,817	181,218	174,770	122,563
Ohio .....	392,777	91,219	113,979	112,639	74,940
Other (Illinois, Indiana, Michigan, and Wisconsin) .....	230,591	53,598	67,239	62,131	47,623
West North Central .....	297,950	68,378	85,205	79,277	65,090
Kansas and Missouri .....	102,869	23,537	28,563	28,200	22,569
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) .....	195,081	44,841	56,642	51,077	42,521
South Atlantic .....	2,333,229	557,984	622,027	620,418	532,800
Virginia .....	331,906	73,780	90,132	91,061	76,933
North Carolina .....	1,033,666	239,114	280,232	280,506	233,814
South Carolina .....	365,022	81,623	94,833	99,284	89,282
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) .....	602,635	163,467	156,830	149,567	132,771
East South Central .....	1,337,960	289,573	362,244	357,003	329,140
Alabama .....	687,111	136,887	187,263	189,927	173,034
Other (Kentucky, Mississippi, and Tennessee) .....	650,849	152,686	174,981	167,076	156,106
West South Central .....	1,201,729	304,940	314,004	308,180	274,605
Arkansas .....	215,505	52,743	57,799	55,331	49,632
Louisiana .....	67,850	16,560	18,125	16,895	16,270
Oklahoma .....	219,561	59,515	59,188	53,860	46,998
Texas .....	698,813	176,122	178,892	182,094	161,705
Mountain .....	260,973	60,195	70,390	69,811	60,577
Colorado .....	145,874	32,914	38,817	39,491	34,652
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) .....	115,099	27,281	31,573	30,320	25,925
Pacific <sup>3</sup> .....	175,968	40,966	48,194	48,579	38,229

See footnotes at end of table 12.

Table 11. **Quantity of Shipments of Brick (Building or Common and Face) by Divisions and States: 1995 and 1994—Con.**

[Thousands of brick: 2-1/4 inch x 3-5/8 inch brick equivalent]

Division and State	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1994</b>					
<b>United States</b> .....	<b>7,237,982</b>	<b>1,746,610</b>	<b>2,030,029</b>	<b>2,029,619</b>	<b>1,431,724</b>
New England <sup>1</sup> .....	72,875	18,715	21,250	22,021	10,889
Middle Atlantic <sup>2</sup> .....	429,230	107,101	132,559	134,746	54,824
East North Central .....	652,580	166,418	196,104	185,704	104,354
Ohio .....	401,935	106,485	124,489	112,905	58,056
Other (Illinois, Indiana, Michigan, and Wisconsin) .....	250,645	59,933	71,615	72,799	46,298
West North Central .....	336,766	80,818	98,137	92,861	64,950
Kansas and Missouri .....	126,434	30,724	37,475	34,615	23,620
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) .....	210,332	50,094	60,662	58,246	41,330
South Atlantic .....	2,394,258	587,487	662,234	677,894	466,643
Virginia .....	368,421	91,901	107,114	110,471	58,935
North Carolina .....	1,061,261	271,240	288,098	300,778	201,145
South Carolina .....	399,417	99,239	112,495	107,485	80,198
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) .....	565,159	125,107	154,527	159,160	126,365
East South Central .....	1,569,215	374,139	435,022	439,053	321,001
Alabama .....	778,480	184,399	212,785	211,189	170,107
Other (Kentucky, Mississippi, and Tennessee) .....	790,735	189,740	222,237	227,864	150,894
West South Central .....	1,324,915	304,678	355,636	350,041	314,560
Arkansas .....	236,850	58,275	67,525	63,358	47,692
Louisiana .....	81,245	18,821	22,061	21,278	19,085
Oklahoma .....	231,983	54,687	61,537	61,141	54,618
Texas .....	774,837	172,895	204,513	204,264	193,165
Mountain .....	280,795	66,562	78,797	76,218	59,218
Colorado .....	167,663	38,534	45,507	46,326	37,296
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) .....	113,132	28,028	33,290	29,892	21,922
Pacific <sup>3</sup> .....	177,348	40,692	50,290	51,081	35,285

See footnotes at end of table 12.

Table 12. Value of Shipments of Brick (Building or Common and Face) by Divisions and States: 1995 and 1994

[Thousands of brick: 2-1/4 inch x 3-5/8 inch brick equivalent]

Division and State	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1995</b>					
<b>United States</b> .....	<b>1,053,932</b>	<b>248,206</b>	<b>289,668</b>	<b>283,298</b>	<b>232,760</b>
New England <sup>1</sup> .....	15,149	3,631	4,524	3,851	3,143
Middle Atlantic <sup>2</sup> .....	73,437	15,208	21,545	22,387	14,297
East North Central .....	110,185	25,762	32,274	31,307	20,842
Ohio .....	72,118	16,904	21,028	21,054	13,132
Other (Illinois, Indiana, Michigan, and Wisconsin) .....	38,067	8,858	11,246	10,253	7,710
West North Central .....	50,659	11,908	14,677	13,375	10,699
Kansas and Missouri .....	16,033	3,741	4,489	4,398	3,405
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) .....	34,626	8,167	10,188	8,977	7,294
South Atlantic .....	329,686	79,028	88,556	86,740	75,362
Virginia .....	44,187	9,621	12,070	12,324	10,172
North Carolina .....	146,151	33,435	39,123	39,147	34,446
South Carolina .....	53,906	12,738	14,617	14,170	12,381
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) .....	85,442	'23,234	'22,746	'21,099	18,363
East South Central .....	173,329	37,804	47,409	46,400	41,716
Alabama .....	88,239	17,803	24,114	24,563	21,759
Other (Kentucky, Mississippi, and Tennessee) .....	85,090	20,001	'23,295	'21,837	19,957
West South Central .....	198,630	51,072	52,524	51,173	43,861
Arkansas .....	35,049	8,359	9,315	9,645	7,730
Louisiana .....	10,317	2,512	2,769	2,576	2,460
Oklahoma .....	34,535	9,538	9,406	8,498	7,093
Texas .....	118,729	30,663	31,034	30,454	26,578
Mountain .....	56,561	'13,138	'15,346	'15,142	'12,935
Colorado .....	30,718	6,994	8,180	'8,315	'7,229
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) .....	25,843	6,144	7,166	6,827	5,706
Pacific <sup>3</sup> .....	46,296	10,655	12,813	12,923	9,905

See footnotes at end of table.

Table 12. Value of Shipments of Brick (Building or Common and Face) by Divisions and States: 1995 and 1994—Con.

[Thousands of brick: 2-1/4 inch x 3-5/8 inch brick equivalent]

Division and State	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1994</b>					
<b>United States</b> .....	<b>1,102,269</b>	<b>265,615</b>	<b>311,237</b>	<b>313,064</b>	<b>212,353</b>
New England <sup>1</sup> .....	15,672	3,971	4,564	4,691	2,446
Middle Atlantic <sup>2</sup> .....	84,425	21,307	26,431	25,995	10,692
East North Central .....	113,187	29,616	34,299	32,077	17,195
Ohio .....	73,334	19,837	22,961	20,458	10,078
Other (Illinois, Indiana, Michigan, and Wisconsin) .....	39,853	9,779	11,338	11,619	7,117
West North Central .....	54,752	13,188	16,087	15,727	9,750
Kansas and Missouri .....	19,136	4,704	5,684	5,286	3,462
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) .....	35,616	8,484	10,403	10,441	6,288
South Atlantic .....	320,027	77,910	87,422	90,387	64,308
Virginia .....	47,222	12,009	13,922	14,498	6,793
North Carolina .....	141,770	34,585	38,118	39,704	29,363
South Carolina .....	55,244	13,849	14,538	15,224	11,633
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) .....	75,791	17,467	20,844	20,961	<sup>r</sup> 16,519
East South Central .....	199,376	46,872	54,722	58,981	38,801
Alabama .....	100,882	23,189	26,911	30,413	20,369
Other (Kentucky, Mississippi, and Tennessee) .....	98,494	23,683	27,811	28,568	18,432
West South Central .....	208,871	48,034	57,625	55,374	47,838
Arkansas .....	36,086	9,038	10,492	9,528	7,028
Louisiana .....	12,021	2,783	3,299	3,190	2,749
Oklahoma .....	34,740	8,304	9,439	9,096	7,901
Texas .....	126,024	27,909	34,395	33,560	30,160
Mountain .....	59,530	14,079	16,770	16,336	12,345
Colorado .....	34,455	7,993	9,460	9,475	7,527
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) .....	25,075	<sup>r</sup> 6,086	<sup>r</sup> 7,310	6,861	4,818
Pacific <sup>3</sup> .....	<sup>r</sup> 46,429	<sup>r</sup> 10,638	<sup>r</sup> 13,317	<sup>r</sup> 13,496	<sup>r</sup> 8,978

<sup>r</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Represents a combined total for Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.<sup>2</sup>Represents a combined total for New Jersey, New York, and Pennsylvania.<sup>3</sup>Represents a combined total for California, Oregon, and Washington. No production or shipments were reported for Alaska or Hawaii.



Table 13. Production of Clay Construction Products: 1995 and 1994

Product description	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1995</b>					
Brick (building or common and face) . . . . .	7,006,935	1,586,484	1,770,466	1,849,733	1,800,252
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick . . . . .	25,807	'5,258	'6,082	'6,613	'7,854
Structural clay tile (except facing) . . . . .	54,468	13,836	14,807	12,537	13,288
Clay floor and wall tile, including quarry tile . . . . .	604,270	138,244	'141,635	164,696	'159,695
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches . . . . .	402,700	'89,378	'97,476	'109,924	'105,922
Glazed floor and wall tile having a facial area 59 square inches or greater . . . . .	84,383	21,877	15,403	23,152	23,951
Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches . . . . .	<sup>1</sup> 117,187	<sup>1</sup> 26,989	<sup>1</sup> 28,756	<sup>1</sup> 31,620	<sup>1</sup> 29,822
Vitrified clay sewer pipe and fittings . . . . .	152,332	32,067	'34,671	46,140	'39,454
<b>1994</b>					
Brick (building or common and face) . . . . .	7,200,574	1,827,721	1,933,009	1,838,662	1,601,182
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick . . . . .	26,858	7,984	6,433	5,545	6,896
Structural clay tile (except facing) . . . . .	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile . . . . .	'604,454	'147,800	'150,206	'158,594	'147,854
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches . . . . .	'404,347	'100,622	'101,589	'103,163	'98,973
Glazed floor and wall tile having a facial area 59 square inches or greater . . . . .	77,795	19,208	17,755	22,312	18,520
Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches . . . . .	<sup>1</sup> 122,312	<sup>1</sup> 27,970	<sup>1</sup> 30,862	<sup>1</sup> 33,119	<sup>1</sup> 30,361
Vitrified clay sewer pipe and fittings . . . . .	159,112	41,996	45,687	40,635	30,794

See footnotes at end of table 15.

Table 14. Quantity of Shipments of Clay Construction Products: 1995 and 1994

Product description	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1995</b>					
Brick (building or common and face) . . . . .	6,664,543	1,558,495	1,812,149	1,785,497	1,508,402
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick . . . . .	24,096	'5,221	'6,477	'6,273	'6,125
Structural clay tile (except facing) . . . . .	53,727	13,333	15,117	12,958	12,319
Clay floor and wall tile, including quarry tile . . . . .	605,982	136,478	'151,428	165,629	152,447
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches . . . . .	395,774	'87,159	'99,855	'107,868	'100,892
Glazed floor and wall tile having a facial area 59 square inches or greater . . . . .	82,833	20,641	19,060	21,528	21,604
Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches . . . . .	<sup>1</sup> 127,375	<sup>1</sup> 28,678	<sup>1</sup> '32,513	<sup>1</sup> '36,233	<sup>1</sup> 29,951
Vitrified clay sewer pipe and fittings . . . . .	137,891	30,714	41,982	35,969	'29,226
<b>1994</b>					
Brick (building or common and face) . . . . .	7,237,982	1,746,610	2,030,029	2,029,619	1,431,724
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick . . . . .	26,563	6,928	7,729	7,035	4,871
Structural clay tile (except facing) . . . . .	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile . . . . .	'604,408	'147,211	'155,655	'154,781	'146,761
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches . . . . .	'408,166	'99,830	'104,926	'103,318	'100,092
Glazed floor and wall tile having a facial area 59 square inches or greater . . . . .	73,278	18,445	19,998	18,646	16,189
Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches . . . . .	<sup>1</sup> 122,964	<sup>1</sup> 28,936	<sup>1</sup> 30,731	<sup>1</sup> 32,817	<sup>1</sup> 30,480
Vitrified clay sewer pipe and fittings . . . . .	134,913	33,158	40,645	37,031	24,079

See footnotes at end of table 15.

Table 15. Value of Shipments of Clay Construction Products: 1995 and 1994

Product description	Total	Fourth quarter	Third quarter	Second quarter	First quarter
<b>1995</b>					
Brick (building or common and face) . . . . .	1,053,932	248,206	289,668	283,298	232,760
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick . . . . .	16,508	<sup>1</sup> 3,649	<sup>1</sup> 4,330	<sup>1</sup> 4,234	<sup>1</sup> 4,295
Structural clay tile (except facing) . . . . .	7,850	1,922	2,213	1,887	1,828
Clay floor and wall tile, including quarry tile . . . . .	<sup>1</sup> 719,431	164,484	<sup>1</sup> 177,707	<sup>1</sup> 192,997	<sup>1</sup> 184,243
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches . . . . .	452,015	<sup>1</sup> 100,590	<sup>1</sup> 111,491	<sup>1</sup> 121,979	117,955
Glazed floor and wall tile having a facial area 59 square inches or greater . . . . .	74,967	18,827	17,852	19,120	19,168
Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches . . . . .	<sup>1</sup> 192,449	<sup>1</sup> 45,067	<sup>1</sup> 48,364	<sup>1</sup> 51,898	<sup>1</sup> 47,120
Vitrified clay sewer pipe and fittings . . . . .	<sup>1</sup> 36,083	<sup>1</sup> 7,991	<sup>1</sup> 11,183	<sup>1</sup> 9,598	<sup>1</sup> 7,311
<b>1994</b>					
Brick (building or common and face) . . . . .	1,102,269	265,615	311,237	313,064	212,353
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick . . . . .	15,075	4,004	4,040	3,735	3,296
Structural clay tile (except facing) . . . . .	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile . . . . .	755,712	181,902	193,559	193,763	186,488
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches . . . . .	<sup>1</sup> 501,243	<sup>1</sup> 121,300	<sup>1</sup> 128,388	<sup>1</sup> 127,314	<sup>1</sup> 124,241
Glazed floor and wall tile having a facial area 59 square inches or greater . . . . .	69,209	17,064	19,138	17,866	15,141
Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches . . . . .	<sup>1</sup> 185,260	<sup>1</sup> 43,538	<sup>1</sup> 46,033	<sup>1</sup> 48,583	<sup>1</sup> 47,106
Vitrified clay sewer pipe and fittings . . . . .	33,270	8,156	10,582	9,059	5,473

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>"Glazed and unglazed ceramic mosaic tile having a facial area of less than 6 square inches" and "Unglazed tile, including unglazed quarry tile having a facial area greater than 6 square inches" are combined to avoid disclosing data for individual companies.

Table 16. Shipments, Exports, and Imports of Selected Clay Construction Products: 1995 and 1994

[Value in thousands of dollars]

Product description	Unit of measure	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Percent exports to manufacturers' shipments <sup>1</sup>	
		Quantity	Value (f.o.b. plant)	Quantity	Value (at port)	Quantity	Value <sup>3</sup>
<b>1995</b>							
Brick (building or common and face) . . . . .	1,000 bricks .	6,664,543	1,053,932	43,627	8,042	0.7	0.8
Facing tile and structural clay tile . . . . .	. . . .do . . . .	(X)	24,358	(X)	3,487	(X)	14.3
Clay floor and wall tile . . . . .	1,000 sq meters . . . .	56,370	719,431	(X)	26,115	(X)	3.6
Vitrified clay sewer pipe and fittings . . . . .	Metric tons . .	125,015	36,083	1,400	2,276	1.1	6.3
<b>1994</b>							
Brick (building or common and face) . . . . .	1,000 bricks .	7,237,982	1,102,269	43,733	8,315	0.6	0.8
Facing tile and structural clay tile . . . . .	. . . .do . . . .	(D)	(D)	(X)	2,690	(X)	(D)
Clay floor and wall tile . . . . .	1,000 sq meters . . . .	56,224	755,712	(X)	23,520	(X)	3.1
Vitrified clay sewer pipe and fittings . . . . .	Metric tons . .	122,315	33,270	2,891	2,217	2.4	6.7
		Imports for consumption <sup>4</sup>		Apparent consumption <sup>6</sup>		Percent imports to apparent consumption	
		Quantity	Value <sup>5</sup>	Quantity	Value <sup>3</sup>	Quantity	Value
<b>1995</b>							
Brick (building or common and face) . . . . .	1,000 bricks .	16,867	5,580	6,637,783	1,051,470	0.3	0.5
Facing tile and structural clay tile . . . . .	. . . .do . . . .	(X)	1,200	(X)	22,071	(X)	5.4
Clay floor and wall tile . . . . .	1,000 sq meters . . . .	71,960	662,470	(X)	1,355,786	(X)	48.9
Vitrified clay sewer pipe and fittings . . . . .	Metric tons . .	352	301	123,967	34,108	0.3	0.9
<b>1994</b>							
Brick (building or common and face) . . . . .	1,000 bricks .	8,967	2,621	7,203,216	1,096,575	0.1	0.2
Facing tile and structural clay tile . . . . .	. . . .do . . . .	(X)	1,882	(X)	(D)	(X)	(D)
Clay floor and wall tile . . . . .	1,000 sq meters . . . .	66,072	613,034	(X)	1,345,226	(X)	45.6
Vitrified clay sewer pipe and fittings . . . . .	Metric tons . .	830	1,170	120,254	32,223	0.7	3.6

D Withheld to avoid disclosing data for individual companies. X Not applicable.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>3</sup>Value calculations are based on the estimated producers' value of exports.<sup>4</sup>Source: Bureau of the Census report IM 146, *U.S. Imports for Consumption*.<sup>5</sup>Represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States.<sup>6</sup>Apparent consumption is derived by subtracting exports from total of shipments plus imports.

**HISTORICAL NOTE**

Data on clay products have been collected by the Bureau of the Census since 1947. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal

Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Robert Miller, 301-457-4787.

## PLUMBING FIXTURES (MQ34E)

### INTRODUCTION

The data in this section are from a survey of all companies engaged in the manufacture of plumbing fixtures in the United States. The statistics were collected by mail on Bureau of the Census quarterly Form MQ34E, Plumbing Fixtures. The survey panel includes all known manufacturers of plumbing fixtures, approximately 179 companies.

### SUMMARY OF FINDINGS

Manufacturers' shipments of plumbing fixtures during 1995 were valued at \$2,954 million. This represents a 1-percent increase from the 1994 level of \$2,913 million.

Shipments of low consumption water closet bowls (1.6 or less g.p.f.) increased from 5.4 million in 1994 to 6.2 million in 1995. Bathtub shipments increased 3 percent, from 3.8 million in 1994 to 3.9 million in 1995.

Shipments of kitchen sinks remained virtually unchanged at 5.0 million in 1995.

### EXPLANATION OF TERMS

**Definitions of plumbing fixtures.** The products covered are classified by the standards set by the American National Standards Institute.

Table 17. Shipments of Selected Types of Plumbing Fixtures: 1991 to 1995

[Quantity in thousands of units]

Product description	1995	1994	1993	1992	1991
Lavatories.....	7,129	6,982	6,958	6,262	6,045
Vitreous china and other nonmetals.....	<sup>1</sup> 5,494	<sup>1</sup> 5,402	<sup>1</sup> 5,447	4,471	4,386
Cast iron (enameled).....	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	489	501
Steel.....	1,635	1,579	1,512	1,302	1,158
Water closet bowls.....	8,829	9,685	8,845	8,682	8,064
Flush tanks.....	6,652	7,559	7,434	7,516	7,129
Kitchen sinks.....	<sup>2</sup> 4,961	<sup>2</sup> 5,034	<sup>2</sup> 4,810	4,505	4,132
Cast iron (enameled).....	(NA)	(NA)	(NA)	696	634
Steel and other materials.....	(NA)	(NA)	(NA)	3,809	3,498
Cast-iron (enameled) and all other materials.....	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	(NA)	(NA)
Steel.....	4,086	4,056	3,918	(NA)	(NA)
Bathtubs.....	<sup>3</sup> 3,904	<sup>3</sup> 3,826	<sup>3</sup> 3,507	3,215	3,047
Cast iron (enameled).....	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>4</sup> 1,301	365
Steel (enameled).....	880	928	864	<sup>(4)</sup>	726
Plastics and all other materials.....	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	1,914	1,956
Fiberglass, and cultured marble.....	2,203	2,125	1,859	(NA)	(NA)
Whirlpool baths.....	442	426	385	343	254

NA Not available.

<sup>1</sup>"Lavatories, cast iron (enameled)" are included with "Lavatories, vitreous china and other nonmetals" to avoid disclosing data for individual companies.

<sup>2</sup>"Kitchen sinks, cast iron (enameled) and all other materials" are included with "Kitchen sinks, total" to avoid disclosing data for individual companies.

<sup>3</sup>"Bathtubs, cast iron (enameled)" and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing data for individual companies.

<sup>4</sup>For 1992, "Bathtubs, steel (enameled)" are included with "Bathtubs, cast iron (enameled)" to avoid disclosing data for individual companies.

Table 18. Value of Shipments of Plumbing Fixtures by Material: 1992 to 1995

[Value in thousands of dollars]

Product description	1995	1994	1993	1992
<b>Total</b> .....	<b>2,953,621</b>	<b>2,912,992</b>	<b>2,670,165</b>	<b>2,514,555</b>
Metal .....	578,319	585,625	578,455	585,191
Cast iron (enameled) .....	239,962	247,277	247,476	256,843
Steel and other metal .....	338,357	338,348	330,979	328,348
Vitreous china .....	891,869	941,060	843,388	785,633
Fiberglass .....	996,465	928,463	836,733	839,738
Gel coat .....	458,510	428,964	388,176	364,844
Acrylic .....	537,955	499,499	448,557	474,894
Plastics .....	337,156	302,584	271,509	237,489
Cultured marble .....	168,326	137,617	135,698	110,858
Other .....	168,830	164,967	135,811	126,631
All other materials, nonmetal <sup>1</sup> .....	149,812	155,260	140,080	66,504

<sup>1</sup>Includes plumbing fixtures, n.s.k. (not specified by kind).

Table 19. Quantity of Shipments of Plumbing Fixtures: 1992 to 1995

[Quantity in thousands of units]

Quarter and year	Lavatories	Water closet bowls	Flush tanks	Kitchen sinks	Bathtubs	Whirlpool baths
<b>1995</b>						
<b>Total</b> .....	<b>7,129</b>	<b>8,829</b>	<b>6,652</b>	<b>4,961</b>	<b>3,904</b>	<b>442</b>
First quarter .....	1,899	2,442	1,843	1,356	954	114
Second quarter .....	1,786	2,265	1,678	1,245	965	103
Third quarter .....	1,784	2,124	1,639	1,239	990	120
Fourth quarter .....	1,660	1,998	1,492	1,122	995	105
<b>1994</b>						
<b>Total</b> .....	<b>6,982</b>	<b>9,685</b>	<b>7,559</b>	<b>5,034</b>	<b>3,826</b>	<b>426</b>
First quarter .....	1,710	2,275	1,801	1,258	893	98
Second quarter .....	1,739	2,504	1,915	1,327	964	107
Third quarter .....	1,825	2,470	1,934	1,233	1,003	117
Fourth quarter .....	1,708	2,436	1,909	1,216	966	105
<b>1993</b>						
<b>Total</b> .....	<b>6,958</b>	<b>8,845</b>	<b>7,434</b>	<b>4,810</b>	<b>3,507</b>	<b>385</b>
First quarter .....	1,772	2,172	1,799	1,166	844	87
Second quarter .....	1,795	2,110	1,795	1,212	886	95
Third quarter .....	1,716	2,239	1,944	1,205	914	101
Fourth quarter .....	1,675	2,324	1,897	1,228	863	102
<b>1992</b>						
<b>Total</b> .....	<b>6,262</b>	<b>8,682</b>	<b>7,516</b>	<b>4,505</b>	<b>3,215</b>	<b>343</b>
First quarter .....	1,544	2,168	1,835	1,147	763	79
Second quarter .....	1,613	2,134	1,800	1,164	813	91
Third quarter .....	1,565	2,215	1,976	1,158	820	94
Fourth quarter .....	1,540	2,165	1,904	1,036	818	80

Note: Detail may not add to totals because of independent rounding.

Table 20. Total Production and Shipments of Plumbing Fixtures: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1995			1994		
			Quantity produced	Shipments		Quantity produced	Shipments	
				Quantity	Value		Quantity	Value
	Plumbing fixtures .....	(NA)	(X)	(X)	2,953,621	(X)	(X)	2,912,992
	Drinking fountains .....	(NA)	142,489	142,331	111,654	145,157	145,682	112,088
34310 15	Metal .....	5	(1)	(1)	(1)	(1)	(1)	(1)
32610 12	Vitreous china .....	4	(1)	(1)	(1)	(1)	(1)	(1)
19001 12	All other materials .....	2	(1)	(1)	(1)	(1)	(1)	(1)
	Lavatories .....	(NA)	7,246,693	7,128,790	353,174	6,750,898	6,981,905	339,116
34310 17	Cast iron (enameled) .....	3	(2)	(2)	(2)	(2)	(2)	(2)
34310 18	Steel (enameled) .....	5	1,621,822	1,610,208	25,324	1,552,816	1,556,195	24,522
34310 19	Steel (stainless) .....	7	23,214	24,389	5,109	16,752	23,224	4,900
32610 17	Vitreous china .....	11	3,240,790	3,122,482	156,542	3,212,755	3,517,702	168,563
30880 04	Cultured marble .....	80	1,718,008	1,740,312	119,714	1,246,766	1,169,174	93,645
30880 31	Other plastics .....	8	2642,793	2631,399	246,485	2721,809	2715,610	247,486
19001 03	All other materials .....	1	(2)	(2)	(2)	(2)	(2)	(2)
	Water closet bowls (vitreous china) .	(NA)	9,234,291	8,829,258	491,261	10,076,278	9,684,691	525,978
19002 02	1.6 or less g.p.f. low consumption (any material) .....	12	6,427,134	6,191,707	343,147	5,647,360	5,438,800	317,055
32610 21	Flushometer .....	8	687,236	669,441	46,240	545,836	517,804	36,541
32610 24	One piece .....	8	59,686	55,176	11,302	117,510	103,099	20,971
32610 27	Close couple (for use with flush tank) .....	10	32,060,235	31,912,934	390,572	33,765,572	33,624,988	3151,411
19001 04	All other materials .....	4	(3)	(3)	(3)	(3)	(3)	(3)
32610 31	Flush tanks (vitreous china) .....	10	7,100,089	6,652,050	233,682	8,436,347	7,558,978	254,221
	Urinals .....	(NA)	291,464	263,471	27,006	245,615	265,184	24,849
34310 38	Metal .....	6	2,155	1,650	879	1,108	1,317	770
32610 36	Vitreous china .....	9	289,309	261,821	26,127	244,507	263,867	24,079
	Kitchen sinks, not including bar sinks .....	(NA)	4,955,456	4,961,330	4287,839	45,116,968	45,034,187	4278,902
34310 41	Cast iron (enameled) .....	2	(4)	(4)	(4)	(4)	(4)	(4)
34310 42	Steel (enameled) .....	6	364,274	376,361	11,204	446,650	433,026	11,883
34310 47	Steel (stainless) .....	7	3,695,353	3,709,846	162,135	3,673,308	3,623,315	155,996
19001 07	All other materials .....	8	(4)	(4)	(4)	(4)	(4)	(4)
19001 08	Bar sinks (all materials) .....	20	337,042	338,279	18,189	346,951	342,561	17,219
	Wash sinks and service sinks, mop sinks, sink and laundry tray combinations, and laundry trays ...	(NA)	828,205	820,609	39,332	5887,557	5882,952	543,515
34310 54	Metal .....	6	42,892	41,766	13,914	42,512	42,665	12,902
30880 33	Plastics .....	4	755,508	749,174	13,235	(5)	(5)	(5)
32610 54	Vitreous china .....	4	9,113	9,170	2,774	8,390	8,786	2,662
32722 84	Concrete and all other materials ..	4	20,692	20,499	9,409	(5)	(5)	(5)
	Bathtubs, including wall surrounds when sold as combined units, not including whirlpool baths .....	(NA)	63,896,254	63,903,998	6551,582	63,863,443	63,825,525	6534,393
34310 61	Cast iron (enameled) .....	2	(6)	(6)	(6)	(6)	(6)	(6)
34310 62	Steel (enameled) .....	4	863,256	879,582	60,365	942,289	928,037	65,128
30880 12	Fiberglass (FRP) gel coat .....	31	2,024,281	2,042,616	324,463	1,959,476	1,963,620	307,534
30880 13	Fiberglass (FRP) acrylic .....	26	140,418	140,342	40,718	142,258	139,352	42,568
30880 14	Cultured marble .....	51	20,050	20,001	10,686	23,042	22,262	10,972
30880 15	Other plastics (PVC, ABS) .....	7	(6)	(6)	(6)	(6)	(6)	(6)
19001 09	All other materials .....	2	(6)	(6)	(6)	(6)	(6)	(6)
	Shower receptors, sold separately ..	(NA)	270,962	261,772	19,204	307,538	283,402	17,327
30886 55	Plastics .....	20	257,833	248,283	16,228	293,528	269,634	14,481
19001 10	All other materials .....	28	13,129	13,489	2,976	14,010	13,768	2,846
	Shower stalls, including receptor ...	(NA)	978,208	973,859	170,229	930,386	918,105	155,181
34310 74	Metal .....	1	7110,021	7108,814	724,553	789,159	788,886	721,350
30880 21	Fiberglass (FRP) gel coat .....	25	546,027	543,541	101,030	520,484	515,925	89,559
30880 22	Fiberglass (FRP) acrylic .....	14	218,676	218,512	38,364	215,333	208,509	37,272
30880 23	Other plastics .....	9	103,484	102,992	6,282	105,410	104,785	7,000
19001 11	All other materials .....	19	(7)	(7)	(7)	(7)	(7)	(7)
	Wall surrounds, sold as separate units .....	(NA)	983,450	990,200	59,663	1,049,129	1,040,738	57,282
30880 70	Showers (all materials) .....	44	300,266	303,293	19,804	387,570	386,645	25,522
30880 71	Bathtubs (all materials) .....	44	683,184	686,907	39,859	661,559	654,093	31,760
19222 08	Bidets (all materials) .....	9	66,870	56,330	7,456	47,153	59,549	6,480

See footnotes at end of table.



Table 20. Total Production and Shipments of Plumbing Fixtures: 1995 and 1994—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1995			1994		
			Quantity produced	Shipments		Quantity produced	Shipments	
				Quantity	Value		Quantity	Value
	Plumbing fixtures—Con.							
	Whirlpool baths, not spas or hot tubs (noninstitutional) . . . . .	(NA)	441,672	441,795	308,386	430,555	426,019	295,175
34310 86	Cast iron (enameled) . . . . .	2	<sup>8</sup> 6,437	<sup>8</sup> 6,437	<sup>8</sup> 10,594	<sup>8</sup> 7,392	<sup>8</sup> 8,695	<sup>8</sup> 11,179
30880 26	Fiberglass (FRP) gel coat . . . . .	22	39,483	39,383	23,830	36,209	36,213	23,193
30880 27	Fiberglass (FRP) acrylic . . . . .	33	354,518	354,314	245,520	341,630	334,982	232,347
30880 28	Cultured marble . . . . .	52	9,656	9,584	10,357	9,990	9,700	11,137
30886 29	Other plastics . . . . .	6	31,578	32,077	18,082	35,334	36,429	17,320
19001 12	All other materials . . . . .	3	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
19001 13	Hot tubs (noninstitutional, all materials) . . . . .	1	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
19001 15	Spas (noninstitutional, all materials) . . . . .	28	<sup>9</sup> 136,227	<sup>9</sup> 135,336	<sup>9</sup> 332,685	<sup>9</sup> 138,041	<sup>9</sup> 137,507	<sup>9</sup> 302,504
	All other fixtures not described above . . . . .	(NA)	(X)	(X)	42,279	(X)	(X)	48,762
30882 20	Plastics . . . . .	5	(X)	(X)	269	(X)	(X)	4,611
19002 20	All other materials . . . . .	7	(X)	(X)	42,010	(X)	(X)	44,151

NA Not available. <sup>†</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>“Drinking fountains, metal,” “Drinking fountains, vitreous china,” and “Drinking fountains, all other materials” are included with “Drinking fountains,” to avoid disclosing data for individual companies.

<sup>2</sup>“Lavatories, cast iron (enameled)” and “Lavatories, all other materials” are included with “Lavatories, other plastics” to avoid disclosing data for individual companies.

<sup>3</sup>“Water closet bowls, all other materials” are included with “Water closet bowls, close couple” to avoid disclosing data for individual companies.

<sup>4</sup>“Kitchen sinks, cast iron (enameled)” and “Kitchen sinks, all other materials” are included with “Kitchen sinks, total” to avoid disclosing data for individual companies.

<sup>5</sup> For 1994, “Wash sinks, plastics” and “Wash sinks, concrete and all other materials” are included with “Wash sinks, total” to avoid disclosing data for individual companies.

<sup>6</sup>“Bathtubs, cast iron (enameled),” “Bathtubs, other plastics,” and “Bathtubs, all other materials” are included with “Bathtubs, total” to avoid disclosing data for individual companies.

<sup>7</sup>“Shower stalls, all other materials” are included with “Shower stalls, metal” to avoid disclosing data for individual companies.

<sup>8</sup>“Whirlpool baths, all other materials” are included with “Whirlpool baths, cast iron (enameled)” to avoid disclosing data for individual companies.

<sup>9</sup>“Hot tubs” are included with “Spas” to avoid disclosing data for individual companies.

**This Page Intentionally Left Blank.**



Third quarter				Fourth quarter				Line no.
Quantity produced	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter	
	Quantity	Value			Quantity	Value		
(X)	(X)	763,546	(X)	(X)	(X)	700,947	(X)	1
<sup>1</sup> 12,169	<sup>1</sup> 12,101	<sup>1</sup> 3,399	<sup>1</sup> 706	<sup>1</sup> 8,331	<sup>1</sup> 8,282	<sup>1</sup> 2,499	<sup>1</sup> 705	2
( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3
( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4
( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5
1,750,348	1,783,538	87,500	632,837	1,661,088	1,660,274	83,677	628,466	6
( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7
<sup>a</sup> 433,287	<sup>a</sup> 432,352	<sup>a</sup> 6,792	<sup>a</sup> 74,163	<sup>a</sup> 346,819	<sup>a</sup> 357,962	<sup>a</sup> 5,677	<sup>a</sup> 56,119	8
5,352	5,383	1,036	769	5,989	5,470	1,004	1,082	9
744,525	745,889	37,701	444,041	756,523	755,087	37,701	449,030	10
427,227	435,630	29,932	59,319	395,869	400,226	28,914	56,841	11
<sup>2</sup> 139,957	<sup>2</sup> 164,284	<sup>2</sup> 12,040	<sup>2</sup> 54,545	<sup>2</sup> 155,887	<sup>2</sup> 141,530	<sup>2</sup> 10,380	<sup>2</sup> 65,394	12
( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	13
2,044,113	2,123,844	120,232	838,653	2,021,571	1,998,423	109,528	852,757	14
1,400,998	1,507,881	84,897	576,510	1,460,034	1,433,205	77,461	597,440	15
167,342	158,585	11,345	47,254	141,916	132,150	9,578	57,008	16
18,422	15,769	3,219	13,876	13,709	12,693	2,716	14,831	17
<sup>3</sup> 457,351	<sup>3</sup> 457,351441,609	<sup>3</sup> 20,771	<sup>3</sup> 201,013	<sup>3</sup> 405,911	<sup>3</sup> 420,376	<sup>3</sup> 19,773	<sup>3</sup> 183,478	18
( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	19
<sup>a</sup> 1,616,785	<sup>a</sup> 1,639,349	56,319	744,456	1,517,212	1,492,136	54,289	713,812	20
69,360	62,168	6,602	33,159	64,199	58,075	6,052	37,800	21
678	229	122	(D)	613	375	198	(D)	22
68,682	61,939	6,480	(D)	63,586	57,700	5,853	(D)	23
<sup>4</sup> 1,183,843	<sup>4</sup> 1,239,467	<sup>4</sup> 70,174	<sup>4</sup> 180,999	<sup>4</sup> 1,102,800	<sup>4</sup> 1,121,543	<sup>4</sup> 66,071	<sup>4</sup> 188,157	24
( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	25
88,131	98,301	3,060	<sup>a</sup> 27,902	75,243	87,089	2,614	17,859	26
914,995	914,600	37,185	( <sup>4</sup> )	802,092	828,403	36,048	( <sup>4</sup> )	27
( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	28
80,308	82,500	4,439	12,700	79,644	82,003	4,533	11,662	29
221,306	197,608	9,170	<sup>5</sup> 16,088	223,959	196,792	9,482	<sup>5</sup> 17,090	30
6,874	9,388	3,162	( <sup>5</sup> )	11,828	10,828	3,499	( <sup>5</sup> )	31
207,632	181,369	3,280	11,263	205,610	179,383	3,248	11,263	32
2,627	2,327	666	1,342	2,375	2,251	695	1,466	33
4,172	4,525	2,062	( <sup>5</sup> )	4,146	4,330	2,040	( <sup>5</sup> )	34
<sup>6</sup> 955,151	<sup>6</sup> 989,501	<sup>6</sup> 142,316	<sup>6</sup> 136,244	<sup>6</sup> 1,017,362	<sup>6</sup> 994,837	<sup>6</sup> 142,368	<sup>6</sup> 146,859	35
( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	36
<sup>a</sup> 205,068	<sup>a</sup> 215,690	<sup>a</sup> 14,806	22,209	<sup>a</sup> 203,267	<sup>a</sup> 190,803	<sup>a</sup> 13,105	25,895	37
544,935	551,031	87,291	57,976	506,173	531,201	84,573	59,524	38
35,673	35,530	10,434	5,373	32,703	33,790	9,823	4,619	39
4,653	4,724	2,531	( <sup>6</sup> )	5,086	5,191	2,788	( <sup>6</sup> )	40
( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	41
( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	42
63,148	63,272	4,611	17,363	56,534	54,765	3,963	17,365	43
60,400	60,346	3,959	(D)	54,189	52,295	3,401	(D)	44
2,747	2,926	652	(D)	2,346	2,470	562	(D)	45
250,765	252,175	44,782	27,661	233,346	235,434	41,994	27,365	46
<sup>7</sup> 27,203	<sup>7</sup> 28,495	<sup>7</sup> 6,457	<sup>7</sup> 10,465	<sup>7</sup> 24,571	<sup>7</sup> 25,984	<sup>7</sup> 5,926	<sup>7</sup> 10,225	47
144,581	144,311	27,045	11,322	130,574	131,923	24,651	10,796	48
54,440	54,916	9,790	2,266	53,555	53,410	9,955	2,736	49
24,542	24,453	1,490	( <sup>7</sup> )	24,646	24,116	1,462	( <sup>7</sup> )	50
( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	51
180,098	203,171	12,673	32,422	267,091	257,325	15,493	32,126	52
67,296	70,603	4,549	(D)	77,750	80,261	5,135	(D)	53
112,802	132,568	8,124	(D)	189,341	177,064	10,358	(D)	54
18,664	13,047	1,775	17,754	14,272	14,934	2,017	14,973	55

Table 21. Production, Shipments, and Stocks of Plumbing Fixtures: 1995

[Quantity in units. Value In thousands of dollars]

Line no.	Product code	Product description	Company count	First quarter				Second quarter			
				Quantity produced	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter
					Quantity	Value			Quantity	Value	
		Plumbing fixtures—Con.									
56		Whirlpool baths, not spas or hot tubs (noninstitutional) . . . . .	(NA)	113,123	113,530	78,856	23,676	109,115	103,321	71,645	28,865
57	34310 86	Cast iron (enameled) . . . . .	2	<sup>8</sup> 1,423	<sup>8</sup> 1,582	<sup>8</sup> 2,523	<sup>8</sup> 527	<sup>8</sup> 1,916	<sup>8</sup> 1,667	<sup>8</sup> 2,778	<sup>8</sup> 776
58	30880 26	Fiberglass (FRP) gel coat . . . . .	22	9,182	9,295	5,591	2,626	10,173	9,846	5,905	2,725
59	30880 27	Fiberglass (FRP) acrylic . . . . .	33	90,650	92,362	63,078	17,943	86,479	80,813	55,599	22,836
60	30880 28	Cultured marble . . . . .	52	3,010	3,023	<sup>9</sup> 3,450	<sup>9</sup> 2,580	2,534	2,532	2,664	<sup>9</sup> 2,528
61	30886 29	Other plastics . . . . .	6	8,858	7,269	4,213	<sup>(8)</sup>	8,014	8,463	4,697	<sup>(8)</sup>
62	19001 12	All other materials . . . . .	3	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>
63	19001 13	Hot tubs (noninstitutional, all materials) . .	1	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
64	19001 15	Spas (noninstitutional, all materials) . . . .	28	<sup>10</sup> 31,042	<sup>10</sup> 27,305	<sup>10</sup> 63,292	<sup>10</sup> 5,964	<sup>10</sup> 36,863	<sup>10</sup> 36,298	<sup>10</sup> 90,866	<sup>10</sup> 6,294
65		All other fixtures not described above. . . .	(NA)	(X)	(X)	9,847	(X)	(X)	(X)	10,310	(X)
66	30882 20	Plastics . . . . .	5	(X)	(X)	66	(X)	(X)	(X)	68	(X)
67	19002 20	All other materials . . . . .	7	(X)	(X)	9,782	(X)	(X)	(X)	10,243	(X)

D Withheld to avoid disclosing data for individual companies. NA Not available. X Not applicable.

<sup>1</sup>"Drinking fountains, metal," "Drinking fountains, vitreous china," and "Drinking fountains, all other materials" are included with "Drinking fountains" to avoid disclosing data for individual companies.<sup>2</sup>"Lavatories, cast iron (enameled)," and "Lavatories, all other materials," are included with "Lavatories, other plastics" to avoid disclosing data for individual companies.<sup>3</sup>"Water closet bowls, all other materials" are included with "Water closet bowls, close couple" to avoid disclosing data for individual companies.<sup>4</sup>"Kitchen sinks, cast iron (enameled)" and "Kitchen sinks, all other materials" are included with "Kitchen sinks, total" to avoid disclosing data for individual companies. Stocks, end of quarter, for "Kitchen sinks, steel (stainless)" also are included with "Kitchen sinks, total" to avoid disclosing data for individual companies.<sup>5</sup>Stocks, end of quarter, for "Wash sinks, metal," and "Wash sinks, concrete and all other materials" are included with "Wash sinks, total" to avoid disclosing data for individual companies.<sup>6</sup>"Bathtubs, cast iron (enameled)," "Bathtubs, other plastics," and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing data for individual companies. Stocks, end of quarter for "Bathtubs, cultured marble," also are included with "Bathtub, total" to avoid disclosing data for individual companies.<sup>7</sup>"Shower stalls, all other materials" are included with "Shower stalls, metal" to avoid disclosing data for individual companies. Stocks, end of quarter, for "Shower stalls, other plastics" also are included with "Shower stalls, metal" to avoid disclosing data for individual companies.<sup>8</sup>"Whirlpool baths, all other materials" are included with "Whirlpool baths, cast iron (enameled)" to avoid disclosing data for individual companies.<sup>9</sup>Stocks, end of quarter, for "Whirlpool baths, other plastics" are included with "Whirlpool baths, cultured marble" to avoid disclosing data for individual companies.<sup>10</sup>"Hot tubs" are included with "Spas" to avoid disclosing data for individual companies.Note: Percent of estimation of each item is indicated as follows (see "Description of Survey" in the text for a discussion of estimation of missing reports): <sup>a</sup>25 to 50 percent of this item is estimated. <sup>b</sup>Over 50 percent of this item is estimated.

Third quarter				Fourth quarter				Line no.
Quantity produced	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter	
	Quantity	Value			Quantity	Value		
114,365	119,701	83,891	25,146	105,068	105,244	73,995	25,721	56
<sup>8</sup> 1,497	<sup>8</sup> 1,664	<sup>8</sup> 2,786	<sup>8</sup> 609	<sup>8</sup> 1,600	<sup>8</sup> 1,525	<sup>8</sup> 2,509	<sup>8</sup> 684	57
9,987	9,732	5,886	2,747	10,141	10,510	6,448	2,622	58
93,368	97,870	68,296	19,614	84,021	83,270	58,547	20,424	59
2,217	2,206	2,321	<sup>9</sup> 2,176	1,896	1,824	1,922	<sup>9</sup> 1,991	60
7,296	8,230	4,602	<sup>(9)</sup>	7,410	8,115	4,570	<sup>(9)</sup>	61
<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	62
<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	63
<sup>10</sup> 37,234	<sup>10</sup> 41,740	<sup>10</sup> 103,610	<sup>10</sup> 4,412	<sup>10</sup> 31,088	<sup>10</sup> 29,993	<sup>10</sup> 74,917	<sup>10</sup> 5,373	64
(X)	(X)	12,053	(X)	(X)	(X)	10,068	(X)	65
(X)	(X)	67	(X)	(X)	(X)	70	(X)	66
(X)	(X)	11,987	(X)	(X)	(X)	9,999	(X)	67



Third quarter				Fourth quarter				Line no.
Quantity produced	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter	
	Quantity	Value			Quantity	Value		
(X)	(X)	757,022	(X)	(X)	(X)	728,034	(X)	1
<sup>1</sup> 12,591	<sup>1</sup> 12,970	<sup>1</sup> 3,446	<sup>1</sup> 697	<sup>1</sup> 9,065	<sup>1</sup> 9,149	<sup>1</sup> 2,668	<sup>1</sup> 638	2
( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	3
( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4
( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5
1,686,458	1,824,529	89,961	593,910	1,624,717	1,708,060	82,691	589,247	6
( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7
397,099	416,461	6,452	73,482	387,947	371,112	5,725	90,030	8
<sup>1</sup> 5,004	<sup>1</sup> 7,085	<sup>1</sup> 1,845	( <sup>2</sup> )	<sup>1</sup> 3,871	<sup>1</sup> 4,926	<sup>1</sup> 788	( <sup>2</sup> )	9
816,529	918,191	44,096	418,228	751,345	861,817	41,967	378,600	10
302,058	300,791	25,445	52,553	304,698	296,906	22,773	64,396	11
<sup>2</sup> 165,768	<sup>2</sup> 182,001	<sup>2</sup> 12,123	<sup>2</sup> 49,647	<sup>2</sup> 176,856	<sup>2</sup> 173,299	<sup>2</sup> 11,438	<sup>2</sup> 56,221	12
( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	13
2,547,954	2,469,869	130,799	896,802	2,443,122	2,436,235	134,792	814,775	14
1,393,415	1,395,773	79,565	483,588	1,406,431	1,373,159	82,646	467,436	15
135,824	128,464	9,228	33,235	153,395	147,023	10,480	27,371	16
32,305	22,826	4,288	36,500	20,448	22,950	4,728	34,529	17
<sup>3</sup> 986,410	<sup>3</sup> 922,806	<sup>3</sup> 37,718	<sup>3</sup> 343,479	<sup>3</sup> 862,848	<sup>3</sup> 893,103	<sup>3</sup> 36,938	<sup>3</sup> 285,439	18
( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	19
2,131,974	1,934,424	65,068	584,625	2,096,816	1,908,986	66,784	631,816	20
59,924	65,758	6,157	23,674	70,232	74,640	6,973	20,639	21
216	380	217	(D)	313	300	179	(D)	22
59,708	65,378	5,940	(D)	69,919	74,340	6,794	(D)	23
<sup>4</sup> 1,221,171	<sup>4</sup> 1,233,078	<sup>4</sup> 70,197	<sup>4</sup> 189,439	<sup>4</sup> 1,235,689	<sup>4</sup> 1,216,367	<sup>4</sup> 69,902	<sup>4</sup> 193,526	24
( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	25
111,717	110,142	2,966	23,420	110,579	102,190	2,899	29,908	26
872,551	861,957	39,388	( <sup>4</sup> )	889,705	879,424	38,871	( <sup>4</sup> )	27
( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	28
80,071	79,165	4,288	13,064	83,397	83,430	4,228	12,901	29
<sup>5</sup> 220,182	<sup>5</sup> 220,466	<sup>5</sup> 10,780	<sup>5</sup> 10,077	<sup>5</sup> 220,633	<sup>5</sup> 220,298	<sup>5</sup> 10,828	<sup>5</sup> 9,879	30
<sup>9</sup> 9,127	10,336	3,108	( <sup>5</sup> )	9,675	10,233	3,153	( <sup>5</sup> )	31
( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	32
1,939	2,320	707	1,078	2,866	2,436	738	1,439	33
( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	34
<sup>6</sup> 972,043	<sup>6</sup> 1,002,841	<sup>6</sup> 140,405	<sup>6</sup> 147,460	<sup>6</sup> 979,443	<sup>6</sup> 965,908	<sup>6</sup> 135,467	<sup>6</sup> 161,670	35
( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	36
244,317	253,709	17,770	37,012	239,162	222,116	15,275	54,188	37
506,341	506,468	81,222	45,496	493,552	502,668	78,917	42,350	38
35,420	35,723	10,961	3,805	35,729	35,436	10,468	3,753	39
<sup>a</sup> 5,504	<sup>a</sup> 5,401	2,691	( <sup>6</sup> )	<sup>a</sup> 6,390	<sup>a</sup> 6,138	2,974	( <sup>6</sup> )	40
( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	41
( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	42
74,120	68,714	4,125	17,037	81,304	70,227	4,269	27,520	43
<sup>7</sup> 71,007	<sup>7</sup> 65,891	<sup>7</sup> 3,507	<sup>7</sup> 16,401	<sup>7</sup> 78,233	<sup>7</sup> 67,009	<sup>7</sup> 3,584	<sup>7</sup> 27,371	44
<sup>a</sup> 3,113	<sup>a</sup> 2,823	618	636	<sup>a</sup> 3,071	<sup>a</sup> 3,218	685	149	45
234,249	234,347	40,383	24,018	223,745	222,660	37,636	24,472	46
<sup>7</sup> 22,292	<sup>7</sup> 22,214	<sup>7</sup> 5,330	<sup>7</sup> 10,928	<sup>7</sup> 22,245	<sup>7</sup> 22,196	<sup>7</sup> 5,324	<sup>7</sup> 10,874	47
130,538	130,195	22,466	9,989	118,579	117,902	20,617	10,046	48
55,037	55,752	10,836	<sup>a</sup> 3,101	56,456	56,364	9,947	3,496	49
<sup>a</sup> 26,382	<sup>a</sup> 26,186	1,751	( <sup>7</sup> )	<sup>a</sup> 26,465	<sup>a</sup> 26,198	1,748	( <sup>7</sup> )	50
( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	51
251,550	253,203	13,922	29,518	243,569	235,717	13,108	37,137	52
93,246	93,498	6,182	8,496	92,436	92,833	6,137	8,490	53
<sup>a</sup> 158,304	<sup>a</sup> 159,705	7,740	<sup>a</sup> 21,022	<sup>a</sup> 151,133	<sup>a</sup> 142,884	6,971	28,647	54
10,552	15,403	1,660	6,801	11,732	13,804	1,501	7,263	55



Table 22. Production, Shipments, and Stocks of Plumbing Fixtures: 1994

[Quantity in units. Value in thousands of dollars]

Line no.	Product code	Product description	Company count	First quarter				Second quarter			
				Quantity produced	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter
					Quantity	Value			Quantity	Value	
		Plumbing fixtures—Con.									
56		Whirlpool baths, not spas or hot tubs (noninstitutional) . . . . .	(NA)	113,294	116,733	80,915	17,468	107,098	105,055	71,929	19,283
57	34310 86	Cast iron (enameled) . . . . .	2	<sup>8</sup> 1,708	<sup>8</sup> 1,832	<sup>8</sup> 2,761	<sup>8</sup> 666	<sup>8</sup> 1,817	<sup>8</sup> 1,762	<sup>8</sup> 2,748	<sup>8</sup> 686
58	30880 26	Fiberglass (FRP) gel coat . . . . .	22	8,978	9,601	6,039	1,779	8,881	9,205	5,778	1,867
59	30880 27	Fiberglass (FRP) acrylic . . . . .	35	88,945	93,022	64,633	12,934	84,407	82,036	55,598	14,857
60	30880 28	Cultured marble . . . . .	45	2,357	2,337	2,602	<sup>9</sup> 2,089	2,961	2,729	3,357	<sup>9</sup> 1,873
61	30886 29	Other plastics . . . . .	6	11,306	9,941	4,880	<sup>(8)</sup>	9,032	9,323	4,448	<sup>(8)</sup>
62	19001 12	All other materials . . . . .	3	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>
63	19001 13	Hot tubs (noninstitutional, all materials) . .	1	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
64	19001 15	Spas (noninstitutional, all materials) . . . .	<sup>10</sup> 28	<sup>10</sup> 36,784	<sup>10</sup> 37,408	<sup>10</sup> 82,774	<sup>10</sup> 5,502	<sup>10</sup> 32,561	<sup>10</sup> 32,392	<sup>10</sup> 73,022	<sup>10</sup> 5,687
65		All other fixtures not described above. . . .	(NA)	(X)	(X)	12,142	(X)	(X)	(X)	12,236	(X)
66	30882 20	Plastics . . . . .	6	(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)
67	19002 20	All other materials . . . . .	9	(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)

D Withheld to avoid disclosing data for individual companies. <sup>8</sup> Revised by 5 percent or more from previously published data.  
 NA Not available. X Not applicable.

<sup>1</sup> "Drinking fountains, metal," "Drinking fountains, vitreous china," and "Drinking fountains, all other materials" are included with "Drinking fountains" to avoid disclosing data for individual companies.

<sup>2</sup> "Lavatories, cast iron (enameled)" and "Lavatories, all other materials" are included with "Lavatories, other plastics" to avoid disclosing data for individual companies. Stocks, end of quarter, for "Lavatories, stainless steel" are also included with "Lavatories, other plastics" to avoid disclosing data for individual companies.

<sup>3</sup> "Water closet bowls, all other materials" are included with "Water closet bowls, close couple" to avoid disclosing data for individual companies.

<sup>4</sup> "Kitchen sinks, cast iron (enameled)" and "Kitchen sinks, all other materials" are included with "Kitchen sinks, total" to avoid disclosing data for individual companies. Stocks, end of quarter, for "Kitchen sinks, steel (stainless)" also are included with "Kitchen sinks, total" to avoid disclosing data for individual companies.

<sup>5</sup> "Wash sinks, plastics" and "Wash sinks, concrete and all other materials" are included with "Wash sinks, total" to avoid disclosing data for individual companies. Stocks, end of quarter, for "Wash sinks, metal" also are included with "Wash sinks, total" to avoid disclosing data for individual companies.

<sup>6</sup> "Bathtubs, cast iron (enameled)," "Bathtubs, other plastics," and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing data for individual companies.

<sup>7</sup> "Shower stalls, all other materials" are included with "Shower stalls, metal" to avoid disclosing data for individual companies. Stocks, end of quarter, for "Shower stalls, other plastics" also are included with "Shower stalls, metal" to avoid disclosing data for individual companies.

<sup>8</sup> "Whirlpool baths, all other materials" are included with "Whirlpool baths, cast iron (enameled)" to avoid disclosing data for individual companies.

<sup>9</sup> Stocks, end of quarter, for "Whirlpool baths, other plastics" are included with "Whirlpool baths, cultured marble" to avoid disclosing data for individual companies.

<sup>10</sup> "Hot tubs" are included with "Spas" to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows (see "Description of Survey" in the text for a discussion of estimation of missing reports): <sup>a</sup> 25 to 50 percent of this item is estimated. <sup>b</sup> Over 50 percent of this item is estimated.

Third quarter				Fourth quarter				Line no.
Quantity produced	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter	
	Quantity	Value			Quantity	Value		
113,294	116,733	80,915	17,468	107,098	105,055	71,929	19,283	56
<sup>8</sup> 1,708	<sup>8</sup> 1,832	<sup>8</sup> 2,761	<sup>8</sup> 666	<sup>8</sup> 1,817	<sup>8</sup> 1,762	<sup>8</sup> 2,748	<sup>8</sup> 686	57
8,978	9,601	6,039	1,779	8,881	9,205	5,778	1,867	58
88,945	93,022	64,633	12,934	84,407	82,036	55,598	14,857	59
2,357	2,337	2,602	<sup>9</sup> 2,089	2,961	2,729	3,357	<sup>9</sup> 1,873	60
11,306	9,941	4,880	( <sup>8</sup> )	9,032	9,323	4,448	( <sup>8</sup> )	61
( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	62
( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	63
<sup>10</sup> 36,784	<sup>10</sup> 37,408	<sup>10</sup> 82,774	<sup>10</sup> 5,502	<sup>10</sup> 32,561	<sup>10</sup> 32,392	<sup>10</sup> 73,022	<sup>10</sup> 5,687	64
(X)	(X)	12,142	(X)	(X)	(X)	12,236	(X)	65
(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)	66
(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)	67

Table 23. Shipments, Exports, Imports, and Apparent Consumption of Plumbing Fixtures: 1995 and 1994

[Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise <sup>1 2</sup> (value at port)	Value of imports for consumption <sup>1 3 4</sup>	Apparent consumption <sup>5</sup>
	<b>1995</b>				
	Plumbing fixtures .....	2,803,809	153,505	248,887	2,899,191
32610 pt.	Vitreous.....	891,869	61,146	71,215	901,938
34310 pt.	Metal.....	578,319	52,544	117,918	643,693
30880 pt.	Plastics and fiberglass.....	1,333,621	39,815	59,754	1,353,560
	<b>1994</b>				
	Plumbing fixtures .....	2,757,732	178,078	248,488	2,828,142
32610 pt.	Vitreous.....	941,060	64,697	75,828	952,191
34310 pt.	Metal.....	585,625	74,970	116,671	627,326
30880 pt.	Plastics and fiberglass.....	1,231,047	38,411	55,989	1,248,625

pt. Part.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry into the United States plus U.S. import duties.

<sup>5</sup>Apparent consumption is derived by subtracting exports from total of manufacturers' shipments plus imports.

## HISTORICAL NOTE

Data on plumbing fixtures have been collected by the Bureau of the Census since 1946. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche. For further information, contact the Bureau of the Census, Customer Services, 301-457-4100.

## FUNDING

This survey is funded by the Plumbing Manufacturers' Institute and by the International Cast Polymers Association.

## CONTACT FOR DATA USERS

For additional information about these data, contact J. Stanis Batton, 301-457-4750.

## Chapter 4. Chemicals and Related Products

### GENERAL INFORMATION

This section contains data for chemicals and related products. Included in this section is information regarding inorganic chemicals and fertilizer materials, industrial gases, paint and allied products, and pharmaceutical preparations. The inorganic chemicals and fertilizer materials group covers inorganic chemicals and fertilizer materials including chlorine, sodium hydroxide, titanium dioxide, inorganic acids, inorganic aluminum compounds, sodium and potassium compounds, ammonia, urea, phosphoric

and sulfuric acid, and superphosphates and phosphatic fertilizer materials. The industrial gases group covers oxygen, helium, carbon dioxide, argon, nitrogen, and all other industrial gases. The paint and allied products group covers special-purpose coatings, architectural coatings, and original equipment manufactures OEM coatings. Finally, the pharmaceutical preparations group covers all pharmaceutical preparations for human and veterinary use, including antacids, cold remedies, dermatological preparations, insulin preparations, laxatives, and vitamin preparations.

### INORGANIC CHEMICALS (MA28A) AND FERTILIZER MATERIALS AND RELATED PRODUCTS (MA28B)

#### INTRODUCTION

The inorganic chemicals and fertilizer materials included in this report cover inorganic chemicals and fertilizer materials manufactured in the United States. They are collected in surveys MQ28A and MA28A, Inorganic Chemicals, and in surveys MQ28B and MA28B, Fertilizer Materials. In the manufacturing of these products, a chemical reaction must take place, physically altering the chemical makeup of the inorganic chemical or fertilizer material. If a chemical is mined, with no further transformation of that chemical, that chemical and the establishment mining that chemical are considered out of scope of manufacturing. Also, if a company is just mixing two different fertilizer materials together, with no chemical reaction occurring, they are considered in scope of manufacturing, but out of scope of inorganic chemicals and fertilizer materials.

The unit of measure (basis) for most of the quantities of inorganic chemicals and fertilizer materials contained in this report is 100 percent of the chemical compound. For example, if a company manufactures 100 tons of 100 percent HCl (hydrochloric acid), that company would report 100 tons of production. However, if the company manufactured 100 tons of a diluted HCl, about 75 percent HCl concentrate, that company would report 75 tons as their production. This is the amount of 100 percent HCl produced in the 75 percent solution.

The Current Industrial Reports (CIR's) on inorganic chemicals and fertilizer materials are annually compared with the Census Bureau's annual survey of manufactures

(ASM). The ASM collects information on product shipments, as well as numerous other statistics, including number of employees, wages, plant worker, hours, inventories, cost of materials, and resales. The value of product shipments is reconciled between the two reports in the time period after the CIR annual report is released, but before the ASM is released. Any revisions to the CIR surveys are then carried the following year.

The comparison of the CIR surveys on inorganic chemicals and fertilizer materials with the ASM product classes for 1995 and 1994 follows (value is in millions of dollars):

The value of shipments for the five-digit product classes for inorganic chemicals and fertilizer materials are generally within 2 percent. The product classes that differ by more than 2 percent are most likely a result of ASM sampling differences. The CIR reports are complete coverage (universe) surveys for the product classes covered; whereas, the ASM is a sample survey that uses a weighting factor to account for companies not sampled.

#### SUMMARY OF FINDINGS

The value of shipments of alkalis and chlorine (SIC 2812) amounted to \$3,143.8 million in 1995, a 38-percent increase from the 1994 level of \$2,275.1 million. Value of shipments of chlorine (SIC 28121) decreased 5 percent to \$800.1 million in 1995, from \$840.9 million in 1994. Value of shipments of sodium hydroxide (SIC 28123) increased 86 percent to \$1,954.6 million in 1995, from \$1,051.2

million in 1994. Value of shipments of other alkalies (SIC 28125) were virtually unchanged at \$379.6 million in 1995 and \$376.2 million in 1994.

Titanium dioxide (SIC 28161) production remained virtually unchanged at 1,382.3 thousand short tons in 1995 and 1,379.9 thousand short tons in 1994. The unit price decreased 6 percent to \$1,565.48 per short ton in 1995, from \$1,658.34 per short ton in 1994.

Shipments of inorganic chemicals, n.e.c. (SIC 2819), increased 12 percent, from the 1994 total of \$12,675.6 million to \$14,251.9 million in 1995. Leading the industry in shipments were potassium and sodium compounds (SIC 28197), which increased 9 percent, from \$1,872.1 million in 1994 to \$2,046.2 million in 1995; and other inorganic chemicals, n.e.c. (SIC 28199), with \$7,544.4 million in shipments in 1995, a 12-percent increase from 1994 shipments of \$6,733.7 million.

United States production of sulfuric acid (SIC 28193) totaled 47,519.3 thousand short tons (100 percent H<sub>2</sub>SO<sub>4</sub> in 1995, approximately 5.9 percent above the figure of

44,861.9 thousand short tons for 1994. Value of shipments (including interplant transfers) amounted to \$553.9 million in 1995, compared with the value of \$461.9 million for 1994. The average unit price of sulfuric acid (SIC 28193) was \$43.64 per short ton in 1995. This is an increase of 11.3 percent, from the average unit price of \$39.20 per short ton in 1994.

Value of shipments of synthetic ammonia, nitric acid, and ammonium compounds (SIC 28731) increased 4.4 percent to \$3,642.6 million in 1995, from the 1994 level of \$3,488.7 million. Shipments of urea (SIC 28732) increased 16.8 percent to \$848.3 million in 1995, and shipments of phosphoric acid increased 10.7 percent to \$1,221.0.

Production of superphosphate and other phosphatic fertilizer materials (100 percent P<sub>2</sub>O<sub>5</sub>) (SIC 28742) increased 3.2 percent to 10,364.2 thousand short tons for 1995. The value of shipments amounted to \$3,594.3 million in 1995, compared with the value of \$2,920.7 million in 1994.

Table 1. **Summary of Production and Shipments of Inorganic Chemicals and Fertilizer Materials: 1991 to 1995**

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Product description	Year	Total production (quantity)	Total shipments including interplant transfers	
				Quantity	Value
2812—	Alkalies and chlorine .....	1995 .....	(X)	(X)	13,143.8
		1994 .....	(X)	(X)	12,275.1
		1993 .....	(X)	(X)	12,278.2
		1992 .....	(X)	(X)	12,760.7
		1991 .....	(X)	(X)	13,028.7
28121—	Chlorine (100 percent Cl) .....	1995 .....	(X)	(X)	800.1
		1994 .....	(X)	(X)	840.9
		1993 .....	(X)	(X)	546.1
		1992 .....	(X)	(X)	194.5
		1991 .....	(X)	(X)	259.7
28123—	Sodium hydroxide (caustic soda) .....	1995 .....	(X)	(X)	1,954.6
		1994 .....	(X)	(X)	1,051.2
		1993 .....	(X)	(X)	1,369.9
		1992 .....	(X)	(X)	2,206.3
		1991 .....	(X)	(X)	2,387.0
28125—	Other alkalies .....	1995 .....	(X)	(X)	379.6
		1994 .....	(X)	(X)	376.2
		1993 .....	(X)	(X)	355.4
		1992 .....	(X)	(X)	353.2
		1991 .....	(X)	(X)	375.0
28120 00	Alkalies and chlorine, n.s.k. ....	1995 .....	(X)	(X)	19.5
		1994 .....	(X)	(X)	16.9
		1993 .....	(X)	(X)	16.8
		1992 .....	(X)	(X)	16.7
		1991 .....	(X)	(X)	17.1
2816—	Inorganic color pigments .....	1995 .....	(X)	(X)	2,284.2
		1994 .....	(X)	(X)	2,470.9
		1993 .....	(X)	(X)	2,390.8
		1992 .....	(X)	(X)	2,427.8
		1991 .....	(X)	(X)	2,064.6
28161 00	Titanium dioxide (composite and pure) (commodity weight) .....	1995 .....	1,382.3	1,362.5	2,132.9
		1994 .....	1,379.9	1,397.9	2,318.1
		1993 .....	1,279.3	1,274.8	2,253.1
		1992 .....	1,253.4	1,240.6	2,316.4
		1991 .....	1,094.9	1,080.9	1,948.7

See footnotes at end of table.

Table 1. **Summary of Production and Shipments of Inorganic Chemicals and Fertilizer Materials: 1991 to 1995—Con.**

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Product description	Year	Total production (quantity)	Total shipments including interplant transfers	
				Quantity	Value
2819—	Inorganic chemicals, n.e.c.....	1995 .....	(X)	(X)	<sup>1</sup> 14,251.9
		1994 .....	(X)	(X)	<sup>1</sup> 12,675.6
		1993 .....	(X)	(X)	<sup>1</sup> 11,860.3
		1992 .....	(X)	(X)	<sup>1</sup> 12,838.4
		1991 .....	(X)	(X)	<sup>1</sup> 12,816.7
28193—	Sulfuric acid, gross (new and fortified) .....	1995 .....	47,519.3	12,677.7	553.9
		1994 .....	44,861.9	11,767.2	<sup>1</sup> 461.9
		1993 .....	39,838.5	11,362.0	515.9
		1992 .....	44,523.7	10,950.2	528.7
		1991 .....	43,466.2	11,536.2	586.6
28194—	Inorganic acids (except nitric, phosphoric, and sulfuric) .....	1995 .....	(X)	(X)	528.9
		1994 .....	(X)	(X)	557.6
		1993 .....	(X)	(X)	505.6
		1992 .....	(X)	(X)	504.7
		1991 .....	(X)	(X)	559.3
28195 00	Aluminum oxide (except natural alumina) .....	1995 .....	4,783.2	4,891.0	1,054.0
		1994 .....	4,470.0	4,484.0	812.9
		1993 .....	4,953.7	4,898.4	920.4
		1992 .....	4,916.0	4,927.4	947.5
		1991 .....	5,094.3	5,085.4	1,080.8
28196—	Aluminum compounds .....	1995 .....	(X)	(X)	660.1
		1994 .....	(X)	(X)	602.4
		1993 .....	(X)	(X)	573.9
		1992 .....	(X)	(X)	595.2
		1991 .....	(X)	(X)	661.8
28197—	Potassium and sodium compounds (except bleaches, alkalis, and alums) .....	1995 .....	(X)	(X)	2,046.2
		1994 .....	(X)	(X)	1,872.1
		1993 .....	(X)	(X)	1,884.3
		1992 .....	(X)	(X)	1,931.9
		1991 .....	(X)	(X)	1,891.5
28198 00	Chemical catalytic preparations .....	1995 .....	(X)	(X)	1,633.3
		1994 .....	(X)	(X)	1,424.0
		1993 .....	(X)	(X)	1,380.3
		1992 .....	(X)	(X)	1,349.5
		1991 .....	(X)	(X)	1,238.0
28199—	Other inorganic chemicals, n.e.c. ....	1995 .....	(X)	(X)	7,544.4
		1994 .....	(X)	(X)	6,733.7
		1993 .....	(X)	(X)	5,883.2
		1992 .....	(X)	(X)	6,532.5
		1991 .....	(X)	(X)	6,567.0
28190 00	Industrial inorganic chemicals, n.s.k. ....	1995 .....	(X)	(X)	<sup>1</sup> 231.0
		1994 .....	(X)	(X)	<sup>1</sup> 211.1
		1993 .....	(X)	(X)	<sup>1</sup> 196.8
		1992 .....	(X)	(X)	<sup>1</sup> 219.6
		1991 .....	(X)	(X)	<sup>1</sup> 231.8
28422 00	Household bleaching compounds .....	1995 .....	309.0	321.6	929.0
		1994 .....	312.9	306.7	954.8
		1993 .....	262.6	270.2	914.8
		1992 .....	372.7	364.1	919.8
		1991 .....	422.0	418.3	826.2
28731 31	Ammonia, synthetic anhydrous <sup>2</sup> .....	1995 .....	17,402.2	9,715.9	1,586.4
		1994 .....	17,869.1	10,525.3	1,540.8
		1993 .....	17,195.2	10,435.5	1,174.3
		1992 .....	17,924.2	10,642.5	1,095.4
		1991 .....	17,169.2	10,002.2	1,036.0
28731 50	Ammonium nitrate, original solution <sup>3</sup> .....	1995 .....	8,491.4	(X)	(X)
		1994 .....	8,567.6	(X)	(X)
		1993 .....	8,280.9	(X)	(X)
		1992 .....	7,980.6	(X)	(X)
		1991 .....	7,819.2	(X)	(X)
28731 57	Ammonium sulfate <sup>2</sup> .....	1995 .....	2,646.7	2,551.7	195.3
		1994 .....	2,584.1	2,484.9	168.8
		1993 .....	2,432.4	2,416.9	150.4
		1992 .....	2,391.0	2,239.3	139.6
		1991 .....	2,243.0	2,251.3	129.9

See footnotes at end of table.

Table 1. **Summary of Production and Shipments of Inorganic Chemicals and Fertilizer Materials: 1991 to 1995—Con.**

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Product description	Year	Total production (quantity)	Total shipments including interplant transfers	
				Quantity	Value
28732 —	Urea (100 percent) .....	1995 .....	8,126.9	5,242.8	848.3
		1994 .....	8,360.3	5,456.9	726.1
		1993 .....	8,329.6	5,254.8	629.6
		1992 .....	8,766.3	5,343.0	695.7
		1991 .....	8,132.8	5,431.5	722.6
28731 11	Nitric acid (100 percent) .....	1995 .....	8,843.6	1,291.1	162.0
		1994 .....	8,713.7	931.8	116.5
		1993 .....	8,253.9	678.0	88.5
		1992 .....	8,136.0	672.0	85.4
		1991 .....	7,926.6	623.1	81.8
28741 81, 85	Phosphoric acid (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	13,133.8	4,409.3	1,221.0
		1994 .....	12,792.0	4,227.7	1,103.1
		1993 .....	11,515.1	3,687.5	969.3
		1992 .....	12,825.9	4,375.0	1,181.5
		1991 .....	12,109.4	4,397.6	1,282.0
28193 —	Sulfuric acid, gross (100 percent) .....	1995 .....	47,519.3	12,677.7	553.9
		1994 .....	44,861.9	11,767.2	461.9
		1993 .....	39,838.5	11,362.0	515.9
		1992 .....	44,523.7	10,950.2	528.7
		1991 .....	43,466.1	11,536.3	586.5
28742 —	Superphosphates and other fertilizer materials (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	10,364.2	10,231.0	3,594.3
		1994 .....	10,041.6	9,966.9	2,920.7
		1993 .....	8,800.9	8,813.8	2,057.3
		1992 .....	9,696.0	9,665.6	2,530.1
		1991 .....	9,043.9	9,017.0	2,832.4

n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data.  
X Not applicable.

<sup>1</sup>Totals include values for industrial inorganic chemicals not specified by kind (n.s.k.). N.s.k. represents value of shipments for establishments that did not provide detailed information by type of product. These establishments, typically with less than 10 employees, are not included on mailing panel. N.s.k. value has been estimated based on the rate of change for reporting establishments applied to previous year's figure.

<sup>2</sup>Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

<sup>3</sup>Represents total amount of original solution produced for all purposes.

Table 2a. Production and Shipments of Selected Inorganic Chemicals: 1995 and 1994

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Total production (quantity)	Total shipments, including interplant transfers		Total production (quantity)	Total shipments, including interplant transfers	
			Quantity	Value		Quantity	Value
2812—	Alkalies and chlorine . . . . .	(X)	(X)	13,143,781	(X)	(X)	12,275,106
28121 —	Chlorine (100 percent Cl) . . . . .	(X)	(X)	800,146	(X)	(X)	840,902
28121 11	Gas . . . . .	<sup>2</sup> 12,395,320	499,517	58,844	<sup>2</sup> 12,187,313	512,105	61,689
28121 15	Liquid . . . . .	10,162,671	5,372,005	741,302	9,934,248	5,248,050	779,213
28123 —	Sodium hydroxide (caustic soda) . . . . .	(X)	(X)	1,954,586	(X)	(X)	1,051,164
28123 50	Sodium hydroxide, total liquid (all processes) (100 percent NaOH) . . . . .	<sup>3</sup> 11,334,631	(X)	(X)	<sup>3</sup> 12,538,967	(X)	(X)
28123 61	Liquid, 68 to 74 percent <sup>4</sup> . . . . .	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>
28123 65	Liquid, all other <sup>4</sup> . . . . .	<sup>5</sup> 11,331,934	<sup>5</sup> (D)	<sup>5</sup> (D)	<sup>5</sup> 12,529,257	<sup>5</sup> 10,006,139	<sup>5</sup> 972,008
28123 67	Dry (all forms) <sup>6</sup> . . . . .	(D)	(D)	(D)	(D)	201,708	79,156
28125 —	Other alkalies . . . . .	(X)	(X)	379,580	(X)	(X)	376,182
	Potassium hydroxide (caustic potash) (88 to 92 percent KOH):						
28125 21	Liquid . . . . .	(D)	(D)	(D)	(D)	<sup>1</sup> 389,160	<sup>1</sup> 143,220
28125 23	Solid . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28125 30	Finished sodium bicarbonate . . . . .	461,442	462,762	170,432	(D)	(D)	(D)
28125 40	Potassium carbonate . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28125 90	Sodium carbonate (soda ash):						
14745 11	Natural and synthetic <sup>7</sup> . . . . .	11,025	(NA)	(NA)	10,276	(NA)	(NA)
28125 90	Alkalies, n.e.c., including soda ash, sal soda, and modified sodas; excluding alkaline detergents . . . . .	(X)	(X)	18,073	(X)	(X)	<sup>1</sup> 18,865
28120 00	Alkalies and chlorine, n.s.k. . . . .	(X)	(X)	<sup>1</sup> 9,469	(X)	(X)	<sup>1</sup> 6,858
2816—	Inorganic color pigments . . . . .	(X)	(X)	2,284,232	(X)	(X)	2,470,873
28161 00	Titanium dioxide (composite and pure) (commodity weight) . . . . .	1,382,333	1,362,459	2,132,908	1,379,884	1,397,850	2,318,113
28163 13	Chrome green (C.P.) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28163 15	Chrome yellow and orange (C.P.) . . . . .	8,300	8,172	28,405	11,320	11,330	34,887
28163 17	Molybdate chrome orange (C.P.) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28163 18	Zinc yellow (zinc chromate) (C.P.) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28163 19	Other chrome colors (C.P.) . . . . .	(D)	31,311	87,188	31,778	32,040	79,778
2819—	Inorganic chemicals, n.e.c. <sup>8</sup> . . . . .	(X)	(X)	14,251,876	(X)	(X)	12,675,627
28193 00	Sulfuric acid, gross (new and fortified) <sup>9</sup> . . . . .	47,519,288	12,677,717	553,944	44,861,919	11,767,162	<sup>1</sup> 461,894
28194 —	Inorganic acids (except nitric, phosphoric, and sulfuric) . . . . .	(X)	(X)	528,913	(X)	(X)	557,608
28194 11	Boric (boracic) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
	Hydrochloric acid, including anhydrous (100 percent HCl) <sup>10</sup> . . . . .	3,907,075	1,576,944	142,045	3,754,429	1,452,926	118,575
28194 41	From salt and acid . . . . .	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>
28194 45	From chlorine and hydrogen . . . . .	361,155	275,212	36,328	<sup>1</sup> 348,871	264,323	<sup>1</sup> 28,691
28194 47	Byproduct and other . . . . .	<sup>11</sup> 3,545,920	<sup>11</sup> 1,301,732	<sup>11</sup> 105,717	<sup>11</sup> 3,405,558	<sup>11</sup> 1,188,603	<sup>11</sup> 89,884
28194 51	Hydrocyanic, including anhydrous (100 percent HCN) . . . . .	531,635	149,298	91,327	466,440	121,868	77,084
	Hydrofluoric (100 percent HF):						
	Produced and withdrawn from system:						
28194 61	Anhydrous . . . . .	<sup>12</sup> 192,237	(D)	(D)	(D)	(D)	(D)
28194 65	Technical . . . . .	<sup>(12)</sup>	(D)	(D)	(D)	(D)	(D)
28194 67	Mixed (sulfuric and nitric) (commodity weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28194 98	Other inorganic acids, n.e.c., including chlorosulfonic and perchloric . . . . .	(X)	(X)	146,463	(X)	(X)	127,995
28195 00	Aluminum oxide (except natural alumina) . . . . .	4,783,233	4,891,003	1,053,958	4,469,949	4,483,962	812,850
28196 —	Aluminum compounds . . . . .	(X)	(X)	660,095	(X)	(X)	602,403
	Chloride:						
28196 13	Liquid and crystal (100 percent AlCl <sub>3</sub> ) . . . . .	30,816	(D)	(D)	19,472	(D)	(D)
28196 17	Anhydrous (100 percent AlCl <sub>3</sub> ) . . . . .	31,263	31,197	19,761	26,070	26,610	14,795
28196 25	Hydroxide, trihydrate (100 percent Al <sub>2</sub> O <sub>3</sub> ·3H <sub>2</sub> O) . . . . .	1,058,268	1,106,836	227,144	1,052,460	1,059,217	207,490
28196 27	Fluoride (technical) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
	Sulfate:						
28196 51	Commercial (17 percent Al <sub>2</sub> O <sub>3</sub> ), excluding municipalities . . . . .	1,143,748	1,101,185	108,961	1,139,841	1,081,661	106,326
28196 55	Iron-free (17 percent Al <sub>2</sub> O <sub>3</sub> ) . . . . .	170,583	177,153	17,349	176,160	171,883	18,255
28196 73	Aluminates (sodium aluminate, potassium aluminate, etc. (100 percent by weight)) . . . . .	201,182	200,896	38,216	148,623	146,855	29,038
28196 79	Other inorganic aluminum compounds (e.g., light aluminum hydroxide, and cryolite) . . . . .	(X)	(X)	189,295	(X)	(X)	178,910

See footnotes at end of table.



Table 2a. Production and Shipments of Selected Inorganic Chemicals: 1995 and 1994—Con.

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Total production (quantity)	Total shipments, including interplant transfers		Total production (quantity)	Total shipments, including interplant transfers	
			Quantity	Value		Quantity	Value
28197 —	Inorganic chemicals, n.e.c.—Con.						
	Potassium and sodium compounds (except bleaches, alkalis, and alums) . . . . .	(X)	(X)	2,046,244	(X)	(X)	1,872,064
	Potassium compounds, n.e.c.:						
28197 13	Iodide (100 percent KI) . . . . .	1,202	<sup>a</sup> 1,169	<sup>a</sup> 14,361	1,574	1,379	12,659
28197 16	Sulfate (100 percent K <sub>2</sub> SO <sub>4</sub> ) . . . . .	(D)	(D)	(D)	424,011	409,904	60,104
28197 18	Pyrophosphate (tetrapotassium pyrophosphate) (100 percent K <sub>4</sub> P <sub>2</sub> O <sub>7</sub> ) . . . . .	27,213	22,781	26,669	26,330	22,746	26,158
28197 23	Potassium phosphates (100 percent by weight) . . . . .	12,511	12,481	17,884	12,813	12,445	17,023
28197 24	Potassium silicates (100 percent by weight) . . . . .	(D)	(D)	(D)	7,679	7,701	<sup>a</sup> 4,035
28197 17	Other potassium salts and compounds, n.e.c., including potassium chlorate, nitrate, and perchlorate . . . . .	(X)	(X)	89,206	(X)	(X)	97,144
28197 21	Sodium (metal) (100 percent Na) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
	Sodium compounds, n.e.c.:						
28197 28	Sodium bromides (100 percent by weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28197 27	Chlorate (100 percent NaClO <sub>3</sub> ) . . . . .	614,536	598,591	207,123	559,015	561,031	174,108
28197 29	Hydrosulfide (sodium sulfhydrate) (100 percent NaSH) . . . . .	124,041	123,695	39,637	116,798	120,641	<sup>a</sup> 28,068
28197 30	Hydrosulfite (100 percent Na <sub>2</sub> S <sub>2</sub> O <sub>4</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
	Phosphate:						
28197 32	Monobasic (100 percent NaH <sub>2</sub> S <sub>2</sub> PO <sub>4</sub> ) <sup>13</sup> . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28197 33	Dibasic (100 percent Na <sub>2</sub> HPO <sub>4</sub> ) <sup>13</sup> . . . . .	20,723	21,371	28,405	20,193	20,738	27,644
28197 34	Tribasic (100 percent Na <sub>3</sub> PO <sub>4</sub> ) . . . . .	20,968	21,876	16,439	22,308	24,252	18,039
28197 35	Tetrabasic (pyro) (100 percent Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub> ) . . . . .	(D)	15,607	15,334	(D)	14,895	14,858
28197 36	Meta (100 percent NaPO <sub>3</sub> ) . . . . .	43,275	39,324	36,598	39,836	36,353	34,211
28197 37	Acid pyro . . . . .	32,819	32,639	32,237	32,800	32,675	32,011
28197 38	Tripoly (100 percent Na <sub>5</sub> P <sub>3</sub> P <sub>10</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28197 39	Other sodium phosphates . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
	Silicates:						
28197 41	Soluble silicate glass (water glass, solid, and liquid) (anhydrous) <sup>14</sup> . . . . .	1,203,396	729,767	233,771	1,007,442	583,086	139,218
28197 42	Metasilicate pentahydrate (100 percent Na <sub>2</sub> SiO <sub>3</sub> ) . . . . .	45,156	44,845	11,131	47,298	39,378	13,424
28197 44	Metasilicate anhydrous (100 percent Na <sub>2</sub> SiO <sub>3</sub> ) . . . . .	48,249	49,538	17,198	47,478	41,503	19,612
28197 51	Silicofluoride (100 percent Na <sub>2</sub> SiF <sub>6</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
	Sulfate:						
28197 61	High purity (100 percent Na <sub>2</sub> SO <sub>4</sub> ) . . . . .	(D)	496,639	33,863	(D)	504,799	40,271
28197 66	Lower purity (100 percent Na <sub>2</sub> SO <sub>4</sub> ) and Glauber's salt (100 percent Na <sub>2</sub> SO <sub>4</sub> ·10H <sub>2</sub> O) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28197 84	Sulfite (100 percent Na <sub>2</sub> SO <sub>3</sub> ) . . . . .	117,262	86,911	26,251	113,989	103,397	25,527
28197 85	Thiosulfate (hypo) (100 percent Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ·5H <sub>2</sub> O) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28197 87	Other sodium compounds, n.e.c., including sodium bisulfate, bifluoride, borate, fluoride, and other silicates, excluding bleaches . . . . .	(X)	(X)	686,980	(X)	(X)	652,352
28198 00	Chemical catalytic preparations . . . . .	(X)	(X)	1,633,284	(X)	(X)	1,424,012
28199 —	Other inorganic chemicals, n.e.c. . . . .	(X)	(X)	7,544,390	(X)	(X)	6,733,734
28199 01	Reagent and high purity grades of inorganic chemicals refined from purchased technical grades . . . . .	(X)	(X)	41,579	(X)	(X)	(D)
28199 02	Antimony compounds, excluding pigment grades . . . . .	(X)	(X)	(D)	(X)	(X)	67,973
	Barium compounds:						
28199 04	Carbonate (precipitated) (100 percent BaCO <sub>3</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 05	Sulfate (100 percent BaSO <sub>4</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 06	Other barium compounds, including barium chloride, nitrate, peroxide, and sulfide; excluding pigment grades . . . . .	(X)	(X)	21,097	(X)	(X)	20,118
28199 09	Bismuth compounds, excluding bismuth carbonate <sup>15</sup> . . . . .	(X)	(X)	13,855	(X)	(X)	10,774
28199 10	Bromine (isolated) (100 percent Br) . . . . .	(D)	63,982	43,229	(D)	56,574	35,002
28199 11	Cadmium compounds . . . . .	(X)	(X)	8,931	(X)	(X)	10,353
	Calcium compounds:						
28199 12	Carbide (commercial) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 13	Carbonate (precipitated) (100 percent CaCO <sub>3</sub> ) . . . . .	2,565,746	2,590,962	280,038	2,253,123	2,233,489	249,131
28199 14	Chloride (100 percent CaCl <sub>2</sub> ) . . . . .	697,732	(D)	(D)	638,343	(D)	(D)
	Phosphates:						
28199 18	Monobasic (100 percent CaH <sub>4</sub> (PO <sub>4</sub> ) <sub>2</sub> )(21 percent P) . . . . .	801,326	805,544	190,516	774,134	762,616	178,576
28199 19	Dibasic (100 percent CaHPO <sub>4</sub> )(18.5 percent P) . . . . .	728,414	730,275	204,642	833,115	828,386	224,568
	Tribasic (100 percent Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> )(18 percent P):						
28742 71	Animal feed grades . . . . .	498,212	511,389	101,484	413,729	425,474	84,439
28199 22	Other grades . . . . .	37,697	37,109	30,260	36,459	39,134	29,160
28199 23	Other inorganic calcium compounds . . . . .	(X)	(X)	75,488	(X)	(X)	49,686
	Carbon activated:						
28199 25	Granular carbons (dry weight) . . . . .	83,913	90,176	167,144	81,705	82,687	154,640
28199 27	Pulverized carbons (dry weight) . . . . .	72,319	69,080	63,832	75,796	75,039	67,432

See footnotes at end of table.

Table 2a. Production and Shipments of Selected Inorganic Chemicals: 1995 and 1994—Con.

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Total production (quantity)	Total shipments, including interplant transfers		Total production (quantity)	Total shipments, including interplant transfers	
			Quantity	Value		Quantity	Value
	Inorganic chemicals, n.e.c.—Con.						
	Other inorganic chemicals, n.e.c.—Con.						
	Chromium compounds:						
28199 33	Sodium bichromate and chromate (hydrous) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 34	Other chromium compounds, including potassium bichromate and excluding chrome colors . . . . .	(X)	(X)	96,649	(X)	(X)	'91,575
	Copper compounds:						
28199 35	Cuprous oxide (100 percent Cu <sub>2</sub> O) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 37	Other copper compounds, including copper cyanide and copper sulfate . . . . .	(X)	(X)	84,976	(X)	(X)	86,174
28199 38	Gold compounds . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
28199 39	Hydrogen peroxide (100 percent by weight) <sup>16</sup> . . . . .	355,116	349,764	282,405	318,420	329,846	227,772
28199 40	Iodine, crude or resublimed (100 percent I) . . . . .	2,773,648	(D)	(D)	(D)	(D)	(D)
	Iron compounds:						
28199 42	Ferric chloride (100 percent FeCl <sub>3</sub> ) . . . . .	209,193	223,284	40,949	205,858	210,669	33,502
28199 43	Iron oxides and hydroxides (100 percent by weight), excluding iron oxide pigments . . . . .	36,806	37,566	9,972	35,294	(D)	(D)
28199 44	Other iron compounds, including ferrous sulfate . . . . .	(X)	(X)	66,970	(X)	(X)	52,892
28199 45	Lithium compounds . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
	Magnesium compounds:						
28199 48	Chloride (100 percent MgCl <sub>2</sub> ) . . . . .	(D)	227,391	13,754	684,446	'127,440	16,293
28199 49	Sulfate (100 percent MgSO <sub>4</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 50	Other magnesium compounds, including magnesium and epsom salts . . . . .	(X)	(X)	73,661	(X)	(X)	83,109
	Manganese compounds:						
28199 51	Dioxide (100 percent MnO <sub>2</sub> ) . . . . .	70,099	70,134	101,167	55,509	52,091	80,234
28199 52	Other manganese compounds, including potassium, and other permanganates, battery grade, and manganese sulfate . . . . .	(X)	(X)	69,957	(X)	(X)	64,560
	Mercury and compounds:						
28199 53	Mercury, redistilled (quantity in pounds) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 54	Other mercury compounds, including mercuric oxide; excluding mercuric fulminate and medicinal grades. . . . .	(X)	(X)	158	(X)	(X)	224
	Molybdenum compounds:						
28199 5A	Oxides (100 percent by weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 5B	Molybdates (ammonium molybdate, sodium molybdates, etc.) (100 percent by weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 5C	Other molybdenum compounds . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
	Nickel compounds:						
28199 56	Oxides and hydroxides (100 percent by weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 57	Chloride (100 percent NiCl <sub>2</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 55	Sulfate (100 percent NiSO <sub>4</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 59	Other nickel compounds . . . . .	(X)	(X)	28,489	(X)	(X)	22,554
	Phosphorus and compounds:						
28199 58	Phosphorus, elemental (technical) . . . . .	(D)	271,712	381,951	254,987	258,395	381,952
28199 60	Oxychloride (100 percent POCl <sub>3</sub> ) . . . . .	39,699	9,591	7,580	36,064	9,721	9,290
28199 61	Pentasulfide (100 percent P <sub>2</sub> S <sub>5</sub> ) . . . . .	63,015	(D)	(D)	60,877	46,785	50,212
28199 63	Trichloride (chloride) (100 percent PCl <sub>3</sub> ) . . . . .	186,358	51,368	35,745	'157,850	38,242	23,600
28199 64	Other phosphorus compounds, including phosphorus pentoxide . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
28199 65	Rare earth compounds . . . . .	(X)	(X)	111,916	(X)	(X)	95,339
	Silicon compounds:						
28199 66	Silicon tetrachloride (siltet) (100 percent SiCl <sub>4</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 67	Silica gel . . . . .	(X)	(X)	43,499	(X)	(X)	50,442
28199 68	Other silicon compounds . . . . .	(X)	(X)	60,877	(X)	(X)	(D)
28199 73	Silver compounds . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
	Strontium compounds:						
28199 71	Carbonate (100 percent SO <sub>2</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 72	Other strontium compounds . . . . .	(X)	(X)	5,185	(X)	(X)	(D)
	Sulfur and sulfur compounds:						
28199 74	Sulfur, recovered elemental (metric tons) <sup>17</sup> . . . . .	8,000	11,800	468	7,160	10,400	296
28199 75	Sulfur dioxide (produced for sale) (100 percent SO <sub>2</sub> ) . . . . .	211,758	218,516	35,960	229,459	230,567	40,663
28199 78	Other sulfur compounds, including sulfur chloride . . . . .	(X)	(X)	101,972	(X)	(X)	77,739
28199 83	Tin compounds . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
	Tungsten compounds:						
28199 84	Tungstates (ammonium tungstate, sodium tungstate, etc.) (100 percent by weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 85	All other tungstate compounds . . . . .	(X)	(X)	243	(X)	(X)	278

See footnotes at end of table.

Table 2a. Production and Shipments of Selected Inorganic Chemicals: 1995 and 1994—Con.

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1995		1994			
		Total production (quantity)	Total shipments, including interplant transfers		Total production (quantity)	Total shipments, including interplant transfers	
			Quantity	Value		Quantity	Value
	Inorganic chemicals, n.e.c.—Con.						
	Other inorganic chemicals, n.e.c.—Con.						
	Zinc compounds:						
28199 87	Sulfate (100 percent ZnSO <sub>4</sub> ·H <sub>2</sub> O) . . . . .	42,814	43,388	23,627	47,037	48,389	24,570
28199 86	Oxide and peroxide (100 percent by weight) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 88	Chloride (100 percent ZnCl <sub>2</sub> ) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 89	Other zinc compounds, excluding pigment grades . . . . .	(X)	(X)	29,785	(X)	(X)	27,720
28199 90	Platinum, radium, tantalum, and thallium . . . . .	(X)	(X)	(D)	(X)	(X)	(D)
28199 98	All other inorganic chemicals, including nuclear fuels titanium tetrachloride, and other titanium compounds . . . . .	(X)	(X)	2,050,390	(X)	(X)	1,772,179
28190 00	Industrial inorganic chemicals, n.s.k. . . . .	(X)	(X)	1,231,048	(X)	(X)	1,211,062
	Chlorine and other inorganic bleaching compounds. . . . .	676,337	684,921	1,173,055	701,349	701,481	1,179,100
28422 —	Household . . . . .	308,973	321,637	929,017	312,854	306,707	954,848
28422 43	Liquid (sodium hypochlorite, etc.) (less than 7 percent available chlorine or equivalent oxidizing value) (100 percent Cl equivalent) . . . . .	252,956	257,341	703,504	263,155	248,323	716,065
28422 53	Dry (calcium hypochlorite, etc.) (less than 50 percent available chlorine or equivalent oxidizing value) (100 percent Cl equivalent) . . . . .	56,017	64,296	225,513	49,699	58,384	238,783
28199 00	Industrial . . . . .	367,364	363,284	244,038	388,495	394,774	224,252
28199 30	Liquid (sodium hypochlorite, etc.) (7 percent or more available chlorine or equivalent oxidizing value) (100 percent Cl equivalent) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28199 15	Dry (calcium hypochlorite, etc.) (50 percent or more available chlorine or equivalent oxidizing value) (100 percent Cl equivalent) . . . . .	(D)	(D)	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Totals include values for industrial inorganic chemicals not specified by kind (n.s.k.). N.s.k. represents value of shipments for establishments that did not provide detailed information by type of product. These establishments, typically with less than 10 employees, are not included on mailing panel. The n.s.k. value has been estimated based on rate of change for reporting establishments applied to previous year's figure.

<sup>2</sup>Includes quantities liquefied for use, storage, or shipments.

<sup>3</sup>Includes quantities later evaporated to dry caustic soda and reported as such.

<sup>4</sup>Includes some liquid shipped as interplant transfers to other establishments for further processing to dry forms.

<sup>5</sup>Product code 28123 61, "Sodium hydroxide liquid, 68 to 74 percent," is combined with product code 28123 65, "Sodium hydroxide liquid, all other," to avoid disclosing data for individual companies.

<sup>6</sup>Includes unspecified amounts produced from liquid caustic received from other establishments.

<sup>7</sup>Source: U.S. Geological Survey. Quantity in thousand short tons.

<sup>8</sup>Includes value of inorganic chemicals shipped by establishments classified in both "manufacturing" and "nonmanufacturing" industries.

<sup>9</sup>Detail data for sulfuric acid are found in table 2b.

<sup>10</sup>Includes anhydrous hydrochloric acid production. Quantity of shipments is 140,322 short tons in 1995 and 135,700 short tons in 1994; value of shipments of \$35,958 in 1995 and \$30,339 in 1994. Quantity of production is withheld to avoid disclosing data for individual companies.

<sup>11</sup>Product code 28194 41, "Hydrochloric acid produced from salt and acid" is combined with product code 28194 47, "Hydrochloric acid byproduct and other" to avoid disclosing data for individual companies.

<sup>12</sup>Product code 28194 65, "Hydrofluoric acid technical produced and withdrawn from the system" is combined with product code 28194 61, "Hydrofluoric acid anhydrous produced and withdrawn from the system" to avoid disclosing data for individual companies.

<sup>13</sup>Represents quantities produced only for sale or interplant transfer.

<sup>14</sup>Quantity produced excludes quantities consumed in the manufacture of meta-, ortho-, and sesquicarbonates. Shipments data include unspecified amounts shipped to other plants for use in manufacturing meta-, ortho-, and sesquicarbonates.

<sup>15</sup>Product code 28199 09, "Other bismuth compounds, excluding bismuth carbonate," is classified as a medicinal chemical and is out of scope of this survey.

<sup>16</sup>Production includes unspecified amounts of hydrogen peroxide produced but not withdrawn from system.

<sup>17</sup>Source: U.S. Geological Survey. Quantity in million short tons; value in million dollars. Includes data for Puerto Rico and the Virgin Islands. Shipped quantity and value include "Frasch sulfur" data to conform with proprietary data requirements.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>20 percent or more of this item is estimated.

Table 2b. Production and Shipments of Fertilizer Materials: 1995 and 1994

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Chemical and basis	1995			1994		
		Total production (quantity)	Total shipments, including interplant transfers		Total production (quantity)	Total shipments, including interplant transfers	
			Quantity	Value		Quantity	Value
28193 —	Sulfuric acid, gross (new and fortified) . . . . .	47,519.3	12,677.7	553.9	44,861.9	11,767.2	461.9
	By feedstock:						
28193 32	Elemental sulfur* . . . . .	39,726.4	7,285.6	363.7	(NA)	(NA)	(NA)
28193 34	Smelting metallic sulfide ore* . . . . .	3,764.5	3,358.0	63.6	(NA)	(NA)	(NA)
28193 36	Decomposition of alkylation and other spent acid* . . . . .	3,477.6	1,852.6	117.4	(NA)	(NA)	(NA)
28193 38	Other* . . . . .	550.8	181.5	9.2	(NA)	(NA)	(NA)
	By grade:						
28193 11	Oleum under 40 percent . . . . .	1,313.7	849.2	44.3	1,341.5	841.2	41.6
28193 21	Oleum 40 percent and more* . . . . .	253.3	259.6	15.2	253.4	253.4	16.1
28193 31	Other than oleum <sup>1</sup> . . . . .	45,952.2	11,569.0	494.5	43,267.0	10,672.5	404.2
28731 —	Synthetic ammonia, nitric acid, and ammonium compounds . . . . .	(X)	(X)	3,642.6	(X)	(X)	3,448.7
28731 11	Nitric acid (100 percent HNO <sub>3</sub> ) <sup>2</sup> . . . . .	8,843.6	1,291.1	162.0	8,713.7	931.1	116.5
28731 31	Ammonia, synthetic anhydrous (100 percent NH <sub>3</sub> ) <sup>3</sup> . . . . .	17,402.2	9,715.9	1,586.4	17,869.1	10,525.3	1,540.8
28731 30	Fertilizer use . . . . .	15,566.4	8,580.8	1,408.0	15,991.7	9,282.2	1,371.1
28731 32	Other uses . . . . .	1,835.7	1,135.1	178.4	1,877.4	1,243.2	169.6
	Ammonium nitrate:						
28731 44	Original melt liquor (100 percent NH <sub>4</sub> NO <sub>3</sub> ) <sup>4</sup> . . . . .	8,491.4	4,467.9	636.0	8,567.6	4,551.2	615.9
	Consumed in the manufacture of:						
	Other nitrogen solutions (100 percent NH <sub>4</sub> NO <sub>3</sub> ) <sup>5</sup> . . . . .	584.6	(X)	(X)	(NA)	(X)	(X)
28731 46	Ammonium nitrate-urea solutions* . . . . .	3,495.1	(X)	(X)	(NA)	(X)	(X)
28731 47	High density prill and granular* . . . . .	2,498.9	2,578.9	344.1	(NA)	(NA)	(NA)
28731 48	Low density prill and grained* . . . . .	1,585.5	1,562.9	247.0	(NA)	(NA)	(NA)
28731 49	All other (liquor sales, etc.)* . . . . .	327.3	326.1	44.9	(NA)	(NA)	(NA)
28731 57	Ammonium sulfate, synthetic and byproduct other than coke oven byproduct (100 percent (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> ) <sup>3</sup> . . . . .	2,646.7	2,551.7	195.3	2,584.1	2,484.9	168.8
28731 56	Synthetic . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28731 58	Byproduct, other than coke oven . . . . .	(D)	(D)	(D)	(D)	(D)	(D)
28731 55	Nitrogen solutions (100 percent N), including mixtures containing urea . . . . .	3,602.9	3,593.9	973.2	3,594.9	3,613.6	948.6
28731 66	Ammonium nitrate/urea solutions . . . . .	3,432.9	3,466.1	950.7	3,420.6	3,438.8	923.4
28731 68	All other compounds and solutions (e.g. CAN17, AN20, AAN and others) and solutions containing free ammonia, including data for solutions containing two or more products such as (a) ammonia, ammonium-nitrate; (b) ammonia, urea; (c) ammonia, ammonium-nitrate, urea <sup>5</sup> . . . . .	170.0	127.9	22.5	174.4	174.8	25.2
28731 69	Other ammonium compounds, including ammonium chloride, gray and white . . . . .	(X)	(X)	89.7	(X)	(X)	98.0
28732 —	Urea original melt liquor (100 percent) . . . . .	8,126.9	5,242.8	848.3	8,360.3	5,456.9	726.1
	Consumed in the manufacture of:						
28732 17	Urea-ammonium nitrate solutions* . . . . .	2,608.2	(X)	(X)	(NA)	(NA)	(NA)
28732 19	Prills* . . . . .	2,589.5	2,435.4	350.7	(NA)	(NA)	(NA)
28732 20	Granular* . . . . .	2,667.5	2,564.0	470.2	(NA)	(NA)	(NA)
28732 23	All other (liquor sales, melamine, feedstock, other)* . . . . .	261.6	243.4	27.4	(NA)	(NA)	(NA)
28741 —	Phosphoric acid (100 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	13,133.8	4,409.3	1,221.0	12,792.0	4,227.7	1,103.1
28741 81	Thermal . . . . .	318.6	162.3	139.3	324.2	163.1	142.4
28741 85	Wet . . . . .	12,815.2	4,247.0	1,081.8	12,467.9	4,064.7	960.6
	By use:						
28741 86	Fertilizer . . . . .	11,914.4	(D)	(D)	11,588.8	3,521.6	770.9
28741 87	Feed and other . . . . .	900.7	(D)	(D)	879.1	543.1	189.8
	By grade:						
28741 88	Ortho (less than 65 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	11,658.5	3,294.3	806.0	11,252.1	3,078.8	621.6
28741 89	Super (65 percent or more P <sub>2</sub> O <sub>5</sub> ) . . . . .	1,156.6	952.7	275.8	1,215.7	985.9	339.0
28742 —	Superphosphates and other phosphatic fertilizer materials:						
	Gross weight . . . . .	19,886.4	19,503.5	(X)	19,115.3	18,802.8	(X)
	Phosphoric oxide content (100 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	10,364.2	10,231.0	3,594.3	10,041.6	9,966.9	2,920.7
28742 15, 41	Normal, enriched, and concentrated superphosphates:						
	Gross weight . . . . .	1,830.7	1,611.3	(X)	1,917.2	1,704.1	(X)
	Phosphoric oxide content (100 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	807.8	767.7	214.6	876.8	811.8	200.9
28742 51	Monoammonium phosphates:						
	Gross weight . . . . .	2,841.4	2,791.7	(X)	2,935.5	2,976.3	(X)
	Phosphoric oxide content (100 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	1,528.8	1,497.6	527.2	1,754.1	1,788.6	474.5
28742 52	Diammonium phosphates:						
	Gross weight . . . . .	14,653.0	14,571.8	(X)	13,566.7	13,502.1	(X)
	Phosphoric oxide content (100 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	7,739.3	7,669.7	2,770.0	7,049.7	7,017.0	2,154.4
28742 55, 61	Other ammonium phosphates and other phosphatic fertilizer materials:						
	Gross weight . . . . .	561.2	528.7	(X)	695.9	620.2	(X)
	Phosphoric oxide content (100 percent P <sub>2</sub> O <sub>5</sub> ) . . . . .	288.2	295.9	82.4	361.0	349.4	91.2

\* New product codes for 1995. D Withheld to avoid disclosing data for individual companies. NA Not available. Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Data for "Other than oleum" includes chamber process acid.

<sup>2</sup>Includes unspecified amounts of nitric acid produced but not withdrawn from the system.

<sup>3</sup>Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

<sup>4</sup>Represents total amount of original solution produced, including amounts used for fertilizer, explosives, and other uses and amounts consumed in manufacturing other products such as "Nitrogen solutions" (product code 28731 55).

<sup>5</sup>Ammonium nitrate/calcium nitrate solutions" (product code 28731 73) and "All other two-component products" (product code 28731 67) are combined with "Solutions containing ammonia" (product code 28731 65) to form a new product code (28731 68) for 1995.

Table 3. Quantities of Selected Inorganic Acids and Fertilizer Materials Produced and Consumed in Same Plant: 1995 and 1994

[Thousands of short tons]

Product code	Product description	Basis	Consumed in producing plants	
			1995	1994
28194 41	Hydrochloric acid, including anhydrous .....	100 percent HCl .....	2,427.1	2,353.1
28194 45	From salt and acid .....	.....do .....	( <sup>1</sup> )	( <sup>1</sup> )
28194 47	From chlorine and hydrogen .....	.....do .....	78.0	77.0
28194 47	Byproduct and other .....	.....do .....	<sup>1</sup> 2,349.1	<sup>1</sup> 2,276.2
28194 51	Hydrocyanic acid, including anhydrous .....	100 percent HCN .....	398.0	341.8
28194 61, 65	Hydrofluoric acid: Anhydrous and technical .....	100 percent HF .....	(D)	(D)
28194 67	Mixed acids (sulfuric and nitric) .....	.....do .....	(D)	(D)
28193 —	Sulfuric acid, gross (new and fortified) .....	100 percent H <sub>2</sub> SO <sub>4</sub> .....	35,000.7	31,908.0
28731 11	Nitric acid .....	100 percent HNO <sub>3</sub> .....	7,774.6	7,982.3
28731 30, 32	Ammonia (synthetic) anhydrous <sup>2</sup> .....	100 percent HN <sub>3</sub> .....	7,418.4	7,342.1
28731 45	Ammonium nitrate: Other nitrogen solutions <sup>3</sup> .....	100 percent NH <sub>4</sub> NO <sub>3</sub> .....	584.6	(X)
28731 46	Urea-ammonium nitrate solutions .....	.....do .....	3,495.1	(X)
28731 47	High density prill and grained .....	.....do .....	152.1	(X)
28731 48	Low density prill and granular .....	.....do .....	(D)	(X)
28731 49	All other .....	.....do .....	(D)	(X)
28731 57	Ammonium sulfate <sup>2</sup> .....	100 percent (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> .....	(D)	(D)
28731 17	Urea: Urea-ammonium nitrate solutions .....	100 percent urea .....	2,606.5	(X)
28731 19	Prills .....	.....do .....	(D)	(X)
28731 20	Granular .....	.....do .....	(D)	(X)
28731 23	All other .....	.....do .....	(D)	(X)
28741 81	Phosphoric acid .....	100 percent P <sub>2</sub> O <sub>5</sub> .....	8,748.6	<sup>1</sup> 8,665.5
28741 85	Thermal .....	.....do .....	(D)	(D)
28741 85	Wet .....	.....do .....	(D)	(D)
28742 —	Superphosphates and other fertilizer materials .....	.....do .....	<sup>1</sup> 51.5	<sup>1</sup> 55.3

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Product code 28194 41, "Hydrochloric acid from salt and acid" is combined with product code 28194 47, "Hydrochloric acid byproduct and other" to avoid disclosing data for individual companies.<sup>2</sup>Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.<sup>3</sup>Excludes amount converted to solid nitrate.

Table 4. Summary of Selected Fertilizer Materials/Interplant Transfers: 1995 and 1994

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Product description	Basis	1995		1994	
			Quantity	Value	Quantity	Value
28193 —	Sulfuric acid, gross (new and fortified) .....	100 percent H <sub>2</sub> SO <sub>4</sub> .....	1,800.0	38.7	2,176.3	40.5
28193 11	Oleum under 40 percent .....	.....do .....	(D)	(D)	(D)	(D)
28193 21	Oleum 40 percent or more .....	.....do .....	(D)	(D)	(D)	(D)
28193 31	Other than oleum <sup>1</sup> .....	.....do .....	1,756.6	37.0	2,146.8	39.3
28731 31	Ammonia, synthetic anhydrous <sup>2</sup> .....	100 percent NH <sub>3</sub> .....	892.6	121.2	<sup>1</sup> 1,132.3	<sup>1</sup> 133.7
28731 30	Fertilizer use .....	.....do .....	(D)	(D)	(D)	(D)
28731 32	Other uses .....	.....do .....	(D)	(D)	(D)	(D)
28731 57	Ammonium sulfate <sup>2</sup> .....	100 percent (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> .....	(D)	(D)	(D)	(D)
28731 11	Nitric acid .....	100 percent HNO <sub>3</sub> .....	(D)	(D)	(D)	(D)
28732 —	Urea .....	100 percent urea .....	(D)	(D)	(D)	(D)
28741 81, 85	Phosphoric acid .....	100 percent P <sub>2</sub> O <sub>5</sub> .....	1,745.5	391.2	1,544.1	306.4
28742 —	Superphosphates and other phosphatic fertilizer materials .....	.....do .....	(D)	(D)	(D)	(D)

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Data for "Other than oleum" include chamber process acid.<sup>2</sup>Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

Table 5. Sodium Sulfate, Production and Number of Establishments by Process: 1995 and 1994

[Net tons of 100 percent Na<sub>2</sub>SO<sub>4</sub>]

Process	Number of establishments <sup>1</sup>		Production	
	1995	1994	1995	1994
<b>Total</b> .....	<b>14</b>	<b>15</b>	<b>710,853</b>	<b>651,696</b>
Natural.....	2	3	(D)	(D)
Viscose rayon .....	3	3	(D)	(D)
Sodium dichromate.....	1	1	(D)	(D)
Phenol, boric acid, formic acid, and other .....	8	8	133,950	130,255

D Withheld to avoid disclosing data for individual companies. <sup>†</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Processes used to manufacture sodium sulfate are specified in the SRI, Directory of Chemical Producers, 1994.Note: Net tons includes Glauber's salt converted to 100 percent Na<sub>2</sub>SO<sub>4</sub>.

Table 6. Production of Specified Inorganic Chemicals by States: 1995 and 1994

[Short tons]

Geographic area	Hydrochloric acid (100 percent HCl) (2819441, 445, and 447)		Aluminum sulfate commercial (17 percent Al <sub>2</sub> O <sub>3</sub> ) (2819651)		Chlorine gas (281211)		Sodium hydroxide (all processes) (2812350)	
	1995	1994	1995	1994	1995	1994	1995	1994
<b>United States</b> .....	<b>3,907,075</b>	<b>3,754,429</b>	<b>1,143,748</b>	<b>1,139,841</b>	<b>12,395,320</b>	<b>12,187,313</b>	<b>11,334,631</b>	<b>12,538,967</b>
Alabama .....	(D)	(D)	(D)	(D)	640,877	(D)	(D)	(D)
Arkansas.....	(D)	(D)	(D)	(D)	-	-	-	-
California.....	(D)	(D)	64,056	58,249	(D)	(D)	-	-
Colorado.....	-	-	(D)	(D)	-	-	-	-
Delaware.....	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Florida.....	-	-	(D)	(D)	-	-	-	-
Georgia.....	(D)	(D)	119,792	131,964	(D)	(D)	(D)	(D)
Illinois.....	(D)	111,195	(D)	(D)	-	-	-	-
Indiana.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Kentucky.....	281,417	262,014	-	-	(D)	(D)	(D)	(D)
Louisiana.....	1,125,401	1,151,313	93,496	92,025	4,785,854	4,823,919	4,735,836	4,871,724
Maine.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maryland.....	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Massachusetts.....	-	-	(D)	(D)	-	-	-	-
Michigan.....	72,777	57,806	(D)	(D)	-	-	-	-
Minnesota.....	-	-	(D)	(D)	-	-	-	-
Mississippi.....	-	-	(D)	(D)	(D)	(D)	-	-
Missouri.....	-	-	-	-	-	-	-	-
Montana.....	-	-	(D)	(D)	-	-	-	-
Nevada.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey.....	28,713	27,255	(D)	(D)	-	-	(D)	(D)
New Mexico.....	-	-	-	-	-	-	-	-
New York.....	(D)	(D)	-	-	(D)	(D)	(D)	(D)
North Carolina.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Ohio.....	(D)	(D)	60,411	70,443	(D)	(D)	-	-
Oklahoma.....	-	-	-	-	(D)	(D)	(D)	(D)
Oregon.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pennsylvania.....	-	-	(D)	(D)	-	-	-	-
South Carolina.....	-	-	(D)	(D)	-	-	-	-
Tennessee.....	(D)	(D)	40,212	62,177	(D)	(D)	(D)	(D)
Texas.....	1,466,157	1,348,441	(D)	12,930	(D)	(D)	(D)	(D)
Utah.....	-	-	(D)	(D)	(D)	(D)	-	-
Virginia.....	-	-	(D)	(D)	-	-	-	-
Washington.....	(D)	(D)	(D)	(D)	425,238	417,786	473,267	467,828
West Virginia.....	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Wisconsin.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Wyoming.....	-	-	-	-	-	-	(D)	(D)

- Represents zero.

D Withheld to avoid disclosing data for individual companies.

<sup>†</sup>Revised by 5 percent or more from previously published data.

Table 7. Total Shipments (Including Interplant Transfers) of Sulfuric Acid by States: 1995 and 1994

[Quantity in thousands of short tons of 100 percent H<sub>2</sub>SO<sub>4</sub>. Value in millions of dollars]

State	1995		1994	
	Quantity	Value	Quantity	Value
<b>United States</b> .....	<b>12,677.7</b>	<b>553.9</b>	<b>11,767.2</b>	<b>461.9</b>
Arizona .....	(D)	(D)	(D)	(D)
California .....	766.3	39.2	850.3	40.4
Florida .....	806.6	26.4	633.1	16.2
Georgia .....	338.5	15.2	360.9	13.5
Illinois .....	(D)	(D)	(D)	(D)
Louisiana .....	2,009.7	106.3	1,724.0	83.3
New Jersey .....	(D)	(D)	(D)	(D)
Ohio .....	340.7	27.6	345.4	21.0
Texas .....	1,857.1	102.6	1,746.9	88.7
Virginia .....	(D)	(D)	(D)	(D)
Washington .....	(D)	(D)	(D)	(D)
Other States .....	4,151.5	167.4	3,844.4	<sup>1</sup> 138.0

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Revised by 5 percent or more from previously published data.

Table 8. Production of New Sulfuric Acid by States: 1995 and 1994

[Thousands of short tons of 100 percent H<sub>2</sub>SO<sub>4</sub>]

State	1995 <sup>1</sup>	1994 <sup>1</sup>
<b>United States</b> .....	<b>43,927.7</b>	<b>42,311.1</b>
Arizona .....	2,222.4	2,062.5
California .....	801.9	1,189.9
Florida .....	20,478.6	19,891.3
Georgia .....	514.3	517.9
Illinois .....	(D)	(D)
Louisiana .....	6,057.2	5,833.8
Missouri .....	(D)	(D)
New Jersey .....	(D)	(D)
New Mexico .....	(D)	(D)
Ohio .....	(D)	443.1
Oklahoma and Texas .....	1,971.1	3,207.5
Virginia .....	(D)	(D)
Washington .....	(D)	(D)
Other States .....	9,361.5	6,798.9

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Includes data for government-owned, privately operated plants.

Table 9a. Primary Production and Stocks of Specified Inorganic Chemicals by Quarter: 1995 and 1994

[Short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	Stocks on hand December 31
28196 17	Aluminum chloride (anhydrous) (100 percent AlCl <sub>3</sub> ) .....	1995 .....	31,263	7,634	8,058	7,465	8,106	(NA)
		1994 .....	26,070	8,033	5,530	6,224	6,283	(NA)
28195 00	Aluminum oxide (alumina) (100 percent Al <sub>2</sub> O <sub>3</sub> ) .....	1995 .....	4,783,233	1,058,315	1,173,038	1,277,420	1,274,461	91,098
		1994 .....	4,469,949	1,146,488	1,093,517	1,117,149	1,112,795	133,192
28196 51	Aluminum sulfate (commercial) <sup>1</sup> (17 percent Al <sub>2</sub> O <sub>3</sub> ) .....	1995 .....	1,143,748	268,361	289,021	313,872	272,495	(NA)
		1994 .....	1,139,841	262,925	292,739	314,501	269,676	(NA)
28194 11	Boric (boracic) (100 percent H <sub>3</sub> BO <sub>3</sub> ) .....	1995 .....	(D)	(D)	(D)	(D)	(D)	(D)
		1994 .....	(D)	(D)	(D)	(D)	(D)	(D)
28199 12	Calcium carbide (commercial) .....	1995 .....	(D)	(D)	(D)	(D)	(D)	(NA)
		1994 .....	(D)	(D)	(D)	(D)	(D)	(NA)
28199 18	Calcium phosphate: Monobasic (21 percent minimum P) .....	1995 .....	801,326	204,983	184,758	202,039	209,546	41,972
		1994 .....	774,134	177,531	195,588	189,190	211,825	53,304
28199 19	Dibasic (except fertilizer grades) (100 percent CaHPO <sub>4</sub> ) .....	1995 .....	728,414	187,757	184,497	186,185	169,975	36,270
		1994 .....	833,115	221,544	205,685	190,523	215,362	46,320
28742 71	Tribasic (100 percent Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> ): Animal feed grades (defluorinated phosphate rock) .....	1995 .....	498,212	123,444	123,726	124,796	126,245	15,544
		1994 .....	413,729	89,782	95,784	114,938	113,225	28,865
28199 22	Other grades .....	1995 .....	37,697	8,011	9,349	8,677	11,660	3,682
		1994 .....	36,459	8,157	10,318	9,028	8,957	1,712
28199 25	Carbon activated, excluding reactivated carbon (dry weight) .....	1995 .....	156,232	38,746	38,070	38,601	40,815	12,560
		1994 .....	157,501	35,612	38,218	40,170	43,500	15,809
28199 27	Granular carbons .....	1995 .....	83,913	21,975	21,497	18,304	22,137	6,134
		1994 .....	81,705	19,439	22,243	18,218	21,805	10,560
28199 27	Pulverized carbons .....	1995 .....	72,319	16,771	16,573	20,297	18,678	6,426
		1994 .....	75,796	16,174	15,975	21,952	21,695	5,249
28121 11	Chlorine (100 percent Cl): Total gas <sup>2</sup> .....	1995 .....	12,395,320	3,090,654	3,097,482	3,125,318	3,081,866	(NA)
		1994 .....	12,187,313	2,991,982	2,971,479	3,081,204	3,142,648	(NA)
28121 15	Total liquid .....	1995 .....	10,162,671	2,510,994	2,526,467	2,595,553	2,529,657	(NA)
		1994 .....	9,934,248	2,423,190	2,420,249	2,518,050	2,572,759	(NA)
28163 15	Chrome colors (C.P.): Chrome yellow and orange .....	1995 .....	8,300	2,305	2,454	1,923	1,618	(NA)
		1994 .....	11,320	2,996	3,492	3,032	1,800	(NA)
28163 17	Molybdate chrome orange .....	1995 .....	(D)	(D)	(D)	(D)	(D)	(NA)
		1994 .....	(D)	(D)	(D)	(D)	(D)	(NA)
28194 41	Hydrochloric acid (100 percent HCl): Total .....	1995 .....	3,907,075	904,017	1,002,526	989,871	1,010,662	(NA)
		1994 .....	3,754,429	878,601	898,950	980,661	996,217	(NA)
28194 41	From salt and acid .....	1995 .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	(NA)
		1994 .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	(NA)
28194 45	From chlorine and hydrogen .....	1995 .....	361,155	91,772	87,140	90,219	92,024	(NA)
		1994 .....	348,871	85,024	90,788	84,015	89,044	(NA)
28194 47	Byproduct and other .....	1995 .....	3,545,920	812,244	915,385	899,652	918,639	(NA)
		1994 .....	3,405,558	793,577	808,162	896,646	907,173	(NA)
28194 61, 65	Hydrofluoric acid (100 percent HF): Produced and withdrawn from system: Anhydrous and technical .....	1995 .....	192,237	53,023	53,759	38,727	46,728	(NA)
		1994 .....	(D)	36,746	(D)	(D)	(D)	(NA)
28199 39	Hydrogen peroxide (100 percent by weight) .....	1995 .....	355,116	88,860	84,663	90,827	90,765	(NA)
		1994 .....	318,420	72,049	80,864	86,324	79,182	(NA)
28199 58	Phosphorus elemental (technical) .....	1995 .....	(D)	68,530	65,213	68,027	(D)	13,527
		1994 .....	254,987	64,658	64,412	61,364	64,552	9,788
28199 60	Phosphorus oxychloride (100 percent POCl <sub>3</sub> ) .....	1995 .....	39,699	9,400	9,880	10,070	10,350	(NA)
		1994 .....	36,064	8,605	8,794	9,409	9,255	(NA)

See footnotes at end of table.



Table 9a. Primary Production and Stocks of Specified Inorganic Chemicals by Quarter: 1995 and 1994—Con.

[Short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	Stocks on hand December 31
28199 61	Phosphorus pentasulfide (100 percent P <sub>2</sub> S <sub>5</sub> )	1995	63,015	14,861	14,852	16,716	16,585	(NA)
		1994	60,877	16,210	15,759	12,616	16,293	(NA)
28199 63	Phosphorus trichloride (chloride) (100 percent PCl <sub>3</sub> )	1995	186,358	44,722	46,258	48,958	46,419	(NA)
		1994	157,850	39,023	40,721	40,443	37,663	(NA)
28125 21	Potassium hydroxide <sup>4</sup>	1995	(D)	(D)	(D)	(D)	125,112	(NA)
		1994	(D)	(D)	(D)	(D)	119,959	(NA)
28197 18	Potassium pyrophosphate (tetrapotas- sium pyrophosphate) (100 percent K <sub>4</sub> P <sub>2</sub> O <sub>7</sub> )	1995	27,213	(D)	7,459	(D)	(D)	(NA)
		1994	26,330	6,421	6,878	6,352	6,679	(NA)
28199 69	Silicon tetrachloride (silitet) (100 percent SiCl <sub>4</sub> )	1995	(D)	(D)	(D)	(D)	(D)	(NA)
		1994	(D)	(D)	(D)	(D)	(D)	(NA)
28197 21	Sodium (metal) (100 percent Na)	1995	(D)	(D)	(D)	(D)	(D)	(D)
		1994	(D)	(D)	(D)	(D)	(D)	(D)
28125 30	Sodium bicarbonate, finished (58 percent Na <sub>2</sub> O)	1995	461,442	106,824	121,385	112,657	120,576	(NA)
		1994	(D)	(D)	123,151	130,411	126,812	(NA)
28125 30, 14745 11	Sodium carbonate, natural and synthetic (58 percent Na <sub>2</sub> O)	1995	11,025	2,694	2,649	2,756	2,926	337
		1994	10,276	2,417	2,550	2,503	2,806	223
28199 33	Sodium bichromate and chromate (hydrous)	1995	(D)	(D)	(D)	(D)	(D)	(NA)
		1994	(D)	(D)	(D)	(D)	(D)	(NA)
28197 27	Sodium chlorate (100 percent NaClO <sub>3</sub> )	1995	614,536	155,647	158,583	152,691	147,615	30,807
		1994	559,015	131,032	134,829	145,689	147,465	27,680
28197 30	Sodium hydrosulfite (100 percent Na <sub>2</sub> SO <sub>4</sub> )	1995	(D)	(D)	(D)	(D)	(D)	(NA)
		1994	(D)	(D)	(D)	(D)	(D)	(NA)
28123 50	Sodium hydroxide (caustic soda) (100 percent NaOH) (all processes): Liquid <sup>5</sup>	1995	11,334,631	2,980,718	2,855,585	2,933,694	2,564,634	388,117
		1994	12,538,967	3,072,777	3,019,295	3,178,515	3,268,381	(D)
28123 67	Dry (all forms)	1995	(D)	(D)	(D)	(D)	(D)	(NA)
		1994	(D)	44,966	47,057	56,704	(D)	(NA)
28197 34	Sodium phosphate: Tribasic (100 percent Na <sub>3</sub> PO <sub>4</sub> )	1995	20,968	4,140	5,640	5,164	6,024	(NA)
		1994	22,308	4,617	6,866	5,817	5,009	(NA)
28197 35	Tetrabasic (pyro) (100 percent Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub> )	1995	(D)	4,293	(D)	5,215	(D)	(NA)
		1994	(D)	3,847	4,666	(D)	3,310	(NA)
28197 36	Meta (100 percent NaPO <sub>3</sub> )	1995	43,275	11,539	10,965	10,521	10,250	(NA)
		1994	39,836	9,918	10,710	9,447	9,761	(NA)
28197 38	Tripoly (100 percent Na <sub>5</sub> P <sub>3</sub> O <sub>10</sub> )	1995	(D)	(D)	(D)	(D)	(D)	(NA)
		1994	(D)	(D)	(D)	(D)	(D)	(NA)
28197 41	Sodium silicate: Soluble silicate glass (water glass, solid and liquid)(anhydrous) <sup>6</sup>	1995	1,203,396	291,246	298,522	304,945	308,683	(NA)
		1994	1,007,442	223,687	249,596	264,705	269,455	(NA)
28197 42	Metasilicate pentahydrate (100 percent Na <sub>2</sub> SiO <sub>3</sub> ·5H <sub>2</sub> O)	1995	45,156	12,051	10,829	10,022	12,254	(NA)
		1994	47,298	12,753	11,807	11,625	11,114	(NA)
28197 44	Metasilicate anhydrous (100 percent Na <sub>2</sub> SiO <sub>3</sub> )	1995	48,249	11,598	12,293	12,716	11,642	(NA)
		1994	47,478	13,429	11,921	10,344	11,784	(NA)

See footnotes at end of table.

Table 9a. Primary Production and Stocks of Specified Inorganic Chemicals by Quarter: 1995 and 1994—Con.

[Short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	Stocks on hand December 31
28197 61	Sodium sulfate (100 percent Na <sub>2</sub> SO <sub>4</sub> ): Total .....	1995 .....	710,853	168,455	152,967	153,168	236,263	(NA)
		1994 .....	651,696	188,234	180,495	136,643	146,324	(NA)
28197 66	High purity (more than 99 percent Na <sub>2</sub> SO <sub>4</sub> ) .....	1995 .....	(D)	(D)	(D)	(D)	(D)	(NA)
		1994 .....	(D)	(D)	(D)	(D)	(D)	(NA)
28161 00	Lower purity (99 percent or less Na <sub>2</sub> SO <sub>4</sub> ) and Glauber's salt (100 percent Na <sub>2</sub> SO <sub>4</sub> ·10H <sub>2</sub> O) .....	1995 .....	(D)	(D)	(D)	(D)	(D)	(NA)
		1994 .....	(D)	(D)	(D)	(D)	(D)	(NA)
28161 00	Titanium dioxide (composite and pure) (100 percent TiO <sub>2</sub> ) (commodity weight) ...	1995 .....	1,382,333	356,884	364,696	340,033	320,721	<sup>7</sup> 132,204
		1994 .....	1,379,884	329,475	352,125	353,340	344,944	<sup>7</sup> 116,461

D Withheld to avoid disclosing data for individual companies. NA Not available.

<sup>1</sup>Excludes quantities produced and consumed by municipalities.<sup>2</sup>Total gas production including quantities liquefied for use, storage, or shipments.<sup>3</sup>"Hydrochloric acid produced from salt and acid" is combined with "Hydrochloric acid byproduct and other" to avoid disclosing data for individual companies.<sup>4</sup>Liquid production figures represent total production including quantities later evaporated to solid caustic and reported as such.<sup>5</sup>Includes some liquid shipped as interplant transfers to other establishments for further processing to dry forms.<sup>6</sup>Excludes quantities produced and consumed in the same establishment in the manufacture of meta-, ortho-, and sesquicarbonates.<sup>7</sup>Represents total stocks of producing companies, including amounts held at locations other than producing locations.

Table 9b. Primary Production of Inorganic Fertilizer Chemicals by Quarter: 1995 and 1994

[Thousands of short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	
28731 31	Ammonia, synthetic anhydrous (100 percent NH <sub>3</sub> ): Production .....	1995 .....	17,402.2	4,367.6	4,391.7	4,279.3	4,363.6	
		1994 .....	17,869.1	4,513.2	4,392.8	4,374.0	4,589.1	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	1,634.5	1,798.8	1,757.0	1,285.6
		1994 .....	(NA)	1,282.2	789.6	1,041.6	1,281.5	
28731 30	Fertilizer use: Production .....	1995 .....	15,566.4	3,963.4	3,884.4	3,831.0	3,887.6	
		1994 .....	15,991.7	4,022.6	3,955.8	3,929.2	4,084.0	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	1,266.2	(D)	(D)	(D)
		1994 .....	(NA)	1,138.6	573.6	747.0	924.4	
28731 32	Other uses: Production .....	1995 .....	1,835.7	404.2	507.2	448.3	476.0	
		1994 .....	1,877.4	490.5	437.0	444.8	505.1	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	(S)	(D)	(D)	(D)
		1994 .....	(NA)	(S)	(S)	(S)	(S)	
28731 44	Ammonium nitrate (100 percent NH <sub>4</sub> NO <sub>3</sub> ): Original solution <sup>1</sup> : Production .....	1995 .....	8,491.4	2,232.2	2,169.6	1,899.6	2,190.0	
		1994 .....	8,567.6	2,193.9	2,155.7	1,985.5	2,232.5	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	160.3	168.5	206.3	202.1
		1994 .....	(NA)	221.1	213.0	196.9	283.2	
28731 45	Total production: Consumed in the manufacture of other nitrogen solutions (e.g. CAN17, AM20, AAN): Production .....	1995 .....	584.6	140.6	151.4	141.7	150.8	
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	(D)	(D)	(D)	(D)
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
28731 46	Liquor consumed in the manufacture of urea- ammonium nitrate solutions: Production .....	1995 .....	3,495.1	963.2	938.5	738.4	855.0	
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	(D)	15.9	(D)	23.9
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
28731 47	High density prill and granular: Production .....	1995 .....	2,498.9	710.4	596.9	532.6	659.0	
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	19.5	39.5	31.3	21.6
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
28731 48	Low density prill and grained: Production .....	1995 .....	1,585.5	379.6	386.4	395.2	424.2	
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	(D)	(D)	(D)	(D)
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
28731 49	All other (e.g., liquor sales, etc.): Production .....	1995 .....	327.3	38.4	96.4	91.7	100.9	
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	(D)	(D)	(D)	(D)
		1994 .....	(NA)	(NA)	(NA)	(NA)	(NA)	
28731 56 28731 58	Ammonium sulfate (100 percent (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> ): Production .....	1995 .....	2,646.7	649.2	681.5	632.5	683.5	
		1994 .....	2,584.1	643.8	653.8	643.1	643.3	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	98.7	166.9	285.1	285.9
		1994 .....	(NA)	148.5	131.5	192.1	218.3	
28731 11	Nitric acid (100 percent HNO <sub>3</sub> ): Production .....	1995 .....	8,843.6	2,351.1	2,238.0	1,984.5	2,270.1	
		1994 .....	8,713.7	2,264.3	2,189.7	1,987.3	2,272.3	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	(X)	(X)	(X)	(X)
		1994 .....	(NA)	(X)	(X)	(X)	(X)	
28731 55	Nitrogen solutions, including mixtures containing urea (100 percent N): Production .....	1995 .....	3,602.9	974.8	893.3	809.1	925.7	
		1994 .....	3,594.9	1,007.5	996.2	725.4	865.9	
		Stocks on hand, end of quarter.....	1995 .....	(NA)	289.7	234.6	249.5	236.0
		1994 .....	(NA)	416.5	271.5	296.9	340.5	

See footnotes at end of table.

Table 9b. Primary Production of Inorganic Fertilizer Chemicals by Quarter: 1995 and 1994—Con.

[Thousands of short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28731 55	Nitrogen solutions, including mixtures containing urea (100 percent N)—Con.						
28731 66	Solutions containing ammonium nitrate/urea:						
	Production .....	1995 .....	3,432.9	933.3	846.2	771.4	882.0
		1994 .....	3,420.6	963.7	942.8	687.0	827.1
	Stocks on hand, end of quarter .....	1995 .....	(NA)	258.0	198.7	(D)	(D)
		1994 .....	(NA)	404.0	263.6	285.7	254.2
28731 68	All other solutions <sup>2</sup> :						
	Production .....	1995 .....	170.0	41.5	47.1	37.7	43.7
		1994 .....	174.4	43.8	53.4	38.4	38.8
	Stocks on hand, end of quarter .....	1995 .....	(NA)	31.7	35.9	(D)	(D)
		1994 .....	(NA)	12.5	7.9	11.1	86.3
28741 —	Phosphoric acid (100 percent P <sub>2</sub> O <sub>5</sub> ):						
	Production .....	1995 .....	13,133.8	3,326.8	3,274.0	3,183.1	3,350.0
		1994 .....	12,792.0	3,081.7	3,269.6	3,186.1	3,254.6
	Stocks on hand, end of quarter .....	1995 .....	(NA)	270.1	309.2	278.2	260.0
		1994 .....	(NA)	255.1	281.3	259.2	277.8
28741 81	Thermal:						
	Production .....	1995 .....	318.6	79.7	77.1	51.3	110.6
		1994 .....	324.2	79.9	81.7	83.6	79.0
	Stocks on hand, end of quarter .....	1995 .....	(NA)	10.2	8.5	8.0	7.3
		1994 .....	(NA)	10.8	8.6	12.4	10.3
28741 85	Wet:						
	Production .....	1995 .....	12,815.2	3,247.1	3,196.9	3,131.8	3,239.4
		1994 .....	12,467.9	3,001.8	3,187.9	3,102.5	3,175.6
	Stocks on hand, end of quarter .....	1995 .....	(NA)	259.9	300.8	270.2	252.7
		1994 .....	(NA)	244.2	272.7	246.8	267.5
28741 86	By use:						
	Fertilizer:						
	Production .....	1995 .....	11,914.4	3,023.5	2,962.3	2,903.8	3,024.7
		1994 .....	11,588.8	2,779.9	2,952.0	2,889.3	2,967.6
	Stocks on hand, end of quarter .....	1995 .....	(NA)	(D)	(D)	(D)	(D)
		1994 .....	(NA)	(D)	(D)	(D)	(D)
28741 87	Feed and other:						
	Production .....	1995 .....	900.7	223.5	234.5	228.0	214.7
		1994 .....	897.1	228.4	242.9	215.7	210.1
	Stocks on hand, end of quarter .....	1995 .....	(NA)	(D)	(D)	(D)	(D)
		1994 .....	(NA)	(D)	(D)	(D)	(D)
28741 88	By grade:						
	Ortho (less than 65 percent P <sub>2</sub> O <sub>5</sub> ):						
	Production .....	1995 .....	11,658.5	2,932.3	2,943.9	2,867.8	2,914.5
		1994 .....	11,252.1	2,695.7	2,873.6	2,822.4	2,860.4
	Stocks on hand, end of quarter .....	1995 .....	(NA)	230.8	267.6	241.0	225.3
		1994 .....	(NA)	210.7	243.3	213.9	240.0
28741 89	Super (more than 65 percent P <sub>2</sub> O <sub>5</sub> ):						
	Production .....	1995 .....	1,156.6	314.7	252.9	264.0	325.0
		1994 .....	1,215.7	305.3	314.2	281.3	314.9
	Stocks on hand, end of quarter .....	1995 .....	(NA)	29.1	33.2	29.2	27.4
		1994 .....	(NA)	33.6	29.4	32.0	27.5
28732 —	Urea original melt liquor (100 percent urea):						
	Production .....	1995 .....	8,126.9	2,058.9	2,054.8	1,962.5	2,050.7
		1994 .....	8,360.3	2,219.5	2,005.0	1,965.4	2,170.3
	Stocks on hand, end of quarter .....	1995 .....	(NA)	373.7	420.0	313.8	362.6
		1994 .....	(NA)	491.2	336.8	372.1	418.5

See footnotes at end of table.

Table 9b. Primary Production of Inorganic Fertilizer Chemicals by Quarter: 1995 and 1994—Con.

[Thousands of short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28732 —	Urea original melt liquor (100 percent urea)—Con.						
28732 15	Total production: Consumed in the manufacture of urea-ammonium nitrate solutions:						
	Production .....	1995.....	2,608.2	678.8	670.6	583.3	675.5
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
	Stocks on hand, end of quarter .....	1995.....	(NA)	(D)	(D)	(D)	(D)
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
28732 19	Prills:						
	Production .....	1995.....	2,589.5	607.2	624.8	605.2	752.3
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
	Stocks on hand, end of quarter .....	1995.....	(NA)	22.6	(D)	35.4	46.8
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
28732 20	Granular:						
	Production .....	1995.....	2,667.5	704.8	692.4	713.0	557.3
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
	Stocks on hand, end of quarter .....	1995.....	(NA)	273.4	274.2	165.4	189.2
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
28732 22	All other (solid and solution):						
	Production .....	1995.....	261.6	68.1	67.0	60.9	65.6
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)
	Stocks on hand, end of quarter .....	1995.....	(NA)	(D)	(D)	(D)	(D)
		1994.....	(NA)	(NA)	(NA)	(NA)	(NA)

D Withheld to avoid disclosing data for individual companies. NA Not available. † Revised by 5 percent or more from previously published data.  
S Does not meet publication standards. X Not applicable.

<sup>1</sup>Represents total amount of original solution produced, including amounts used for fertilizer, explosives, and other uses and amounts consumed in manufacturing other products such as "Nitrogen solutions" (product code 28731 55).

<sup>2</sup>"Solutions containing ammonium nitrate/calcium nitrate" (product code 28731 73) and "All other two-component products" (product code 28731 67) are combined with "Solutions containing ammonia" (product code 28731 65) into a new product code (28731 68) for 1995.

Note: Detail may not add because of independent rounding.

Table 9c. **Production, Shipments, and Stocks of Superphosphates and Other Phosphatic Fertilizer Materials by Quarter: 1995 and 1994**

[Thousands of short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	
28742 —	Superphosphates and other phosphatic fertilizer materials:							
		Production (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	10,365.2	2,593.7	2,551.4	2,529.1	2,691.0
			1994 .....	10,041.6	2,359.1	2,564.2	2,533.0	2,585.4
		Shipments, including interplant transfers (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	10,231.1	2,598.3	2,422.8	2,677.7	2,532.3
			1994 .....	9,966.9	2,538.6	2,423.1	2,586.7	2,418.4
		Stocks on hand, end of quarter (gross weight) ...	1995 .....	(NA)	649.3	725.8	601.0	782.3
		1994 .....	(NA)	499.7	641.3	602.8	704.4	
28742 15, 41	Normal, concentrated, and enriched superphosphates (triple) (over 40 percent P <sub>2</sub> O <sub>5</sub> ):							
		Production (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	807.8	172.8	186.0	163.2	285.8
			1994 .....	876.8	217.0	224.7	216.4	218.7
		Shipments, including interplant transfers (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	767.7	192.3	190.9	163.7	220.8
			1994 .....	811.9	220.2	186.3	197.7	207.7
		Stocks on hand, end of quarter (gross weight) ...	1995 .....	(NA)	70.0	77.8	99.4	79.9
		1994 .....	(NA)	41.2	84.2	105.9	99.8	
28742 51	Ammonium phosphates: Monoammonium phosphates:							
		Production (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	1,528.8	445.0	355.3	367.0	361.6
			1994 .....	1,754.1	449.0	434.9	448.3	421.9
		Shipments, including interplant transfers (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	1,497.6	425.7	328.0	413.2	330.8
			1994 .....	1,788.6	485.1	434.6	478.1	390.8
		Stocks on hand, end of quarter (gross weight) .	1995 .....	(NA)	155.7	223.3	134.6	150.8
		1994 .....	(NA)	168.0	146.2	117.8	116.1	
28742 52	Diammonium phosphates:							
		Production (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	7,739.3	1,892.4	1,937.1	1,933.3	1,976.5
			1994 .....	7,049.7	1,598.3	1,801.3	1,808.2	1,842.0
		Shipments, including interplant transfers (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	7,669.8	1,923.8	1,790.6	2,052.1	1,903.3
			1994 .....	7,017.0	1,738.2	1,669.5	1,863.3	1,746.0
		Stocks on hand, end of quarter (gross weight) .	1995 .....	(NA)	325.7	373.2	291.8	478.4
		1994 .....	(NA)	216.4	373.2	301.5	405.9	
28742 55, 61	Other ammonium phosphates and other phosphatic fertilizer materials <sup>1</sup> :							
		Production (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	289.2	83.6	73.1	65.5	67.0
			1994 .....	361.0	94.8	103.3	60.0	102.8
		Shipments, including interplant transfers (100 percent P <sub>2</sub> O <sub>5</sub> ) .....	1995 .....	295.9	56.5	113.3	48.7	77.3
			1994 .....	349.4	95.0	132.8	47.6	74.0
		Stocks on hand, end of quarter (gross weight) ...	1995 .....	(NA)	97.9	51.6	75.2	73.1
		1994 .....	(NA)	74.0	37.7	77.6	82.6	

NA Not available.

<sup>1</sup>"Other ammonium phosphates" (product code 28742 55) is combined with "Other phosphatic fertilizer materials" (product code 28742 61) to avoid disclosing data for individual companies.

Note: Detail may not add because of independent rounding.

Table 10. Production and Stocks of Sulfuric Acid by Process and by Quarter: 1995 and 1994

[Thousands of short tons of 100 percent H<sub>2</sub>SO<sub>4</sub>]

Quarter and year	Production				Sulfuric acid produced through decomposition	Spent acid used in fortification <sup>2</sup>	Stocks (gross) at producing plants at end of period
	Sulfuric acid, gross, new and fortified			New acid <sup>1</sup>			
	Total	Oleum grades	Other than oleum grades				
<b>1995</b>							
<b>Total .....</b>	<b>47,519.3</b>	<b>1,567.1</b>	<b>45,952.2</b>	<b>43,927.7</b>	<b>(D)</b>	<b>(D)</b>	<b>(NA)</b>
First quarter .....	11,627.2	379.5	11,247.7	10,805.6	(D)	(D)	652.1
Second quarter .....	11,877.9	390.7	11,487.2	11,004.9	(D)	(D)	642.1
Third quarter .....	11,909.8	388.8	11,521.0	10,946.0	(D)	(D)	679.3
Fourth quarter .....	12,104.4	408.0	11,696.4	11,171.2	(D)	(D)	788.2
<b>1994</b>							
<b>Total .....</b>	<b>44,861.9</b>	<b>1,594.9</b>	<b>43,267.0</b>	<b>42,311.1</b>	<b>(D)</b>	<b>(D)</b>	<b>(NA)</b>
First quarter .....	10,658.6	312.5	10,346.1	10,075.0	(D)	(D)	623.0
Second quarter .....	11,237.8	443.5	10,794.3	10,617.7	(D)	(D)	594.4
Third quarter .....	11,344.5	428.9	10,915.7	10,660.2	(D)	(D)	518.7
Fourth quarter .....	11,620.9	410.0	11,210.9	10,958.1	(D)	(D)	696.2

D Withheld to avoid disclosing data for individual companies. NA Not available.

<sup>1</sup>Represents gross production of sulfuric acid less acid produced through decomposition and spent acid used in fortification.<sup>2</sup>Spent acid fortified by the addition of sulfur trioxide.

Note: Detail may not add because of independent rounding.

Table 11. Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1995 and 1994

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to production (quantity)	Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup> (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value <sup>3</sup>		
<b>1995</b>									
28121 11	Chlorine gas .....	11,237,824	23,373	9,858	0.2	359,573	48,880	11,574,024	3.1
28123 50	Sodium hydroxide, total liquid (all processes) .....	10,276,184	1,676,333	389,594	16.3	488,445	146,686	9,088,296	5.4
28125 21	Potassium hydroxide, liquid .....	(D)	78,616	28,770	(D)	207,757	23,104	(D)	(D)
28125 30	Finished sodium bicarbonate .....	418,352	52,034	17,534	12.4	12,726	10,384	379,044	3.4
28161 00	Titanium dioxide (composite and pure) .....	1,253,248	341,774	589,285	27.3	182,966	336,599	1,094,440	16.7
28193 —	Sulfuric acid, gross .....	43,081,857	170,201	12,838	0.4	1,920,305	96,031	44,831,961	4.3
28194 11	Boric acid .....	(D)	74,490	68,099	(D)	15,586	11,269	(D)	(D)
28194 41, 45, 47	Hydrochloric acid .....	3,542,226	64,783	10,459	1.8	61,461	6,057	3,538,904	1.7
28194 61, 65	Hydrofluoric acid .....	174,286	11,257	14,145	6.5	105,923	96,927	268,952	39.4
28194 51, 67	Other inorganic acids .....	(NA)	32,490	37,713	(NA)	17,986	14,807	(NA)	(NA)
28194 98, 28195 00	Aluminum oxide .....	4,336,567	1,002,644	321,884	23.1	3,917,229	881,173	7,251,152	54.0
28196 13, 17	Aluminum chloride .....	56,282	14,518	8,510	25.8	3,324	1,022	45,088	7.4
28196 25	Aluminum hydroxide trihydrate .....	959,445	64,122	31,578	6.7	128,446	86,691	1,023,769	12.5
28196 27	Aluminum flouride .....	(D)	22,363	15,773	(D)	22,226	17,187	(D)	(D)
28196 51	Aluminum sulfate (commercial) .....	1,036,943	5,628	2,606	0.5	39,879	12,060	1,071,194	3.7
28196 73	Aluminum (sodium aluminate, etc.) .....	182,395	7,722	4,830	4.2	2,920	1,673	177,593	1.6
28197 13	Potassium iodide .....	1,090	59	939	5.4	201	1,673	1,232	16.3
28197 16	Potassium sulfate .....	(D)	-	-	(X)	51,777	10,894	(D)	(D)
28197 23	Potassium phosphates .....	11,343	2,870	2,868	25.3	3,255	4,597	11,728	27.8
28197 24	Potassium silicates .....	(D)	1,954	1,203	(D)	228	444	(D)	(D)
28197 21	Sodium metal .....	(D)	2,412	8,948	(D)	498	1,632	(D)	(D)
28197 27	Sodium chlorate .....	557,150	43,157	16,148	7.7	466,272	162,252	980,265	47.6
28197 84	Sodium sulfite .....	106,312	45,984	14,635	43.3	9,954	4,643	70,282	14.2
28197 32, 33	Sodium phosphate mono and dibasic .....	(D)	2,425	3,818	(D)	9,722	10,621	(D)	(D)
28197 34	Sodium phosphate tribasic .....	19,010	610	605	3.2	2,424	1,388	20,824	11.6
28197 38	Sodium phosphate tripoly .....	(D)	56,482	36,515	(D)	55,669	38,675	(D)	(D)
28197 41, 42, 45, 47	Sodium silicates (other than metasilicates) .....	1,091,021	35,089	10,528	3.2	9,474	2,271	1,065,406	0.9
28197 44	Sodium metasilicates .....	84,683	11,547	5,352	13.6	4,625	2,789	77,761	5.9
28197 61, 66	Sodium sulfate .....	644,472	30,949	11,220	4.8	211,303	18,880	824,826	25.6
28197 85	Sodium thiosulfate (hypo) .....	(D)	2,630	979	(D)	1,058	471	(D)	(D)
28199 05	Barium sulfate .....	(D)	723	3,575	(D)	13,400	13,040	(D)	(D)
28199 04	Barium carbonate .....	(D)	747	6,452	(D)	20,490	13,155	(D)	(D)
28199 10	Bromine .....	(D)	3,218	3,794	(D)	2,221	1,502	(D)	(D)
28199 12	Calcium carbide .....	(D)	33,479	17,229	(D)	1,516	782	(D)	(D)
28199 13	Calcium carbonate (precipitated) .....	2,326,152	21,898	10,644	0.9	80,640	12,076	2,384,894	3.4
28199 14	Calcium chloride .....	632,577	58,971	17,317	9.3	230,476	26,216	804,082	28.7
28199 18, 19, 22, 25, 28742 71	Calcium phosphates .....	1,872,755	95,920	75,201	5.1	12,631	16,055	1,789,466	0.7
28199 27	Carbon activated (granular and pulverized) <sup>5</sup> .....	141,643	32,415	60,611	22.9	30,634	48,012	139,862	21.9
28199 35	Cuprous oxide .....	(D)	(NA)	(NA)	(X)	26	146	(D)	(D)
28199 39	Hydrogen peroxide .....	321,955	51,514	36,502	16.0	73,348	46,432	343,789	21.3
28199 40	Iodine .....	1,257	1,596	12,369	127.0	3,804	37,731	3,465	109.8
28199 43	Iron oxides and hydroxides .....	33,369	24,644	43,804	73.9	19,904	31,537	28,629	69.5

See footnotes at end of table.



Table 11. Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1995 and 1994—Con.

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to production (quantity)	Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup> (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value <sup>3</sup>		
<b>1995—Con.</b>									
28199 48	Magnesium chloride .....	(D)	3,062	1,698	(D)	16,456	6,199	(D)	(D)
28199 49	Magnesium sulfate .....	(D)	4,736	1,829	(D)	16,000	4,597	(D)	(D)
28199 51	Manganese dioxide .....	63,553	4,264	4,125	6.7	29,680	42,869	88,969	33.4
28199 53	Mercury .....	(D)	178	770	(D)	377	1,262	(D)	(D)
28199 5B	Molybdates .....	(D)	2,180	35,965	(D)	226	3,162	(D)	(D)
28199 56	Nickel oxides and hydroxides .....	(D)	273	3,172	(D)	1,156	11,873	(D)	(D)
28199 57	Nickel chloride .....	(D)	158	601	(D)	638	1,815	(D)	(D)
28199 55	Nickel sulfate .....	(D)	2,222	6,231	(D)	3,895	8,384	(D)	(D)
28199 58	Phosphorous, elemental .....	(D)	13,748	24,072	(D)	1,779	3,917	(D)	(D)
28199 60, 63	Phosphorous, oxychloride and trichloride .....	204,947	1,542	5,032	0.8	46	2,281	203,451	-
28199 71	Strontium carbonate .....	(D)	1,484	740	(D)	34,878	22,039	(D)	(D)
28199 74	Sulfur, recovered elemental .....	(NA)	548,249	28,379	(NA)	2,136,164	119,841	(NA)	(NA)
28199 75	Sulfur dioxide .....	191,984	1,672	598	0.9	76,799	14,382	267,111	28.8
28199 84	Tungstates .....	(D)	2,610	3,254	(D)	2,238	18,468	(D)	(D)
28199 87	Zinc sulfate .....	38,816	4,206	2,262	10.8	5,399	3,957	40,009	13.5
28199 86	Zinc oxide and peroxide .....	(D)	7,086	9,113	(D)	48,024	52,560	(D)	(D)
28199 88	Zinc chloride .....	(D)	1,694	1,253	(D)	2,449	2,641	(D)	(D)
28163 13, 15,17,18, 19	Chrome colors .....	47,631	1,256	6,024	2.6	6,316	16,394	52,691	12.0
28199 15, 30, 28422 43, 53	Bleaches (sodium and calcium hypochlorite, etc.) .....	613,180	48,889	51,263	8.0	22,546	19,502	586,837	3.8
28731 30, 32	Ammonia, synthetic anhydrous .....	15,777	(D)	(NA)	(D)	(D)	(NA)	(D)	(D)
28731 50	Ammonium nitrate, original solution .....	7,698	90	(NA)	1.2	721	(NA)	8,329	8.7
28731 66	Nitrogen solutions, ammonium nitrate/urea solutions .....	3,266	5	(NA)	0.2	628	(NA)	3,890	16.2
28731 56, 58	Ammonium sulfate .....	2,400	917	(NA)	38.2	434	(NA)	1,916	22.6
28732 —	Urea .....	7,368	881	(NA)	12.0	2,936	(NA)	9,423	31.2
28741 81, 85	Phosphoric acid .....	11,907	(D)	(NA)	(D)	20	(NA)	(D)	(D)
28742 15, 41	Normal, concentrated, and enriched superphosphates .....	1,660	720	(NA)	43.4	-	(NA)	940	-
28742 52	Diammonium phosphates .....	13,285	10,059	(NA)	75.7	21	(NA)	3,247	0.7
28193 —	Sulfuric acid, gross .....	43,082	170	(NA)	0.4	1,926	(NA)	44,837	4.3
<b>1994</b>									
28121 11	Chlorine gas .....	11,049,241	26,874	8,497	0.2	357,435	46,938	11,379,802	3.1
28123 50	Sodium hydroxide, total liquid (all processes) .....	11,368,057	770,638	139,949	6.8	486,703	103,898	11,084,122	4.4
28125 21	Potassium hydroxide, liquid .....	(D)	54,732	20,516	(D)	50,001	7,821	(D)	(D)
28125 30	Finished sodium bicarbonate .....	(D)	51,917	17,536	(D)	8,560	4,236	(D)	(D)
28161 00	Titanium dioxide (composite and pure) .....	1,251,028	352,325	485,223	28.2	129,293	218,124	1,027,996	12.6
28193 —	Sulfuric acid, gross .....	40,672,637	140,206	11,051	0.3	2,134,492	85,068	42,666,923	5.0
28194 11	Boric acid .....	(D)	87,357	53,319	(D)	19,654	12,930	(D)	(D)
28194 41, 45, 47	Hydrochloric acid .....	3,403,834	45,176	7,885	1.3	57,060	5,636	3,415,718	1.7
28194 61, 65	Hydrofluoric acid .....	(D)	10,821	13,359	(D)	127,231	96,524	(D)	(D)
28194 51, 67	Other inorganic acids .....	(NA)	21,124	28,267	(NA)	16,895	11,947	(NA)	(NA)

See footnotes at end of table.

Table 11. **Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1995 and 1994—Con.**

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to production (quantity)	Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup> (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value <sup>3</sup>		
<b>1994—Con.</b>									
28194 98, 28195 00 28196 13, 17 28196 25 28196 27 28197 23 28196 51	Aluminum oxide . . . . . Aluminum chloride . . . . . Aluminum hydroxide trihydrate . . . . . Aluminum flouride . . . . . Aluminum sulfate (commercial) . . . . .	4,052,538 41,289 954,180 (D) 1,033,401	997,284 10,966 68,035 16,077 7,056	243,661 6,379 27,671 9,113 3,529	24.6 26.6 7.1 (D) 0.7	3,059,804 4,329 99,829 23,709 30,881	593,080 2,221 70,195 22,719 11,622	6,115,058 34,652 985,974 (D) 1,057,226	50.0 12.5 10.1 (D) 2.9
28196 73	Aluminates (sodium aluminate, etc.) . . . . .	134,744	10,059	3,616	7.5	2,516	1,525	127,201	2.0
28197 13	Potassium iodide . . . . .	1,427	89	989	6.2	134	1,163	1,472	9.1
28197 16	Potassium sulfate . . . . .	384,416	-	-	(X)	86,690	20,491	471,106	18.4
28197 23	Potassium phosphates . . . . .	11,617	2,197	2,573	18.9	5,106	7,755	14,526	35.2
28197 24	Potassium silicates . . . . .	6,962	1,036	1,087	14.9	59	167	5,985	1.0
28197 21	Sodium metal . . . . .	(D)	4,857	11,187	(D)	364	1,151	(D)	(D)
28197 27	Sodium chlorate . . . . .	506,813	47,751	13,649	9.4	412,170	132,486	871,232	47.3
28197 84	Sodium sulfite . . . . .	103,345	35,247	10,268	34.1	10,178	4,378	78,276	13.0
28197 32, 33	Sodium phosphate mono and dibasic . . . . .	(D)	2,266	3,361	(D)	7,857	9,249	(D)	(D)
28197 34	Sodium phosphate tribasic . . . . .	20,225	785	729	3.9	4,250	2,503	23,690	17.9
28197 38	Sodium phosphate tripoly . . . . .	(D)	69,289	47,175	(D)	64,929	45,152	(D)	(D)
28197 41, 42, 45, 47	Sodium silicates (other than metasilicates) . . . . .	913,365	29,911	8,978	3.3	2,715	1,724	886,169	0.3
28197 44	Sodium metasilicates . . . . .	85,926	9,835	5,095	11.4	4,747	2,443	80,838	5.9
28197 61, 66	Sodium sulfate . . . . .	590,840	34,279	12,089	5.8	214,855	19,021	771,416	27.9
28197 85	Sodium thiosulfate (hypo) . . . . .	(D)	2,156	960	(D)	1,359	551	(D)	(D)
28199 05	Barium sulfate . . . . .	(D)	335	413	(D)	12,988	11,388	(D)	(D)
28199 04	Barium carbonate . . . . .	(D)	563	8,208	(D)	18,741	10,591	(D)	(D)
28199 10	Bromine . . . . .	(D)	6,470	7,268	(D)	330	256	(D)	(D)
28199 12	Calcium carbide . . . . .	(D)	32,447	16,501	(D)	1,308	723	(D)	(D)
28199 13	Calcium carbonate (precipitated) . . . . .	2,042,723	37,614	12,229	1.8	68,979	10,373	2,074,088	3.3
28199 14	Calcium chloride . . . . .	578,733	50,583	13,935	8.7	253,607	33,142	781,757	32.4
28199 18, 19, 22, 25, 28742 71	Calcium phosphates . . . . .	1,865,310	106,727	72,054	5.7	15,925	8,416	1,774,508	0.9
28199 27	Carbon activated (granular and pulverized) <sup>5</sup> . . . . .	142,793	26,311	49,027	18.4	26,601	42,135	143,083	18.6
28199 35	Cuprous oxide . . . . .	(D)	(NA)	(NA)	(X)	83	246	(D)	(D)
28199 39	Hydrogen peroxide . . . . .	288,685	46,532	28,609	16.1	57,848	33,945	300,001	19.3
28199 40	Iodine . . . . .	(D)	1,165	9,066	(D)	4,258	32,426	(D)	(D)
28199 43	Iron oxides and hydroxides . . . . .	31,998	23,254	41,941	72.7	16,907	25,844	25,651	65.9
28199 48	Magnesium chloride . . . . .	620,531	4,395	2,515	0.7	23,113	8,056	639,249	3.6
28199 49	Magnesium sulfate . . . . .	(D)	4,160	2,205	(D)	9,793	2,800	(D)	(D)
28199 51	Manganese dioxide . . . . .	50,323	3,316	3,598	6.6	29,774	48,884	76,781	38.8
28199 53	Mercury . . . . .	(D)	316	885	(D)	129	517	(D)	(D)
28199 5B	Molybdates . . . . .	(D)	1,802	9,995	(D)	361	2,632	(D)	(D)
28199 56	Nickel oxides and hydroxides . . . . .	(D)	233	2,161	(D)	978	9,414	(D)	(D)
28199 57	Nickel chloride . . . . .	(D)	198	666	(D)	744	1,469	(D)	(D)
28199 55	Nickel sulfate . . . . .	(D)	1,219	4,415	(D)	3,617	6,239	(D)	(D)
28199 58	Phosphorous, elemental . . . . .	231,176	15,234	26,393	6.6	1,403	3,021	217,345	0.6
28199 60, 63	Phosphorous, oxychloride and trichloride . . . . .	175,806	1,015	2,964	0.6	45	2,623	174,836	-
28199 71	Strontium carbonate . . . . .	(D)	1,616	799	(D)	33,075	20,581	(D)	(D)
28199 74	Sulfur, recovered elemental . . . . .	(NA)	530,770	20,159	(NA)	1,583,458	76,910	(NA)	(NA)

See footnotes at end of table.

Table 11. **Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1995 and 1994—Con.**

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise <sup>1</sup>		Percent exports to production (quantity)	Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup> (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value <sup>3</sup>		
<b>1994—Con.</b>									
28199 75	Sulfur dioxide .....	208,032	295	154	0.1	68,772	12,069	276,509	24.9
28199 84	Tungstates .....	(D)	400	3,006	(D)	2,108	11,133	(D)	(D)
28199 87	Zinc sulfate .....	42,645	4,802	2,884	11.3	7,197	4,182	45,040	16.0
28199 86	Zinc oxide and peroxide.....	(D)	8,197	7,188	(D)	39,885	43,573	(D)	(D)
28199 88	Zinc chloride.....	(D)	947	939	(D)	3,359	3,250	(D)	(D)
28163 13, 15,17,18, 19	Chrome colors .....	49,820	1,305	6,008	2.6	6,389	16,788	54,904	11.6
28199 15, 30, 28422 43, 53	Bleaches (sodium and calcium hypochlorite, etc.) .....	635,856	48,720	39,709	7.7	21,725	18,088	608,861	3.6
28731 30, 32	Ammonia, synthetic anhydrous.....	16,200	(D)	(NA)	(D)	(D)	(NA)	(D)	(D)
28731 50	Ammonium nitrate, original solution.....	7,768	55	(NA)	0.7	507	(NA)	8,220	6.2
28731 66	Nitrogen solutions, ammonium nitrate/urea solutions.....	3,259	119	(NA)	3.7	312	(NA)	3,452	9.0
28731 56, 58	Ammonium sulfate.....	2,343	762	(NA)	32.5	456	(NA)	2,036	22.4
28732 —	Urea.....	7,580	914	(NA)	12.1	3,160	(NA)	9,827	32.2
28741 81, 85	Phosphoric acid.....	11,598	(D)	(NA)	(D)	16	(NA)	(D)	(D)
28742 15, 41	Normal, concentrated, and enriched superphosphates.....	1,738	809	(NA)	46.5	-	929	(NA)	-
28742 52	Diammonium phosphates .....	12,300	9,195	(NA)	74.8	15	3,121	(NA)	0.5
28193 —	Sulfuric acid, gross .....	40,673	140	(NA)	0.3	2,135	42,667	(NA)	5.0

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. X Not applicable.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 146, *U.S. Imports for Consumption*.<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus calculated import duty.<sup>4</sup>Apparent consumption is derived by subtracting exports from manufacturers' production plus imports. Apparent consumption does not include any adjustments for changes in inventories.<sup>5</sup>Includes reactivated carbon.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

**HISTORICAL NOTE**

Data on inorganic chemicals and fertilizer materials have been collected by the Bureau of the Census since 1941. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Lissene Hafenrichter (Inorganic Chemicals), 301-457-4830 or Walter R. Hunter, Jr. (Fertilizer Materials), 301-457-4798.

## INDUSTRIAL GASES (MA28C)

### INTRODUCTION

The data in this subsection are from surveys MQ28C and MA28C, Industrial Gases. The data shown are production, quantity, and value of shipments. Gases that are vented or used for fuel by the manufacturer are excluded.

### SUMMARY OF FINDINGS

In 1995, total manufacturers' shipments of industrial gases amounted to \$3,501.4 million, an increase of 9.8 percent from the 1994 shipments of \$3,187.8 million.

Total shipments of carbon dioxide increased 16.8 percent to \$393.1 million in 1995, from \$336.7 million in 1994. Carbon dioxide gas decreased 10.7 percent to \$59.9 million in 1995, from \$67.1 million in 1994. Carbon dioxide liquid increased 25.4 percent to \$299.4 million in 1995, from \$238.7 million in 1994, and solid carbon dioxide (dry ice) increased 9.1 percent in 1995, bringing its value to \$33.7 million, from a 1994 value of \$30.9 million.

Total production of nitrogen decreased 1.3 percent to 858.3 billion cubic feet in 1995, from 870.0 billion in 1994; however, shipments of nitrogen increased 7.3 percent to \$1,134.8 million in 1995, from \$1,057.6 million in 1994. Production of nitrogen gas decreased 4.1 percent in 1995 to 576.7 billion cubic feet, from 601.5 billion in 1994; and shipments of nitrogen gas decreased 6.5 percent to \$452.0 million in 1995, from \$483.4 in 1994. Production of liquid nitrogen for merchant shipments increased 4.7 percent in 1995 to 237.4 billion cubic feet, from 226.7 billion in 1994; and shipments increased 21.2 percent to \$634.8 million in 1995, from \$523.7 million in 1994.

Total production of oxygen increased 4.0 percent to 629.1 billion cubic feet in 1995, from 605.0 billion in 1994; and shipments of oxygen increased 9.5 percent to \$966.1 million in 1995, from \$881.9 million in 1994. Production of oxygen gas increased 4.2 percent in 1995 to 477.3 billion cubic feet, from 458.0 billion in 1994; and shipments of oxygen gas increased 1.5 percent to \$577.1 million in 1995, from \$568.5 in 1994. Production of liquid oxygen for

merchant shipments increased 4.5 percent in 1995 to 112.3 billion cubic feet, from 107.5 billion in 1994; and shipments increased 23.6 percent to \$347.5 million in 1995, from \$281.1 million in 1994.

Total production of hydrogen increased 6.2 percent to 351.6 billion cubic feet in 1995, from 331.0 billion in 1994; shipments of hydrogen increased 13.8 percent to \$311.1 million in 1995, from \$273.4 million in 1994.

### EXPLANATION OF TERMS

**Carbon dioxide.** Includes all gas produced that is not vented, regardless of whether it will be used as a gas or to make liquid or solid. Also includes natural carbon dioxide produced from well operations. Excludes amounts produced and consumed in the manufacture of urea or soda ash.

**Hydrogen.** Excludes amounts produced and consumed in the manufacture of synthetic ammonia, synthetic methanol, petroleum products (hydrocracking and hydrotreating), and amounts produced by the ammonia dissociation process (cracking of ammonia).

**Nitrogen/oxygen.** Excludes amounts produced and consumed in the manufacture of synthetic ammonia and ammonia derivatives.

**Production.** Data shown for production represent total quantity of each chemical produced, including quantity consumed in plants, and for sale or transfer to other plants or warehouses of the same company. The statistics presented in the tables provide an up-to-date measure of activity in the inorganic field, but do not necessarily indicate amounts entering the market. In some cases, figures are included for material produced "in process" as an intermediate to the end of products.

**Unit of measure.** All figures included in this report are shown in million cubic feet, 70 degrees Fahrenheit, at 1 atmosphere pressure, unless otherwise specified.

Table 12. Production and Shipments of Selected Industrial Gases: 1992 to 1995

[Value in millions of dollars]

Product code	Product description	Year	Unit of measure	Production	Shipments	
					Quantity	Value
28132 00	Acetylene .....	1995 .....	Bil cu ft. ....	5.8	3.3	156.6
		1994 .....	.....do.....	5.3	2.9	143.3
		1993 .....	.....do.....	5.2	2.7	134.1
		1992 .....	.....do.....	5.3	2.9	141.6
28133 00	Carbon dioxide: Gas.....	1995 .....	1,000 s tons ..	5,944.2	5,497.6	59.9
		1994 .....	.....do.....	6,944.7	6,530.4	67.1
		1993 .....	.....do.....	6,816.4	6,402.5	73.4
		1992 .....	.....do.....	6,936.5	6,538.5	75.0
	Liquid .....	1995 .....	.....do.....	6,756.7	6,398.8	299.4
		1994 .....	.....do.....	5,898.4	5,728.9	238.7
		1993 .....	.....do.....	5,543.4	5,266.2	230.8
		1992 .....	.....do.....	5,542.0	5,372.9	230.4
	Solid (dry ice).....	1995 .....	.....do.....	312.3	309.4	33.7
		1994 .....	.....do.....	288.0	288.1	30.9
		1993 .....	.....do.....	295.9	294.9	29.9
		1992 .....	.....do.....	262.0	261.2	27.2
28135 00	Nitrogen.....	1995 .....	Bil cu ft. ....	858.3	819.6	1,134.8
		1994 .....	.....do.....	870.0	827.2	1,057.6
		1993 .....	.....do.....	795.5	751.3	1,070.8
		1992 .....	.....do.....	818.5	792.9	981.5
28136 00	Oxygen .....	1995 .....	.....do.....	629.1	596.8	966.1
		1994 .....	.....do.....	605.0	564.5	881.9
		1993 .....	.....do.....	547.1	522.9	869.1
		1992 .....	.....do.....	525.2	498.9	767.3
28137 pt.	Hydrogen.....	1995 .....	.....do.....	351.6	138.4	311.1
		1994 .....	.....do.....	331.0	126.6	273.4
		1993 .....	.....do.....	212.9	96.5	264.2
		1992 .....	.....do.....	162.2	84.3	259.7

pt. Part.      \*Revised by 5 percent or more from previously published data.

Table 13. Quantity of Primary Production of Specified Industrial Gases: 1995 and 1994

[Production and quantity of shipments in million cubic feet. Value in thousands of dollars]

Product code	Product description	Unit of measure	1995			1994		
			Production	Shipments		Production	Shipments	
				Quantity	Value		Quantity	Value
2813—	Industrial gases	....(X)....	(X)	(X)	3,501,438	(X)	(X)	3,187,765
28132 00	Acetylene <sup>1</sup>	Mil cu ft....	5,843	3,312	156,557	5,336	2,909	<sup>1</sup> 143,335
28132 11	Produced for compression, including cylinder and pipeline	....do....	925	914	84,690	786	<sup>1</sup> 778	76,057
28132 21	Produced for pipeline shipment, excluding that shipped to be compressed, and for consumption in this plant	....do....	4,918	2,398	71,867	4,550	2,131	<sup>1</sup> 67,278
28133 00	Carbon dioxide <sup>2</sup>	Short tons .	13,013,275	12,205,834	393,072	13,131,116	12,547,484	336,724
28133 01	Gas, including amounts produced and liquefied	....do....	5,944,210	5,497,645	59,949	6,944,733	6,530,425	67,080
28133 02	Liquid, including amounts produced and used to make dry ice	....do....	6,756,702	6,398,759	299,445	5,898,425	5,728,923	238,719
28133 31	Solid (dry ice)	....do....	312,363	309,430	33,678	287,958	288,136	30,925
28135 00	Nitrogen <sup>3</sup>	Mil cu ft....	858,251	819,569	1,134,795	870,047	827,236	1,057,595
28135 22	Gas produced by: Cryogenic onsite and pipeline	....do....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
28135 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies	....do....	<sup>4</sup> 576,664	<sup>4</sup> 555,524	<sup>4</sup> 452,037	<sup>4</sup> 601,544	<sup>4</sup> 586,354	<sup>4</sup> 483,373
28135 24	Captive uses for consumption in this plant: Cryogenic processes	....do....	( <sup>5</sup> )	(X)	(X)	( <sup>5</sup> )	(X)	(X)
28135 26	Noncryogenic processes (psa, vpsa, membranes, etc.)	....do....	<sup>5</sup> 29,845	(X)	(X)	<sup>5</sup> 27,553	(X)	(X)
28135 12	Liquid produced for: Merchant shipment	....do....	237,393	250,006	634,776	226,693	226,915	523,742
28135 32	Consumption in this plant	....do....	( <sup>5</sup> )	(X)	(X)	( <sup>5</sup> )	(X)	(X)
28135 34	Supplemental shipments or uses	....do....	14,349	14,039	47,982	14,257	13,967	<sup>1</sup> 50,480
28136 00	Oxygen	....do....	629,054	596,846	966,062	604,974	564,496	881,912
28136 22	Gas produced by: Cryogenic onsite and pipeline	....do....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
28136 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies	....do....	<sup>6</sup> 477,335	<sup>6</sup> 469,743	<sup>6</sup> 577,103	<sup>6</sup> 458,008	<sup>6</sup> 446,883	<sup>6</sup> 568,462
28136 24	Captive uses for consumption in this plant: Cryogenic processes	....do....	( <sup>7</sup> )	(X)	(X)	( <sup>7</sup> )	(X)	(X)
28136 26	Noncryogenic processes (psa, vpsa, membranes, etc.)	....do....	<sup>7</sup> 27,277	(X)	(X)	<sup>7</sup> 28,702	(X)	(X)
28136 12	Liquid produced for: Merchant shipment	....do....	112,258	113,816	347,468	107,503	107,038	281,064
28136 32	Consumption in this plant	....do....	( <sup>7</sup> )	(X)	(X)	( <sup>7</sup> )	(X)	(X)
28136 34	Supplemental shipments or uses	....do....	12,184	13,287	41,491	10,761	10,575	32,386
28137 00	Elemental gases and other industrial gases, n.e.c.	Mil cu ft....	(X)	(X)	806,188	(X)	(X)	<sup>1</sup> 726,952
28137 11	Argon	....do....	(D)	(D)	(D)	(D)	(D)	(D)
28137 15	Argon, crude	....do....	(D)	(D)	(D)	(D)	(D)	(D)
	Argon, high purity, produced for cylinder and bulk delivery and pipeline shipments, and for consumption in this plant	....do....	16,950	16,443	293,858	17,914	17,576	280,657
	Helium <sup>8</sup>	....do....	(X)	3,465	(X)	(X)	3,620	(X)
	Hydrogen <sup>9</sup>	....do....	351,648	138,448	311,136	<sup>1</sup> 330,992	126,624	273,395

See footnotes at end of table.

Table 13. Quantity of Primary Production of Specified Industrial Gases: 1995 and 1994—Con.

[Production and quantity of shipments in million cubic feet. Value in thousands of dollars]

Product code	Product description	Unit of measure	1995			1994		
			Production	Shipments		Production	Shipments	
				Quantity	Value		Quantity	Value
2813— 28137 00	Industrial gases—Con. Elemental gases and other industrial gases, n.e.c.—Con.							
	Gas produced for:							
28137 22	Merchant shipment . . . . .do . . . . .		<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
28137 32	Pipeline and on-site use . . . . .do . . . . .		<sup>10</sup> 155,019	<sup>10</sup> 138,448	<sup>10</sup> 311,136	<sup>10</sup> 140,103	<sup>10</sup> 126,624	<sup>10</sup> 273,395
28137 42	Consumption in this plant . . . . .do . . . . .		196,629	(X)	(X)	<sup>r</sup> 190,889	(X)	(X)
	Liquid produced for:							
28137 52	Merchant shipment . . . . .do . . . . .		<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
28137 62	Supplemental shipments or uses . . . . .do . . . . .		<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
28137 90	Other elemental gases . . . . .(X) . . . . .		(X)	(X)	(D)	(X)	(X)	(D)
28137 71	Nitrous oxide . . . . .do . . . . .		(X)	(X)	<sup>(11)</sup>	(X)	(X)	<sup>(11)</sup>
28137 98	Other compressed and liquefied gases . . . . .(X) . . . . .		(X)	(X)	<sup>11</sup> 188,425	(X)	(X)	<sup>11</sup> <sup>r</sup> 156,365
28130 00	Industrial gases, n.s.k. . . . .(X) . . . . .		(X)	(X)	44,764	(X)	(X)	41,247

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind.  
<sup>r</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Excludes information from railroad ships, shipyards, welding shops, and small establishments using portable generators.

<sup>2</sup>Excludes quantities produced and consumed in plants manufacturing soda ash or urea. "Carbon dioxide gas" figures should be used with caution since the data includes figures for gas produced in the production of petroleum, whose data is difficult to measure.

<sup>3</sup>Excludes amounts produced and consumed in manufacturing of synthetic ammonia or ammonia derivatives.

<sup>4</sup>Product code 28135 22 has been combined with product code 28135 23 to avoid disclosing data for individual companies.

<sup>5</sup>Product codes 28135 24 and 28135 32 are combined with product code 28135 26 to avoid disclosing data for individual companies.

<sup>6</sup>Product code 28135 22 has been combined with product code 28135 23 to avoid disclosing data for individual companies.

<sup>7</sup>Product codes 28136 24 and 28136 32 are combined with product codes 28136 26 to avoid disclosing data for individual companies.

<sup>8</sup>Source: U.S. Department of Interior, Bureau of Mines.

<sup>9</sup>Excludes amounts vented, used as fuel, etc., and amounts produced and consumed in the manufacturing of synthetic ammonia and methanol, but includes an unspecified amount produced for sale or interplant transfer to plants consuming this gas in production of ammonia. Also excludes amount produced by ammonia dissociation process (cracking of ammonia). Also excludes amounts produced in petroleum refineries of captive use.

<sup>10</sup>Product codes 28137 22, 28137 52 and 28137 62 are combined with product code 28137 32 to avoid disclosing data for individual companies.

<sup>11</sup>Product codes 28137 71 and 28137 98 are combined to avoid disclosing data for individual companies and excludes hydrocarbon gases such as propane, butane, and propylene, or halogenated hydrocarbons and cyclopropane, which are published in the U.S. International Trade Commission annual report, *Synthetic Organic Chemicals*. Also, excludes sulfur dioxide and chlorine data, which are shown in Current Industrial Reports Series, MA28A(95)-1 Inorganic Chemicals.

Note: N.s.k. represents value of shipments for establishments that did not provide detailed information by type of product. These establishments, typically with less than five employees, are not included on the MA28C mailing panel. N.s.k. value has been estimated based on rate of change for reporting establishments applied to previous year's figures.

Table 14. Production and Shipments of Acetylene by Geographic Area: 1995 and 1994

[Production and quantity in million cubic feet. Value in thousands of dollars]

Geographic area	1995			1994		
	Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value
<b>Total</b> .....	<b>5,843</b>	<b>3,312</b>	<b>156,557</b>	<b>5,336</b>	<b>2,909</b>	<b><sup>r</sup>143,335</b>
Northeast Region.....	85	88	7,539	62	66	5,054
North Central Region .....	202	213	28,054	210	203	<sup>r</sup> 19,588
East North Central.....	139	150	22,073	<sup>r</sup> 142	136	<sup>r</sup> 13,074
West North Central.....	63	63	5,981	68	67	6,514
South Region .....	5,388	2,841	102,638	4,898	2,474	<sup>r</sup> 100,750
South Atlantic and East South Central .....	699	670	44,085	679	673	44,254
West South Central.....	4,689	2,171	58,553	4,219	1,801	<sup>r</sup> 56,496
West Region.....	168	170	18,326	<sup>r</sup> 166	<sup>r</sup> 166	<sup>r</sup> 17,943
Mountain.....	31	31	3,463	<sup>r</sup> 32	<sup>r</sup> 29	<sup>r</sup> 3,162
Pacific .....	137	139	14,863	<sup>r</sup> 134	<sup>r</sup> 137	<sup>r</sup> 14,781

<sup>r</sup>Revised by 5 percent or more from previously published data.

See note at end of table 17.

Table 15. Production and Shipments of Carbon Dioxide by Geographic Area: 1995 and 1994

[Production and quantity in short tons. Value in thousands of dollars]

Geographic area	Liquid			Solid		
	Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value
<b>1995</b>						
<b>Total</b> .....	<b>6,756,702</b>	<b>6,398,759</b>	<b>299,445</b>	<b>312,363</b>	<b>309,430</b>	<b>33,678</b>
Northeast Region.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
North Central Region .....	1,936,328	1,824,421	71,825	154,157	152,438	14,165
East North Central.....	<sup>1</sup> 1,317,377	<sup>1</sup> 1,264,032	<sup>1</sup> 54,505	<sup>1</sup> 75,040	<sup>1</sup> 75,176	<sup>1</sup> 8,238
West North Central.....	618,951	560,389	17,320	79,117	77,262	5,927
South Region .....	3,629,494	3,433,338	161,986	103,046	102,093	12,245
South Atlantic and East South Central .....	2,165,894	2,037,818	93,934	54,320	53,712	6,352
West South Central.....	1,463,600	1,395,520	68,052	48,726	48,381	5,893
West Region.....	1,190,880	1,141,000	65,634	55,160	54,899	7,268
Mountain.....	362,288	332,187	18,877	23,596	23,264	1,962
Pacific .....	828,592	808,813	46,757	31,564	31,635	5,306
<b>1994</b>						
<b>Total</b> .....	<b>5,898,425</b>	<b>5,728,923</b>	<b>238,719</b>	<b>287,958</b>	<b>288,136</b>	<b>30,925</b>
Northeast Region.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
North Central Region .....	1,688,743	1,648,252	<sup>r</sup> 55,782	152,322	152,071	14,258
East North Central.....	<sup>1</sup> 1,158,981	<sup>1</sup> 1,148,988	<sup>1</sup> 41,641	<sup>1</sup> 78,279	<sup>1</sup> 79,124	<sup>1</sup> 8,716
West North Central.....	<sup>r</sup> 529,762	<sup>r</sup> 499,264	<sup>r</sup> 14,141	74,043	72,947	5,542
South Region .....	3,027,031	2,912,619	121,967	84,951	84,872	9,890
South Atlantic and East South Central .....	1,722,835	1,646,462	<sup>r</sup> 64,644	43,747	43,681	4,661
West South Central.....	1,304,196	1,266,157	<sup>r</sup> 57,323	41,204	41,191	5,229
West Region.....	1,182,651	1,168,052	60,970	50,685	51,193	6,777
Mountain.....	375,056	336,435	19,013	20,788	20,788	1,796
Pacific .....	807,595	831,617	41,957	29,897	30,405	4,981

<sup>r</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Totals for Northeast Region are combined with East North Central to avoid disclosing data for individual companies.

See note at end of table 17.



Table 16. Production and Shipments of Argon and Hydrogen by Geographic Area: 1995 and 1994

[Production and quantity in million cubic feet. Value in thousands of dollars]

Geographic area	Argon						Hydrogen					
	1995			1994			1995			1994		
	Production	Shipments		Production	Shipments		Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value
<b>Total</b> .....	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>351,648</b>	<b>138,448</b>	<b>311,136</b>	<b>'330,992</b>	<b>126,624</b>	<b>273,395</b>
Northeast Region.....	1,570	1,568	24,610	1,231	1,302	19,162	10,714	9,467	34,279	20,216	8,317	29,646
North Central Region .....	(D)	(D)	(D)	(D)	(D)	(D)	29,643	3,608	12,754	27,607	3,589	12,549
East North Central Division .....	6,445	6,430	121,356	7,541	7,566	107,487	(D)	(D)	(D)	(D)	(D)	(D)
West North Central Division .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Region .....	8,884	8,405	134,953	9,310	8,921	142,123	294,140	(D)	(D)	'265,605	(D)	(D)
South Atlantic Division .....	1,643	1,622	32,652	'1,626	'1,631	'29,683	11,896	6,486	14,072	9,546	2,474	9,678
East South Central Division .....	1,228	1,225	15,931	1,337	1,341	18,906	4,379	(D)	(D)	4,140	(D)	(D)
West South Central Division .....	6,013	5,558	86,370	6,347	5,949	93,534	277,865	115,629	230,165	'251,919	108,948	'202,736
West Region .....	1,342	1,326	24,364	1,269	1,292	'26,912	17,151	(D)	(D)	17,564	(D)	(D)

D Withheld to avoid disclosing data for individual companies. 'Revised by 5 percent or more from previously published data.

See note at end of table 17.

Table 17. Production and Shipments of Liquid Nitrogen and Oxygen Produced for Merchant Shipment by Geographic Area: 1995 and 1994

[Production and quantity in million cubic feet. Value in thousands of dollars]

Geographic area	Nitrogen						Oxygen					
	1995			1994			1995			1994		
	Production	Shipments		Production	Shipments		Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value
<b>Total</b> .....	<b>237,393</b>	<b>250,006</b>	<b>634,776</b>	<b>226,693</b>	<b>226,915</b>	<b>523,742</b>	<b>112,258</b>	<b>113,816</b>	<b>347,468</b>	<b>107,503</b>	<b>107,038</b>	<b>281,064</b>
Northeast Region.....	46,403	46,715	116,499	42,331	42,330	82,709	21,126	21,325	62,914	21,670	21,764	51,941
North Central Region .....	72,102	83,612	188,720	62,089	62,853	140,263	36,562	36,462	103,146	28,622	28,950	70,007
East North Central Division .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
West North Central Division .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Region .....	80,154	81,448	218,598	'82,686	'82,379	'191,430	41,490	42,432	132,481	'44,207	'44,204	'117,834
South Atlantic Division .....	36,217	36,572	98,486	'35,309	'35,123	'77,027	22,831	23,132	68,643	'21,658	'21,590	'53,243
East South Central Division .....	15,440	15,355	39,966	15,627	15,417	38,220	7,712	7,703	25,382	10,130	10,128	27,882
West South Central Division .....	28,497	29,521	80,146	31,750	31,839	76,183	10,947	11,597	38,456	12,419	12,486	36,709
West Region .....	38,734	38,231	110,959	39,587	39,353	109,340	13,080	13,597	48,927	13,004	12,120	41,282

D Withheld to avoid disclosing data for individual companies. 'Revised by 5 percent or more from previously published data.

Note: Northeast Region: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania. North Central Region: East North Central Division: Ohio, Indiana, Illinois, Michigan, and Wisconsin. West North Central Division: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. South Region: South Atlantic Division: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida. East South Central Division: Kentucky, Tennessee, Alabama, and Mississippi. West South Central Division: Arkansas, Louisiana, Oklahoma, and Texas. West Region: Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada. Pacific: Washington, Oregon, California, Alaska, and Hawaii.

Table 18. Quantity of Primary Production of Specified Industrial Gases: 1995 and 1994

[Production in million cubic feet, except where otherwise noted]

Product code	Product description	1995					1994				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28132 00	Acetylene <sup>1</sup> .....	5,843	1,639	1,395	1,424	1,385	5,336	1,356	1,276	1,326	1,378
28132 11	Produced for compression, including cylinder and pipeline. ...	925	264	234	206	222	786	208	185	179	213
28132 21	Produced for pipeline shipment, excluding that shipped to be compressed, and for consumption in this plant. ....	4,918	1,375	1,163	1,216	1,163	4,550	1,148	1,091	1,147	1,165
28133 01	Carbon dioxide: <sup>2</sup> Gas, including amounts produced and liquefied (short tons) .....	5,944,210	(S)	(S)	(S)	(S)	6,944,733	(S)	(S)	(S)	(S)
28133 02	Liquid, including amounts produced and used to make dry ice (short tons) .....	6,756,702	1,587,932	1,678,535	1,791,663	1,698,572	5,898,425	1,305,359	1,453,778	1,603,991	1,535,297
28133 31	Solid (dry ice) (short tons) .....	312,363	70,156	79,678	87,612	74,917	287,958	64,200	68,142	90,781	64,835
28137 15	Argon, high purity: Produced for cylinder and bulk delivery and pipeline shipments, and for consumption in this plant. ....	16,950	4,157	4,037	4,158	4,598	17,914	4,086	4,262	4,724	4,842
	Hydrogen <sup>3</sup> .....	351,649	78,694	88,504	92,394	92,057	<sup>1</sup> 330,992	<sup>1</sup> 69,227	<sup>1</sup> 84,379	<sup>1</sup> 93,086	<sup>1</sup> 84,300
28137 22	Gas produced for: Merchant shipment ...	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
28137 32	Pipeline and onsite use .....	<sup>4</sup> 155,019	<sup>4</sup> 38,211	<sup>4</sup> 37,495	<sup>4</sup> 40,653	<sup>4</sup> 38,661	<sup>4</sup> 140,103	<sup>4</sup> 33,911	<sup>4</sup> 34,971	<sup>4</sup> 41,187	<sup>4</sup> 30,034
28137 42	Consumption in this plant. ....	196,629	40,483	51,009	51,741	53,396	<sup>1</sup> 190,889	<sup>1</sup> 35,316	<sup>1</sup> 49,408	<sup>1</sup> 51,899	<sup>1</sup> 54,266
28137 52	Liquid produced for: Merchant shipment ...	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
28137 62	Other shipments or uses .....	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
28135 00	Nitrogen <sup>5</sup> .....	858,251	209,132	215,041	217,834	216,244	870,047	218,952	216,476	217,183	217,436
28135 22	Gas produced by: Cryogenic onsite and pipeline .....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
28135 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies .....	<sup>6</sup> 576,664	<sup>6</sup> 141,734	<sup>6</sup> 143,793	<sup>6</sup> 146,251	<sup>6</sup> 144,886	<sup>6</sup> 601,544	<sup>6</sup> 152,424	<sup>6</sup> 151,425	<sup>6</sup> 147,904	<sup>6</sup> 149,791
28135 24	Captive uses for consumption in this plant (user-owned): Cryogenic processes .....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
28135 26	Noncryogenic processes (psa, vpsa, membranes, etc.) .....	<sup>7</sup> 29,845	<sup>7</sup> 6,952	7,533	<sup>7</sup> 7,738	<sup>7</sup> 7,622	<sup>7</sup> 27,553	<sup>7</sup> 7,580	7,121	<sup>7</sup> 6,945	<sup>7</sup> 5,907
28135 12	Liquid produced for: Merchant shipment ...	237,393	56,933	60,217	60,277	59,965	226,694	54,909	54,749	58,866	58,169
28135 32	Consumption in this plant. ....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
28135 34	Other shipments or uses .....	14,349	3,512	3,498	3,568	3,771	14,257	4,039	3,181	3,468	3,569
28136 00	Oxygen .....	629,054	156,989	157,757	159,633	154,675	604,974	145,075	147,269	152,059	160,572
28136 22	Gas produced by: Cryogenic onsite and pipeline .....	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
28136 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies .....	<sup>8</sup> 477,335	<sup>8</sup> 117,778	<sup>8</sup> 121,153	<sup>8</sup> 120,558	<sup>8</sup> 117,846	<sup>8</sup> 458,008	<sup>8</sup> 108,499	<sup>8</sup> 111,317	<sup>8</sup> 116,103	<sup>8</sup> 122,089

See footnotes at end of table.

Table 18. Quantity of Primary Production of Specified Industrial Gases: 1995 and 1994—Con.

[Production in million cubic feet, except where otherwise noted]

Product code	Product description	1995					1994				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter	Total	First quarter	Second quarter	Third quarter	Fourth quarter
	Oxygen—Con.										
28136 24	Captive uses for consumption in this plant (user-owned):										
	Cryogenic processes . . . . .	( <sup>9</sup> )	(S)	(S)	(S)	(S)	( <sup>9</sup> )	(S)	(S)	(S)	(S)
28136 26	Noncryogenic processes (psa, vpsa, membranes, etc.) . . . . .	<sup>9</sup> 27,277	(S)	(S)	(S)	(S)	<sup>9</sup> 28,702	(S)	(S)	(S)	(S)
	Liquid produced for:										
28136 12	Merchant shipment . . .	112,258	28,227	27,426	28,625	27,980	107,503	26,111	26,138	27,729	27,526
28136 32	Consumption in this plant . . . . .	( <sup>9</sup> )	(S)	(S)	(S)	(S)	( <sup>9</sup> )	(S)	(S)	(S)	(S)
28136 34	Other shipments or uses . . . . .	12,184	3,166	2,847	2,996	3,175	10,761	2,872	2,660	2,605	2,624

<sup>1</sup>Revised by 5 percent or more from previously published data.      S Does not meet publication standards.

<sup>1</sup>Excludes information from railroad ships, shipyards, welding shops, and small establishments using portable generators.

<sup>2</sup>Excludes quantities produced and consumed in plants manufacturing soda ash and urea.

<sup>3</sup>Excludes amounts vented, used as fuel, etc., and amounts produced and consumed in manufacturing of synthetic ammonia and methanol, but includes an unspecified amount produced for sale or interplant transfer to plants consuming this gas in production of ammonia. Also excludes amounts produced by ammonia dissociation process (cracking of ammonia). Also excludes amounts produced in petroleum refineries for captive use.

<sup>4</sup>Product codes 28137 22, 28137 52, and 28137 62 have been combined with product code 28137 32 to avoid disclosing data for individual companies.

<sup>5</sup>Excludes amounts produced and consumed in manufacturing of synthetic ammonia derivatives.

<sup>6</sup>Product code 28315 22 has been combined with product code 28135 23 to avoid disclosing data for individual companies.

<sup>7</sup>Product codes 28135 24 and 28135 32 have been combined with product code 28136 26 to avoid disclosing data for individual companies.

<sup>8</sup>Product code 28136 22 has been combined with product code 28136 23 to avoid disclosing data for individual companies.

<sup>9</sup>Product codes 28136 24 and 28136 32 have been combined with product code 28136 26 to avoid disclosing data for individual companies.

Table 19. Production, Exports, Imports, and Apparent Consumption of Industrial Gases: 1995 and 1994

Product code	Product description	Unit of measure	Manufacturers' production	Exports of domestic merchandise <sup>1</sup>	Percent exports to manufacturers' production	Imports for consumption <sup>2</sup>	Apparent consumption <sup>3</sup>	Percent imports to apparent consumption
<b>1995</b>								
28133 01, 02, 31	Carbon dioxide (gas, liquid, and solid).....	Metric tons. . . .	11,803,040	68,141	0.6	14,712	11,749,612	0.1
28137 15	Argon .....	Mil cu meters . .	475	166	35.0	25	334	7.5
28137 22, 32, 42, 52, 62	Hydrogen.....	Mil cu meters . .	9,846	269	2.7	155	9,732	1.6
28135 00	Nitrogen .....	Mil cu meters . .	24,031	44	0.2	51	24,038	0.2
28136 00	Oxygen.....	Mil cu meters . .	17,614	91	0.5	37	17,560	0.2
<b>1994</b>								
28133 01, 02, 31	Carbon dioxide (gas, liquid, and solid).....	Metric tons. . . .	11,909,922	111,893	0.9	16,123	11,814,152	0.1
28137 15	Argon .....	Mil cu meters . .	502	141	28.1	19	380	5.0
28137 22, 32, 42, 52, 62	Hydrogen.....	Mil cu meters . .	9,268	196	2.1	134	9,206	1.5
28135 00	Nitrogen .....	Mil cu meters . .	24,361	68	0.3	325	24,618	1.3
28136 00	Oxygen.....	Mil cu meters . .	16,939	59	0.3	17	16,897	0.1

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>3</sup>Apparent consumption is derived by subtracting exports from total of Production plus imports.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

## HISTORICAL NOTE

Data on industrial gases have been collected by the Bureau of the Census since 1941. Prior to 1991, data were collected both monthly and annually. Beginning in 1991, as a result of budget reductions, the monthly series was canceled and replaced with a similar quarterly series. Historical data may be obtained from Current Industrial

Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Suzanne Conard, 301-457-4791.

## PAINT, VARNISH, AND LACQUER (MA28F)

### INTRODUCTION

The data in this subsection were collected in the Current Industrial Report surveys MQ28F and MA28F, Paint and Allied Products. The data consist of quarterly and annual statistics on manufacturers' shipments of paint and allied products for 1995 and 1994. The annual statistics are based on reported data from approximately 500 companies having 20 or more employees and represent approximately 95 percent of the paint industry (SIC 2851). Estimates are used for companies with less than 20 employees, as well as for those companies whose reports were not received in time for publication.

### SUMMARY OF FINDINGS

The actual quantity and value of shipments tabulated from the annual report are shown in table 21. As noted in table 20, these figures are then adjusted to represent the total shipments in the paint industry. These adjustments are used because the annual survey panel was selected to measure approximately 95 percent of the paint industry. For 1992 through 1995, the adjustment factors are: 1.008 for architectural coatings, .989 for product coatings original equipment manufactures (OEM), 1.011 for special-purpose coatings, and 1.026 for miscellaneous paint products. For 1989 through 1991, these factors are: 1.00 for architectural coatings, 1.04 for product coatings OEM, 1.06 for special purpose coatings, and 1.16 for miscellaneous paint products. The adjustment factors based on 1992 Census of Manufactures' relationships bring each product class total to 100 percent. Quarterly figures for 1995 and 1994 reflecting the adjusted totals are shown along with the originally published figures for Current Industrial Reports, quarterly series MQ28F, Paint, Varnish, and Lacquer.

In 1995, total manufacturers' shipments of paint and allied products amounted to \$15,862.7 million, an increase of 1.2 percent from the 1994 shipments of \$15,582.3 million.

Total shipments of architectural coatings increased 2.9 percent to \$6,009.1 million in 1995, from \$5,841.5 million in 1994.

Total shipments of OEM coatings increased 4.1 percent to \$5,338.6 million in 1995, from \$5,126.3 million in 1994. Shipments of powder coatings increased 9.8 percent to \$492.5 million in 1995, from \$448.5 million in 1994.

Total shipments of special-purpose coatings decreased 3.8 percent to \$3,043.3 million in 1995, from \$3,162.5 million in 1994.

Total shipments of miscellaneous allied paint products increased 1.4 percent to \$1,471.8 million in 1995, from \$1,452.0 million in 1994.

### EXPLANATION OF TERMS

**Architectural coatings.** Coatings for onsite application to interior or exterior surfaces of residential, commercial, institutional, or industrial buildings. These are protective and decorative finishes applied at ambient temperatures for ordinary use and exposure.

*Clear finishes and spar varnishes.* Transparent protective and/or decorative films, including urethane coatings, natural varnishes, and shellac varnishes.

*Eggshell finish.* Low sheen (semimatte) surface that exhibits surface reflectance (gloss) similar to that of an eggshell, lying between flat and semigloss.

*Enamels.* Topcoats with the ability to form a smooth surface; usually associated with a high gloss, but also used with lesser gloss, i.e., flat enamels.

*Primer.* First complete coat of a painting system applied to a surface. Designed to provide adequate adhesion to new surfaces and to meet special requirements such as absorption and/or corrosion control.

*Stains.* Transparent and semitransparent solutions or suspensions of coloring matter in a vehicle, designed to color a surface by penetration without hiding it, or to color a material into which it is incorporated.

*Solvent.* Nonaqueous liquid, usually volatile, used to dissolve or disperse the coating constituents. This liquid evaporates during drying and does not become part of the dried coating.

*Lacquers.* Coatings composition based on synthetic thermoplastic materials dissolved in organic solvent, which dries primarily by solvent evaporation. Typical lacquers include those based on nitrocellulose and other cellulose derivations, vinyl resins, and acrylic resins.

*Undercoat.* A coat of paint applied on a new wood, over a primer, or over a previous coat of paint, to improve the seal and to serve as base for the top coat.

*Exterior coatings.* Architectural coatings that are expected to possess reasonable durability when exposed to natural weathering.

**Miscellaneous paint products.** Includes thinners for dopes, lacquers, and oleoresinous thinners, including mixtures and proprietary thinners (sold as such); aerosol paints made from purchased paint, both exterior and interior; organosols and plastisols, other than coatings; paint and

varnish driers; and miscellaneous related paint products, e.g., pigment dispersions, ink vehicles, and bleached shellac (not varnish).

*Putty and allied products.* Includes wood and textile preservatives (nonpressure type) such as wood fillers and sealers, putty and glazing compounds, paint and varnish removers, and other allied paint products, including brush cleaners.

(Source: *Paint/Coatings Dictionary, Federation of Societies for Coatings Technology, 1978*)

**OEM coatings.** Coatings formulated specifically for OEM to meet conditions of application and product requirements, and applied to such products during the manufacturing process.

*Powder coatings.* One hundred-percent solid coatings applied as dry powders and subsequently formed into a film with heat.

*Electrical insulating coatings.* Coatings (varnishes), often used in combination with materials such as mica, fabrics, and paper, to provide insulation for electrical equipment. These coatings are formulated to have high resistance to electrical conduction.

**Quantity and value of shipments.** Shipments are collected in thousands of gallons and thousands of dollars. The only exception to this is powder coatings that are collected in pounds and converted to gallons by using a conversion factor of 3 (3 lb = 1 gallon).

**Special-purpose coatings, including coatings for transportation after market.** These may also be stock type or shelf goods, but differ from general architectural coatings by the fact that they are formulated for special applications and/or special environmental conditions such as extreme temperatures, chemicals, and fumes.

*Industrial new construction and maintenance paints.* High performance coatings formulated to withstand extremes of

use such as heavy abrasion, water immersion, chemicals, corrosion, extreme temperatures, and electrical or solvent exposure. Also includes maintenance coatings used to maintain nonresidential structures; building and nonbuilding requirements in such areas as public utilities, railroads, roads, and highways; and other industrial plant coatings, the primary purpose of which is protection.

*Industrial maintenance paints.* Includes:

Interior (specially formulated coatings for special conditions in the interior of industrial plants requiring protection against extreme temperatures, fungi, chemicals, and fumes).

Exterior (specially formulated coatings for special conditions in the exterior of industrial plants requiring protection against extreme temperatures, fungi, chemicals, and fumes).

*Marine paints, including ship and offshore.* Paints and coatings specifically formulated to withstand water immersion and exposure to marine atmosphere. Excludes spar varnish. Includes marine refinish paints.

*Traffic marking paints.* Paints specifically formulated to withstand wear of vehicular traffic and to be highly visible at night; used to mark center lines on roadways, traffic lanes, crosswalks, etc. Includes paints manufactured with reflective beads.

*Refinish paints.* Coatings formulated specifically to meet particular product and application requirements, and sold to the refinishing trade or through retail outlets for after-market application.

*Other special coatings.* Includes the following:

Metallic paints (aluminum, zinc, bronze, etc.)

Traffic paints (all types, shelf goods, and highway departments)

Automotive and machinery refinish primers and undercoaters

Marine paints and enamels (shelf goods)

Aerosol paints made from paint produced and packaged in the same establishments or packaged on contract.

Table 20. Summary of Estimated U.S. Total Quantity and Value of Shipments of Paint and Allied Products: 1990 to 1995

[Quantity in millions of gallons. Value in millions of dollars]

Year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		Miscellaneous allied paint products	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1995	1,407.2	15,923.7	622.5	6,057.1	385.3	5,279.9	196.0	3,076.7	203.4	1,510.0
1994	1,431.1	15,645.2	644.8	5,888.3	372.9	5,069.9	193.8	3,197.3	219.6	1,489.7
1993	1,336.5	14,630.1	608.1	5,615.3	356.6	4,788.3	179.0	2,937.7	192.8	1,288.8
1992	1,236.0	13,595.1	575.6	5,294.3	311.7	4,213.5	172.7	2,933.8	176.0	1,153.5
1991	1,226.8	13,009.4	537.9	4,900.7	320.4	4,005.4	179.5	2,910.8	189.0	1,192.5
1990	1,281.9	12,898.4	558.4	4,913.6	338.6	4,032.6	195.6	2,781.5	189.3	1,170.7

Note: Figures for 1990 through 1995 are estimates of total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing product class totals shown in table 21 by adjustment factors. For 1995 through 1992, factors are: 1.008 for "Architectural coatings," .989 for "Product coatings OEM," 1.011 for "Special-purpose coatings," and 1.026 for "Miscellaneous allied paint products." For 1989 through 1991, factors are: 1.00 for "Architectural coatings," 1.04 for "Product coatings OEM," 1.06 for "Special-purpose coatings," and 1.16 for "Miscellaneous allied paint products." For example: quantity and value of OEM coatings for 1995 shown in table 21 amounted to 389,636 and \$5,338,607, respectively. Adjusting these figures by factor of .989 (multiplying 389,636 and \$5,338,607 by .989) equals adjusted and rounded quantity and value of 385.3 and \$5,279.9 shown above in table 20. These factors are used because annual survey panel was selected to measure approximately 95 percent of total shipments in paint industry (SIC 2851). Adjustment factors (based on 1992 census relationships) bring each product code value up to 100 percent. Quarterly figures for 1995 and 1994 reflect adjusted totals in table 20 and are shown in table 22 along with the quarterly figures originally published in Current Industrial Reports, quarterly series MQ28F, *Paint, Varnish, and Lacquer*.

Table 21. Quantity and Value of Shipments of Paint and Allied Products: 1995 and 1994

[Quantity in thousands of gallons. Value in thousands of dollars]

Product code	Product description	1995		1994	
		Quantity	Value	Quantity	Value
2851—	Paint and allied products <sup>1</sup>	1,409,728	15,862,691	1,422,412	15,582,338
28511—	Architectural coatings	617,521	6,009,066	639,698	5,841,544
	Exterior solvent type	74,187	806,226	73,032	762,164
28511 12	Solvent thinned paints and tinting bases, including barn and roof paints	17,015	155,090	14,664	154,698
28511 15	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels	15,367	246,719	15,144	195,031
28511 25	Solvent thinned undercoaters and primers	8,552	93,817	8,966	96,323
28511 35	Solvent thinned clear finishes and sealers	9,044	85,626	9,578	77,879
28511 37	Solvent thinned stains, including shingle and shake	16,615	159,761	14,226	143,342
28511 39	Other exterior solvent thinned coatings, including bituminous paints	7,594	65,213	10,454	94,891
	Exterior water-type	150,928	1,421,382	160,448	1,501,373
28511 41	Water thinned paints and tinting bases, including barn and roof paints	104,777	995,028	111,770	1,071,354
28511 42	Water thinned exterior-interior deck and floor enamels	1,981	22,312	1,616	17,572
28511 44	Water thinned undercoaters and primers	9,748	115,731	9,169	88,616
28511 49	Water thinned stains and sealers	10,348	95,206	9,771	85,990
28511 55	Other exterior water thinned coatings	24,074	193,105	28,122	237,841
	Interior solvent type	59,078	751,279	58,537	676,546
28511 63	Flat solvent thinned wall paints and tinting bases, including mill white paints	6,054	71,127	6,174	72,680
28511 65	Gloss and quick drying enamels and other gloss-solvent thinned paints and enamels	3,977	52,144	5,257	72,557
28511 69	Semigloss, eggshell, satin solvent thinned paints and tinting bases	14,958	207,536	12,933	139,002
28511 71	Solvent thinned undercoaters and primers	11,289	112,323	11,276	93,078
28511 75	Solvent thinned clear finishes and sealers	9,144	134,283	9,260	131,576
28511 77	Solvent thinned stains	5,925	85,983	5,425	76,282
28511 79	Other interior solvent thinned coatings	7,731	87,883	8,212	91,371

See footnotes at end of table.

Table 21. Quantity and Value of Shipments of Paint and Allied Products: 1995 and 1994—Con.

[Quantity in thousands of gallons. Value in thousands of dollars]

Product code	Product description	1995		1994	
		Quantity	Value	Quantity	Value
2851—	Paint and allied products—Con.				
28511—	Architectural coatings—Con.				
28511 81	Interior water-type .....	310,794	2,788,502	323,854	2,654,383
28511 83	Flat water thinned paints and tinting bases .....	144,808	1,303,316	148,116	1,107,678
28511 86	Semigloss, eggshell, satin, and other water thinned paints and tinting bases .....	117,242	1,091,673	121,593	1,104,195
28511 88	Water thinned undercoaters and primers .....	22,090	157,324	20,525	147,995
28511 93	Other interior water thinned coatings, stains, and sealers .....	26,654	236,189	33,620	294,515
28511 00	Architectural lacquers .....	6,789	69,083	7,169	67,986
28512	Architectural coatings, n.s.k. ....	15,745	172,594	16,658	179,092
28512	Product finishes for original equipment manufactures (OEM), excluding marine coatings .....	389,636	5,338,607	377,010	5,126,279
28512 21*	Automobile, light truck, van, and sport utility vehicle finishes .....	45,528	1,125,596	44,709	1,092,265
28512 24*	Automobile parts finishes .....	2,096	67,303	2,330	68,881
28512 26*	Heavy duty truck, bus, and recreational vehicle finishes ..	15,281	364,680	14,370	336,039
28512 28*	Other transportation equipment finishes, including aircraft and railroad .....	9,515	148,327	5,019	95,503
28512 35	Appliance, heating equipment, and air-conditioner finishes .....	6,370	93,395	6,610	106,515
28512 37	Wood furniture, cabinet, and fixture finishes .....	37,468	354,727	36,034	344,947
28512 39	Wood and composition board flat stock finishes .....	10,094	107,395	11,460	118,845
28512 41	Metal building product finishes, including coatings for aluminum extrusions and siding .....	28,872	476,991	29,142	514,464
28512 43	Container and closure finishes .....	55,125	487,886	51,208	487,488
28512 47	Machinery and equipment finishes, including road building equipment and farm implements .....	17,791	264,407	17,143	252,723
28512 49	Nonwood furniture and fixture finishes, including business equipment finishes .....	20,232	309,244	18,331	276,362
28512 52	Paper, paper board, film, and foil finishes, excluding pigment binders .....	16,346	128,004	16,084	129,452
28512 53	Electrical insulating coatings .....	5,167	125,915	5,013	103,096
28512 54*	Appliance powder coatings <sup>2</sup> .....	10,873	81,736	15,713	90,474
28512 56*	Automotive powder coatings <sup>2</sup> .....	12,232	108,777	13,287	97,972
28512 58*	Architectural powder coatings (such as aluminum extrusions) <sup>2</sup> .....	3,835	28,928	2,959	23,186
28512 60*	Lawn and garden powder coatings <sup>2</sup> .....	3,126	27,475	4,284	32,895
28512 62*	General metal finishing powder coatings <sup>2</sup> .....	31,031	245,603	25,996	204,016
28512 67	Other industrial product finishes .....	29,652	464,301	29,122	468,906
28512 00	Product finishes for original equipment manufactures (OEM), excluding marine coatings, n.s.k. ....	29,002	327,917	28,196	282,250
28513	Special-purpose coatings, including all marine coatings ....	193,888	3,043,265	191,709	3,162,544
28513 01	Industrial new construction and maintenance paints (especially formulated coatings for special con- ditions of industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):				
28513 05	Interior .....	20,179	213,179	18,237	221,612
28513 11	Exterior .....	33,868	502,443	36,725	610,969
28513 13	Traffic marking paints (all types, shelf goods, and highway department) .....	34,563	218,985	33,898	202,810
28513 15	Automotive, other transportation and machinery refinish paints and enamels, including primers .....	48,109	1,302,078	44,829	1,283,119
28513 19*	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and maintenance, excluding spar varnish .....	18,913	311,906	19,864	340,312
28513 31	Marine paints for yacht and pleasure craft, new construc- tion, refinish, and maintenance .....	108	2,389	(D)	(D)
28513 00	Aerosol-paint concentrates produced for packaging in aerosol containers .....	26,311	271,480	25,838	277,347
	Special-purpose coatings, n.s.k. ....	11,837	220,805	(D)	(D)

See footnotes at end of table.



Table 21. Quantity and Value of Shipments of Paint and Allied Products: 1995 and 1994—Con.

[Quantity in thousands of gallons. Value in thousands of dollars]

Product code	Product description	1995		1994	
		Quantity	Value	Quantity	Value
2851—	Paint and allied products—Con.				
28515	Miscellaneous allied paint products .....	208,683	1,471,753	213,995	1,451,971
28515 23	Paint and varnish removers .....	6,948	62,160	7,374	66,625
28515 31	Thinners for lacquers and other solvent based paint products .....	50,671	208,976	<sup>1</sup> 50,257	<sup>1</sup> 193,377
28515 33	Pigment dispersions .....	36,216	431,853	<sup>1</sup> 35,032	<sup>1</sup> 409,014
28515 98	Other miscellaneous allied paint products, including brush cleaners, nonpressure wood preservatives, and putty and glazing compounds .....	109,849	693,659	<sup>1</sup> 115,768	708,187
28515 00	Miscellaneous allied paint products, n.s.k. ....	4,999	75,105	<sup>1</sup> 5,564	<sup>1</sup> 74,768

\*New product code for 1994. D Withheld to avoid disclosing data for individual companies. NA Not available. n.s.k. Not specified by kind.  
<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of total value of shipments for SIC Industry 2851, Paint, varnishes, lacquers, enamels, and allied products based on relationships observed in the 1992 Census of Manufactures final report.

<sup>2</sup>Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 3 (3 lb = 1 gallon). Data collected in pounds amounted to 183,291 thousand pounds in 1995 and 186,717 thousand pounds in 1994.

Table 22. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 1995 and 1994

[Quantity in thousands of gallons. Value in thousands of dollars]

Quarter and year	As revised							
	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>								
<b>Total .....</b>	<b>1,208,426</b>	<b>14,412,010</b>	<b>627,172</b>	<b>6,056,532</b>	<b>385,273</b>	<b>5,279,353</b>	<b>195,981</b>	<b>3,076,125</b>
Fourth quarter .....	279,599	3,424,348	139,473	1,359,222	93,101	1,290,403	47,025	774,723
Third quarter .....	320,065	3,816,154	170,430	1,682,067	97,493	1,331,058	52,142	803,029
Second quarter .....	328,388	3,839,624	176,966	1,709,324	97,301	1,324,194	54,121	806,106
First quarter .....	280,374	3,331,884	140,303	1,305,919	97,378	1,333,698	42,693	692,267
<b>1994</b>								
<b>Total .....</b>	<b>1,211,133</b>	<b>13,799,726</b>	<b>644,623</b>	<b>5,887,098</b>	<b>372,751</b>	<b>5,068,368</b>	<b>193,759</b>	<b>2,844,260</b>
Fourth quarter .....	271,657	3,240,752	137,088	1,257,147	93,402	1,280,147	41,167	703,458
Third quarter .....	330,076	3,736,180	184,998	1,689,935	94,744	1,274,063	50,334	772,182
Second quarter .....	338,994	3,783,018	186,223	1,714,077	95,304	1,284,203	57,467	784,738
First quarter .....	270,406	3,039,776	136,314	1,225,939	89,301	1,229,955	44,791	583,882
<b>1995</b>								
<b>Total .....</b>	<b>1,246,252</b>	<b>14,506,497</b>	<b>677,836</b>	<b>6,125,687</b>	<b>382,112</b>	<b>5,482,748</b>	<b>186,304</b>	<b>2,898,062</b>
Fourth quarter .....	283,694	3,444,640	146,648	1,374,638	92,337	1,340,051	44,709	729,951
Third quarter .....	331,885	3,839,963	185,630	1,701,285	96,688	1,382,252	49,567	756,426
Second quarter .....	340,661	3,863,658	192,724	1,728,948	96,495	1,375,375	51,442	759,335
First quarter .....	290,012	3,358,236	152,834	1,320,816	96,592	1,385,070	40,586	652,350
<b>1994</b>								
<b>Total .....</b>	<b>1,220,835</b>	<b>14,070,075</b>	<b>645,174</b>	<b>5,912,740</b>	<b>382,065</b>	<b>5,082,635</b>	<b>193,596</b>	<b>3,074,700</b>
Fourth quarter .....	274,073	3,281,989	137,205	1,262,624	95,736	1,283,750	41,132	735,615
Third quarter .....	332,560	3,781,599	185,156	1,697,295	97,112	1,277,649	50,292	806,655
Second quarter .....	341,485	3,862,760	186,382	1,721,543	97,685	1,287,817	57,418	853,400
First quarter .....	272,717	3,143,727	136,431	1,231,278	91,532	1,233,419	44,754	679,030

See note at end of table 20.

Table 23. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 1995 and 1994

[Quantity in millions of gallons. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Percent exports to manufacturers' production		Imports for consumption <sup>2</sup>		Apparent consumption <sup>4</sup>	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value <sup>3</sup>	Quantity	Value
28511 00, 28512 00, 28513 00	Paint, varnish, and lacquer. . . . .	1995 . . . . .	1994 . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
		1,208.4	14,412.0	673.7	624.4	4.6	4.4	228.4	183.5	13,966.7	13,358.8
		1,211.1	13,799.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
28515 23, 31	Paint and varnish remover, including thinners . . . . .	1995 . . . . .	1994 . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
		57.6	271.1	52.3	46.9	19.3	19.1	35.7	14.0	254.5	212.7
		65.0	260.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
28515 98	Other miscellaneous allied paint products . . . . .	1995 . . . . .	1994 . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
		109.8	693.7	102.3	98.2	14.7	14.0	33.3	24.5	624.7	628.4
		115.8	708.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.<sup>4</sup>Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

## HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Bureau of the Census since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from the Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Kim Credito, 301-457-1606.

## PHARMACEUTICAL PREPARATIONS, EXCEPT BIOLOGICALS (MA28G)

### INTRODUCTION

The data in this subsection are from the survey MA28G, Pharmaceutical Preparations, which covers manufacturers of pharmaceutical preparations, except biologicals. The data include all preparations that can be dispensed in measured portions, to produce the therapeutic effect for which the preparation is most commonly employed (liquids, tablets, pills, capsules, lozenges, powders, ointments, jellies, salves, inhaler tubes, etc.). The survey excludes all uncompounded medicinal chemicals and botanicals.

### EXPLANATION OF TERMS

**Bulk domestic shipments.** Represents the value of dosage forms shipped in bulk to other plants of the same company or other companies in large drums or other

bulk-type containers requiring only repackaging. Shipments to hospitals or similar users are excluded from this item description and are reported in the product areas described in the Prescription and Nonprescription definition.

**Nonprescription.** A drug product that is sold over the counter, whether advertised or otherwise promoted to the professions, or advertised or otherwise promoted to the general public. (Note: Prior to 1984, separate figures were collected for drugs promoted to the professions, "OTC Professional," and drugs promoted to the general public, "Proprietary".)

**Prescription legend.** A drug product that by Federal law is available only by prescription by a licensed physician.

Table 24. **Value of Product Class Shipments of Pharmaceutical Preparations, Except Biologicals: 1986 to 1995**

[In millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
28341 —	Pharmaceutical preparations: Pharmaceutical preparations affecting neoplasms, endocrine system, and metabolic diseases, for human use .....	4,020.0	4,119.8	3,820.3	3,317.8	2,877.4	2,743.2	2,507.4	2,071.2	1,994.9	2,140.6
28342 —	Pharmaceutical preparations acting on the central nervous system and sense organs, for human use .....	10,063.6	8,989.9	8,926.8	8,319.3	7,430.8	7,218.5	6,441.3	6,172.7	5,740.5	5,946.0
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use .....	6,172.4	5,673.9	5,234.2	4,908.7	4,810.3	4,814.6	4,874.9	4,449.9	3,795.9	3,570.3
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use .....	5,189.5	5,566.4	5,509.8	5,276.8	4,259.7	3,724.1	3,286.2	3,224.0	2,811.4	2,492.2
28345 —	Pharmaceutical preparations acting on the digestive or genito-urinary system, for human use .....	8,570.7	8,479.2	7,995.7	7,110.9	5,624.8	4,840.2	4,363.0	3,860.8	2,954.8	1,864.5
28346 —	Pharmaceutical preparations acting on the skin, for human use .....	2,193.3	2,089.7	1,979.7	1,759.6	1,578.5	1,558.0	1,451.7	1,388.5	1,288.3	1,327.3
28347 —	Vitamin, nutrient, and hematinic preparations, for human use .....	4,523.4	4,402.1	3,559.8	2,923.7	2,787.2	2,587.9	2,672.4	2,538.5	2,570.7	2,665.9
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use .....	7,196.9	7,257.4	7,233.6	7,017.6	6,006.1	5,411.0	4,936.2	4,593.6	4,024.9	3,821.0
28349 —	Pharmaceutical preparations for veterinary use .....	1,584.6	1,631.0	1,352.5	1,327.3	1,462.2	1,056.8	1,071.1	1,051.5	997.1	853.7

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations (except biologicals) . . . . .	49,514,363	37,492,303	10,941,898	1,080,162	48,209,370	36,109,371	10,955,363	1,144,636
28341—	Pharmaceutical preparations affecting neoplasms, endocrine system, and metabolic diseases, for human use . . . . .	4,019,989	3,925,901	66,009	28,079	4,119,777	4,031,008	32,918	55,851
	Hormones and synthetic substitutes:								
	Corticoids:								
28341 11	Systemic . . . . .	252,564	(D)	(D)	(D)	243,295	243,295	-	(D)
28341 15	Local and topical including anti-infective combinations . . . . .	434,362	404,279	30,083	-	427,754	396,641	31,113	-
28341 17	Androgens . . . . .	(D)	(D)	-	-	(D)	(D)	-	-
28341 19	Estrogens . . . . .	154,238	154,234	(D)	(D)	241,527	241,527	-	(D)
28341 21	Insulin and antidiabetic agents . . . . .	(D)	(D)	(D)	-	(D)	(D)	-	-
28341 25	ACTH (corticotropin) . . . . .	(D)	(D)	-	-	(D)	(D)	-	-
28341 27	Oral contraceptive preparations . . . . .	55,378	55,378	-	-	149,722	149,722	-	-
28341 29	Progestogens, excluding premenstrual tension preps (see product code 28345 85) . . . . .	(D)	(D)	-	(D)	(D)	(D)	-	(D)
28341 31	Sex hormone combinations (except progestogen combinations) . . . . .	(D)	(D)	-	-	(D)	(D)	-	-
28341 35	Thyroid and antithyroid preparations, including iodides . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
28341 37	Anabolic agents . . . . .	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)
28341 39	Other hormone preparations . . . . .	269,226	(D)	(D)	(D)	167,404	167,301	103	(D)
	Antineoplastic agents:								
28341 43	Radioactive isotopes for internal use . . . . .	(D)	(D)	-	-	17,142	17,142	-	-
28341 45	Specific antineoplastic agents . . . . .	623,657	623,657	-	(D)	'868,309	'868,309	-	(D)
28341 98	Other pharmaceutical preparations affecting neoplasms, the endocrine system, and metabolic diseases, for human use . . . . .	987,149	984,000	3,149	(D)	'949,043	(D)	(D)	(D)
28342—	Pharmaceutical preparations acting on the central nervous system and the sense organs, for human use . . . . .	10,063,593	7,796,467	2,183,404	83,722	8,989,931	6,780,434	2,133,167	76,330
28342 11	Parasympathomimetic cholinergic drugs . . . . .	16,900	16,900	-	-	11,884	11,884	-	(D)
28342 13	Skeletal muscle relaxants . . . . .	357,278	(D)	(D)	(D)	399,122	(D)	(D)	(D)
	Internal analgesics and antipyretics:								
	Narcotic:								
28342 19	Opium and derivatives . . . . .	436,568	436,568	-	(D)	301,848	301,848	-	(D)
28342 20	Synthetic narcotics . . . . .	259,019	259,019	-	-	'219,656	'219,656	-	(D)
	Nonnarcotic:								
	Salicylates:								
28342 22	Aspirin (acetylsalicylic acid) . . . . .	220,189	(D)	(D)	1,815	143,973	(D)	(D)	1,642
28342 24	Other salicylates, such as sodium salicylate . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
28342 25	Aspirin combinations . . . . .	334,581	(D)	(D)	(D)	303,777	(D)	(D)	(D)
28342 26	Acetaminophen and combinations . . . . .	436,344	98,878	337,466	13,704	490,624	97,514	393,110	11,495
28342 27	Antiarthritic (nonhormonal) . . . . .	1,124,007	944,232	179,775	(D)	869,478	672,189	197,289	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations, except biologicals—Con.								
28342—	Pharmaceutical preparations acting on the central nervous system and the sense organs, for human use —Con.								
28342 28	Internal analgesics and antipyretics—Con.								
28342 28	Other internal analgesics and antipyretics, including effervescent types and suppositories . . . . .	<sup>2</sup> 312,206	<sup>2</sup> 176,642	<sup>2</sup> 135,564	<sup>2</sup> 4,521	<sup>2</sup> 287,433	<sup>2</sup> 174,425	<sup>2</sup> 113,008	<sup>2</sup> 1,356
28342 41	Anticonvulsants (except phenobarbital) . . . . .	493,249	(D)	(D)	(D)	444,819	(D)	(D)	(D)
28342 51	Psychotherapeutic agents:								
28342 51	Antidepressants . . . . .	1,706,684	(D)	(D)	(D)	1,514,544	1,514,544	-	(D)
28342 51	Tranquilizers:								
28342 55	Phenothiazine derivatives . . . . .	402,356	(D)	(D)	(D)	343,558	343,558	-	(D)
28342 57	Other tranquilizers . . . . .	366,285	366,285	-	-	390,089	390,089	-	(D)
28342 59	Other psychotherapeutic agents . . . . .	134,102	134,102	-	221	<sup>1</sup> 97,633	<sup>1</sup> 97,633	-	3,119
28342 61	Central nervous system stimulants (respiratory and cerebral stimulants, including sympathomimetic agents employed mainly as CNS stimulants); excluding nondrug dietaries for weight control:								
28342 61	Amphetamines . . . . .	(D)	(D)	-	-	(D)	(D)	-	-
28342 63	Anorexiant (except amphetamines) . . . . .	105,733	104,246	(S)	(D)	51,838	50,998	840	(D)
28342 69	Other CNS stimulants . . . . .	(D)	(D)	(D)	(D)	182,726	(D)	(D)	(D)
28342 71	Sedatives and hypnotics:								
28342 71	Prescription:								
28342 71	Barbiturates . . . . .	44,978	44,978	(X)	(D)	27,575	27,575	(X)	(D)
28342 75	Nonbarbiturates . . . . .	47,149	47,149	(X)	(D)	50,405	50,405	(X)	(D)
28342 77	Nonprescription:								
28342 77	Sleep inducers . . . . .	52,846	(X)	52,846	(D)	71,296	(X)	71,296	(D)
28342 79	Calming agents . . . . .	278	(X)	(D)	-	(D)	(X)	(D)	-
28342 81	Anesthetics (except urinary tract anesthetics) and skin preparations used as antipruritics:								
28342 81	Local and topical . . . . .	258,124	249,553	8,571	-	220,115	212,862	7,253	-
28342 85	General . . . . .	96,397	(D)	(D)	(D)	106,097	(D)	(D)	(D)
28342 91	Eye and ear preparations, excluding anti-infectives, corticoids, and antibacterials and antiseptics:								
28342 91	Mydriatics and miotics . . . . .	(D)	(D)	(D)	-	257,725	(D)	(D)	-
28342 93	Contact lens solutions . . . . .	613,652	(D)	(D)	-	625,512	(D)	(D)	-
28342 94	Other eye and ear preparations . . . . .	521,397	250,535	270,862	(D)	419,535	(D)	(D)	(D)
28342 98	Other pharmaceutical preparations acting on the central nervous system and the sense organs, for human use . . . . .	1,194,278	1,141,271	53,007	(D)	<sup>1</sup> 1,058,502	<sup>1</sup> 1,014,161	44,341	14,171
28343—	Pharmaceutical preparations acting on the cardiovascular system, for human use . . . . .	6,172,435	6,017,642	13,475	141,318	5,673,893	5,457,695	10,895	205,303
28343 11	Anticoagulants . . . . .	763,012	(D)	(D)	(D)	564,427	(D)	(D)	(D)
28343 21	Hemostatics . . . . .	59,197	(D)	(D)	-	58,594	(D)	(D)	-
28343 31	Digitalis preparations . . . . .	(D)	(D)	-	(D)	(D)	(D)	-	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations, except biologicals—Con.								
28343—	Pharmaceutical preparations acting on the cardiovascular system, for human use—Con.								
28343 43	Hypotensives: Rauwolfia-alkaloid preparations . . . . .	23,070	(S)	(D)	-	36,470	(D)	(D)	-
28343 47	Beta receptor blocking agents . . . . .	116,381	116,381	-	(D)	143,089	143,089	-	(D)
28343 48	Other hypotensives . . . . .	299,384	299,384	-	(D)	522,325	522,325	-	(D)
	Vasodilators:								
28343 51	Coronary . . . . .	427,046	427,046	-	(D)	374,932	374,932	-	10,812
28343 55	Peripheral . . . . .	119,417	119,417	-	(D)	116,259	116,259	-	(D)
28343 61	Antiarrhythmics such as propanolol and quinidine . . . . .	228,222	228,222	-	-	198,746	198,746	-	-
28343 71	Calcium channel blockers such as isoptin, calan, procardia, cardizem, and adalat . . . . .	673,188	673,188	-	(D)	700,327	700,327	-	(D)
28343 81	Ace inhibitors such as vasotec, capoten, prnivil, and zestril . . . . .	(D)	(D)	-	(D)	(D)	(D)	-	(D)
28343 97	Other pharmaceutical preparations acting on the cardiovascular system, including vasopressors, and antiheparin agents, for human use . . . . .	1,083,125	(D)	(D)	(D)	797,472	(D)	(D)	(D)
28344—	Pharmaceutical preparations acting on the respiratory system, for human use . . . . .	5,189,511	3,271,114	1,866,376	52,021	5,566,412	3,391,697	2,132,043	42,672
28344 11	Antihistamines (except cold preparations and antiemetics) . . . . .	569,443	308,865	260,578	(D)	782,015	543,547	238,468	(D)
28344 15	Bronchial dilators, including antiasthmatics . . . . .	932,647	872,059	60,588	(D)	1,167,223	1,115,171	52,052	413
	Cough and cold preparations (prescription):								
	Cough preparations and expectorants (containing antitussive or other ingredients intended primarily to treat cough only):								
28344 21	Narcotic . . . . .	104,171	<sup>a</sup> 104,171	(X)	-	138,719	138,719	(X)	-
28344 25	Nonnarcotic . . . . .	112,798	112,798	(X)	(D)	92,202	92,202	(X)	576
	Cold preparations containing combinations of the following ingredients (but not antitussive): nasal decongestant, antihistamine, analgesic, bioflavonoid, or antibiotic:								
28344 31	Nasal decongestants . . . . .	14,096	14,096	(X)	(D)	15,468	15,468	(X)	(D)
28344 35	Antihistamine cold preparations . . . . .	18,499	18,499	(X)	-	5,084	5,084	(X)	-
28344 39	Other prescription cold preparations . . . . .	88,636	88,636	(X)	-	110,903	110,903	(X)	(D)
28344 41	Cough and cold combinations (prescription) . . . . .	138,023	138,023	(X)	650	55,706	55,706	(X)	1,216

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations, except biologicals—Con.								
28344—	Pharmaceutical preparations acting on the respiratory system, for human use—Con.								
	Cough and cold preparations (nonprescription):								
	Decongestants:								
28344 51	Nasal sprays.....	106,424	(X)	106,424	-	177,344	(X)	177,344	(D)
28344 55	Nose drops.....	452	(X)	452	-	(D)	(X)	(D)	-
28344 59	Other decongestants.....	228,118	(X)	228,118	(D)	179,540	(X)	179,540	(D)
28344 61	Cough syrups.....	423,001	(X)	423,001	(D)	432,936	(X)	432,936	-
28344 63	Capsules and tablets.....	495,387	(X)	495,387	28,690	517,425	(X)	517,425	(D)
28344 65	Lozenges.....	40,109	(X)	40,109	(D)	49,927	(X)	49,927	(D)
28344 67	Topical preparations.....	(D)	(X)	(D)	-	(D)	(X)	(D)	-
28344 71	Cough drops.....	57,987	(X)	57,987	-	101,101	(X)	101,101	-
28344 79	Other nonprescription cough and cold preparations.....	183,059	(X)	183,059	(D)	293,783	(X)	293,783	(D)
28344 81	Beta agonists such as proventil and ventolin.....	1,223,176	(D)	(D)	(D)	1,045,081	(D)	(D)	(D)
28344 98	Other pharmaceutical preparations acting on the respiratory system, for human use.....	400,467	391,004	9,463	(D)	'357,985	'345,280	'12,705	(D)
28345—	Pharmaceutical preparations acting on the digestive or the genito-urinary systems, for human use.....	8,570,658	7,227,796	1,309,486	33,376	8,479,204	7,006,553	1,420,592	52,059
	Digestive system preparations:								
28345 11	Enzymes.....	80,467	65,006	<sup>a</sup> 15,461	(D)	81,203	69,291	<sup>a</sup> 11,912	(D)
28345 15	Antacids, including acid neutralizing products with coating functions, but excluding effervescent salicylate products classified as analgesics.....	478,603	<sup>a</sup> 10,581	<sup>a</sup> 468,022	(D)	432,856	<sup>a</sup> 7,024	425,832	70
28345 19	Antidiarrheals.....	223,860	7,516	216,344	(D)	228,458	'8,548	219,910	(D)
	Laxatives:								
28345 21	Irritants.....	83,677	(D)	(D)	(D)	79,171	(D)	(D)	(D)
28345 23	Bulk producing.....	194,079	(D)	(D)	(S)	318,605	(D)	(D)	560
28345 25	Fecal softeners.....	50,287	-	50,287	(D)	114,836	(D)	(D)	(D)
28345 27	Emollients.....	20,587	(D)	(D)	-	24,163	(D)	(D)	-
28345 28	Saline.....	14,231	(D)	(D)	-	14,548	(D)	(D)	-
28345 29	Enema specialties.....	40,561	(D)	(D)	(D)	37,058	(D)	(D)	(D)
28345 31	Digestants.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28345 33	Bile therapy preparations, including bile products, cholagogues, and cholagogues.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28345 35	Antinauseants and motion sickness remedies (antiemetics), including antihistaminic antiemetic preparations.....	332,107	(D)	(D)	1,193	(D)	(D)	'6,774	(D)
28345 37	Lipotropics and cholesterol reducers.....	2,138,408	2,137,886	522	86	(D)	(D)	(D)	(D)
28345 39	Diet aids containing local anesthetics such as benzocaine.....	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations, except biologicals—Con.								
28345 —	Pharmaceutical preparations acting on the digestive or the genito-urinary system, for human use—Con.								
	Antispasmodics and anticholinergics:								
28345 41	Synthetics . . . . .	16,870	16,870	-	-	14,525	14,525	-	-
28345 43	Ataractic combinations . . . . .	(D)	(D)	-	-	608	608	-	-
28345 45	Belladonna and derivatives . . . . .	(D)	(D)	(D)	171	(D)	(D)	(D)	(D)
28345 47	H <sub>2</sub> blocking agents such as zantac, tagamet, carafate, and pepcid . . . . .	3,922,367	(D)	(D)	(D)	3,845,308	3,845,308	-	(D)
28345 49	Other antispasmodics and anticholinergics . . . . .	(D)	(D)	-	-	(D)	(D)	(D)	(D)
28345 58	Other digestive system preparations, including emetics . . . . .	81,587	78,933	<sup>a</sup> 2,654	(D)	63,307	60,635	2,672	(D)
28345 61	Genito-urinary preparations: Urinary antibacterials and antiseptics . . . . .	123,296	(D)	(D)	(D)	119,559	(D)	(D)	(D)
	Diuretics, excluding aminophylline, xanthine, and rauwolfia-diuretic combinations (see cardiovascular preparations):								
28345 71	Thiazides and related agents . . . . .	62,079	(D)	(D)	(D)	110,566	110,566	-	-
28345 73	Other diuretics . . . . .	136,530	(D)	(D)	-	222,356	(D)	(D)	-
28345 81	Oxytocics . . . . .	18,510	18,510	-	-	(D)	(D)	-	-
28345 83	Contraceptive agents (except oral contraceptives; i.e., aerosols, jels, sponges, and creams) . . . . .	76,370	(D)	(D)	-	81,182	58,336	(D)	-
28345 85	Premenstrual tension preparations . . . . .	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
28345 87	Vaginal cleaners . . . . .	113,087	(D)	(D)	(D)	109,985	(D)	(D)	(D)
28345 98	Other pharmaceutical preparations acting on the genito-urinary system, including urinary tract anesthetics, for human use . . . . .	130,788	85,670	45,118	<sup>a</sup> 1,455	<sup>r</sup> 104,144	64,539	39,605	2,405
28346 —	Pharmaceutical preparations acting on the skin, for human use . . . . .	2,193,294	689,667	1,480,823	22,804	2,089,734	686,041	1,391,121	12,572
	Dermatological preparations:								
28346 11	Emollients and protectives, including burn remedies and ointment bases . . . . .	654,386	(D)	(D)	(D)	631,745	(D)	(D)	(D)
28346 13	Antipruritics and local anesthetic skin preparations . . . . .	147,546	<sup>a</sup> 38,016	109,530	(D)	161,820	34,020	127,800	(D)
28346 15	Coal tar, sulfur and resorcinol preparations . . . . .	7,115	(D)	(D)	-	14,292	(D)	(D)	(D)
28346 16	Antiacne preparations . . . . .	332,892	78,785	254,107	(D)	241,618	73,205	168,413	(D)
28346 18	Antidandruff and antiseborrheic preparations (except dandruff shampoos) . . . . .	38,586	(D)	(D)	-	35,836	(D)	(D)	-
28346 19	Other dermatological preparations . . . . .	196,224	<sup>a</sup> 121,085	75,139	(D)	200,558	134,092	66,466	(D)

See footnotes at end of table.



Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations, except biologicals—Con.								
28346—	Pharmaceutical preparations acting on the skin, for human use—Con.								
28346 21	Hemorrhoidal preparations . . . . .	131,695	(D)	(D)	-	141,254	(D)	(D)	-
28346 31	External analgesics and counterirritants: Ointments, jellies, pastes, creams, cerates, and salves. . . . .	170,188	(D)	(D)	(D)	148,235	(D)	(D)	(D)
28346 35	Liquid, excluding rubbing alcohol, but including liniments . . . . .	56,782	-	56,782	(D)	57,346	(D)	(D)	(D)
28346 37	Rubbing alcohol . . . . .	135,719	-	135,719	-	138,174	-	138,174	-
28346 39	Other external analgesics and counterirritants . . . . .	74,378	(D)	(D)	(D)	84,168	(D)	(D)	(D)
28346 98	Other pharmaceutical preparations acting on the skin, for human use . . . . .	224,979	175,114	49,865	(D)	222,116	177,558	44,558	(D)
28347—	Vitamin, nutrient, and hematinic preparations, for human use . . . . .	4,523,416	1,456,464	2,601,679	465,273	4,402,072	1,538,335	2,399,780	463,957
28347 11	Vitamins: Multivitamins, plain and with minerals, (except B complex vitamins and fish liver oils) . . . . .	1,154,404	29,615	1,124,789	165,150	1,171,166	26,033	1,145,133	136,023
28347 13	Pediatric vitamin preparations (drops, suspensions, and chewable tablets) . . . . .	91,775	(D)	(D)	822	83,790	(D)	(D)	856
28347 14	Prenatal vitamin preparations . . . . .	29,998	7,265	22,733	1,186	41,464	32,401	9,063	2,001
28347 15	B complex preparations . . . . .	104,388	<sup>a</sup> 15,301	89,087	7,214	115,833	16,116	99,717	6,822
28347 17	Fluoride preparations . . . . .	1,722	(D)	(D)	-	2,242	(D)	(D)	(D)
28347 19	All other vitamin preparations . . . . .	614,059	6,312	607,747	191,693	558,610	4,971	553,639	189,635
28347 21	Fish liver oils (cod, etc.) . . . . .	11,854	(D)	(D)	(D)	11,758	-	11,758	(D)
28347 31	Nutrients, excluding therapeutic dietary foods and infant formulas . . . . .	284,867	44,468	<sup>a</sup> 240,399	(S)	242,303	53,367	188,936	35,800
28347 41	Tonics and alteratives . . . . .	19,918	-	19,918	(D)	18,716	-	18,716	(D)
28347 51	Hematinics: With B <sub>12</sub> : Oral . . . . .	15,425	12,873	2,552	141	28,974	17,773	11,201	106
28347 53	Parenteral . . . . .	(D)	(D)	-	-	(D)	(D)	-	-
28347 55	Other hematinics: Oral . . . . .	24,585	(D)	(D)	727	23,140	(D)	(D)	559
28347 57	Parenteral . . . . .	(D)	(D)	-	-	(D)	(D)	(D)	-
28347 61	Hospital solutions, including dextran, etc., but excluding biologicals such as blood plasma . . . . .	1,158,420	(D)	(D)	-	1,132,974	(D)	(D)	(D)
28347 98	Other vitamin, nutrient, and hematinic preparations, for human use . . . . .	503,513	217,410	286,103	52,239	464,316	201,199	263,117	64,045

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834— 28348—	Pharmaceutical preparations, except biologicals—Con. Pharmaceutical preparations affecting parasitic and infective diseases, for human use . . . . .	7,196,861	6,327,031	685,813	184,017	7,257,365	6,416,980	678,400	161,985
28348 11	Anti-infective agents, excluding corticoid anti-infective combinations (see product code 28341 15): Amebicides and trichomonocides. . . . .	91,408	(D)	(D)	(D)	92,984	(D)	(D)	(D)
28348 15	Anthelmintics . . . . .	8,735	(D)	(D)	(D)	3,211	(D)	(D)	(D)
	Systemic antibiotic preparations: Broad and medium spectrum (single or in combinations with other antibiotics):								
28348 20	Tetracyclines, including chlortetracycline and congeners . . . . .	68,454	68,454	-	-	113,440	113,440	-	-
28348 22	Cephalosporins such as cefamandole nafate and cephalixin . . . . .	1,725,025	1,725,025	-	(D)	2,112,134	2,112,134	-	59,157
28348 24	Erythromycins such as erythromycin ethylsuccinate and erythromycin stearate . . . . .	137,981	137,981	-	(D)	176,939	(D)	(D)	(D)
	Penicillins (single): Semisynthetic penicillins such as ampicillin and ampicillin:								
28348 26	Injectable . . . . .	30,122	30,122	-	-	49,072	49,072	-	-
28348 28	Other forms . . . . .	1,871,298	1,871,298	-	(D)	1,622,879	1,622,879	-	(D)
	Other penicillins (except semisynthetic) such as penicillin V and penicillin G:								
28348 30	Injectable . . . . .	(D)	(D)	-	-	(D)	(D)	-	-
28348 32	Other forms . . . . .	10,507	10,507	-	(D)	10,556	10,556	-	(D)
28348 34	Other broad and medium spectrum antibiotics (except sulfa-antibiotic combinations) . . . . .	594,051	(D)	(D)	(D)	571,774	571,769	(D)	(D)
28348 36	Antibiotics in combination with sulfonamides . . . . .	24,008	(D)	-	-	(D)	(D)	-	-
28348 38	Other systemic antibiotic preparations, including narrow-spectrum antibiotics and streptomycins . . . . .	62,741	62,741	-	(D)	125,317	125,317	-	(D)
28348 41	Topical antibiotic preparations . . . . .	143,751	101,023	42,728	(D)	134,927	109,776	25,151	(D)
28348 51	Tuberculostatic agents: Isoniazid (isonicotinic acid hydrazide) preparations . . . . .	3,585	3,585	-	-	3,768	3,768	-	(D)
28348 55	Other antituberculars . . . . .	(D)	(D)	(D)	-	(D)	(D)	-	-
28348 61	Antimalarials (plasmodicides) . . . . .	150,730	150,730	-	(D)	7,429	(D)	(D)	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994—Con.

[In thousands of dollars]

Product code	Product description	1995				1994			
		Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>	Total	Prescription legend	Non-prescription	Bulk shipments <sup>1</sup>
2834—	Pharmaceutical preparations, except biologicals—Con.								
28348—	Pharmaceutical preparations affecting parasitic and infective diseases, for human use—Con.								
28348 63	Anti-infective agents, excluding corticoid anti-infective combinations (see product code 28341 15)—Con.								
	Sulfonamides (except antibiotic)—sulfonamide combinations .....	62,819	(D)	(D)	-	70,830	70,830	-	(D)
28348 65	Antifungal preparations .....	294,204	134,382	159,822	(D)	<sup>†</sup> 315,915	<sup>†</sup> 144,754	71,161	(D)
28348 67	Antivirals, systemic such as zovirax, and retrovir .....	(D)	(D)	-	(D)	(D)	(D)	-	(D)
28348 69	Other anti-infective agents .....	346,995	341,382	(D)	-	<sup>†</sup> 201,189	(D)	(D)	-
28348 71	Antibacterials and antiseptics: General .....	67,415	14,358	53,057	15,639	69,730	3,095	66,635	16,295
28348 75	Mouth and throat preparations .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28348 98	Other pharmaceutical preparations affecting parasitic and infective diseases, for human use .....	124,404	95,569	28,835	(D)	<sup>†</sup> 191,235	171,992	19,243	(D)
28349—	Pharmaceutical preparations for veterinary use .....	1,584,606	780,221	734,833	69,552	1,630,982	800,628	756,447	73,907
28349 11	Anesthetics .....	(D)	(D)	(D)	-	20,660	(D)	(D)	-
28349 21	Anthelmintics .....	146,863	70,547	76,316	2,761	145,812	63,455	82,357	1,923
	Antibiotics:								
28349 22	Tetracyclines .....	131,450	(D)	(D)	(D)	156,834	(D)	(D)	(D)
28349 24	Penicillins .....	80,991	35,520	45,471	2,424	87,351	39,111	48,240	5,691
28349 26	Other antibiotics .....	164,378	98,762	<sup>a</sup> 65,616	(D)	<sup>†</sup> 157,362	87,028	<sup>†</sup> 70,334	(D)
28349 27	Antiseptics, wound dressings, and fungicides .....	83,313	(D)	(D)	(D)	85,195	(D)	(D)	(D)
28349 31	Hematinics .....	<sup>3</sup> 6,345	<sup>3</sup> 1,671	<sup>3</sup> 4,674	<sup>3</sup> -	<sup>3</sup> 5,257	<sup>3</sup> 1,430	<sup>3</sup> 3,827	<sup>3</sup> -
28349 33	Hemostatics .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
	Hormones:								
28349 34	Insulin preparations .....	-	-	-	-	-	-	-	-
28349 36	ACTH (corticotropin) preparations .....	(D)	(D)	(D)	-	11,338	(D)	(D)	-
28349 38	Other hormone preparations .....	53,186	(D)	(D)	(D)	<sup>†</sup> 46,746	(D)	(D)	(D)
28349 39	Intravenous solutions and electrolytes .....	<sup>a</sup> 8,823	<sup>a</sup> 4,360	<sup>a</sup> 4,463	-	12,034	(S)	4,629	(D)
28349 41	Nitrofurans .....	1,199	-	1,199	(D)	<sup>†</sup> 1,152	-	<sup>†</sup> 1,152	(D)
28349 43	Nutrients and tonics .....	24,480	-	<sup>a</sup> 24,480	6,566	<sup>†</sup> 24,041	(D)	(D)	7,089
28349 45	Parasiticides, external .....	156,703	(D)	(D)	(D)	164,917	(D)	(D)	(D)
28349 47	Sulfonamides .....	16,460	(D)	(D)	(D)	27,269	17,135	10,134	(D)
28349 51	Tranquillizers and ataractics .....	8,886	8,886	-	(D)	10,299	(D)	(D)	-
28349 55	Vitamins and minerals .....	170,361	(D)	(D)	(D)	171,817	(D)	(D)	(D)
28349 98	Other pharmaceutical preparations for veterinary use .....	424,986	(D)	(D)	(D)	<sup>†</sup> 428,991	(D)	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>†</sup>Revised by 5 percent or more from previously published data.  
S Does not meet publication standards. X Not applicable.

<sup>1</sup>Data for "Bulk shipments" are excluded from all horizontal seven-digit product detail totals; however, these data are included in all five-digit product code and four-digit industry level totals. Since bulk shipments are typically reported by a small number of producers, and often must be suppressed, inclusion of bulk shipments in all horizontal totals would require the suppression of additional detail.

<sup>2</sup>Product code 28242 24 combined with product code 28342 28.

<sup>3</sup>Product code 28349 31 combined with product code 28349 33.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>20 percent or more of this item is estimated.

Table 26. **Domestic Value of Shipments, Exports, Imports, and Apparent Consumption of Pharmaceutical Preparations, Except Biologicals: 1995 and 1994**

[In thousand of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise <sup>1</sup>	Percent exports to manufacturers' shipments	Imports for consumption <sup>2</sup> (value)	Apparent consumption <sup>3</sup> (value)	Percent imports to apparent consumption
<b>1995</b>							
	Pharmaceutical preparations . . . . .	49,514,363	1,707,882	3.4	2,625,490	50,431,971	5.2
28341 —	Pharmaceutical preparations affecting neoplasms, endocrine system, and metabolic diseases, for human use . . . . .	4,019,989	305,389	7.6	619,573	4,334,173	14.3
28342 —	Pharmaceutical preparations acting on the central nervous system and sense organs, for human use . . . . .	10,063,593	134,145	1.3	231,948	10,161,395	2.3
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use . . . . .	6,172,435	163,862	2.7	238,136	6,246,709	3.8
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use . . . . .	5,189,511	129,888	2.5	135,212	5,194,835	2.6
28345 —	Pharmaceutical preparations acting on the digestive or genito-urinary system, for human use . . . . .	8,570,658	104,784	1.2	155,742	8,621,616	1.8
28346 —	Pharmaceutical preparations acting on the skin, for human use . . . . .	2,193,294	23,215	1.1	97,029	2,267,107	4.3
28347 —	Vitamin, nutrient, and hematinic preparations, for human use . . . . .	4,523,416	126,505	2.8	29,115	4,426,027	0.7
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use . . . . .	7,196,861	643,092	8.9	978,348	7,532,117	13.0
28349 —	Pharmaceutical preparations for veterinary use . . . . .	1,584,606	77,002	4.9	140,388	1,647,991	8.5
<b>1994</b>							
	Pharmaceutical preparations . . . . .	48,209,370	1,615,383	3.4	1,936,182	48,530,169	4.0
28341 —	Pharmaceutical preparations affecting neoplasms, endocrine system, and metabolic diseases, for human use . . . . .	4,119,777	237,753	5.8	394,614	4,276,638	9.2
28342 —	Pharmaceutical preparations acting on the central nervous system and sense organs, for human use . . . . .	8,989,931	112,668	1.3	245,628	9,122,891	2.7
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use . . . . .	5,673,893	161,745	2.9	152,741	5,664,889	2.7
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use . . . . .	5,566,412	133,259	2.4	183,216	5,616,369	3.3
28345 —	Pharmaceutical preparations acting on the digestive or genito-urinary system, for human use . . . . .	8,479,204	126,184	1.5	93,573	8,446,593	1.1
28346 —	Pharmaceutical preparations acting on the skin, for human use . . . . .	2,089,734	25,011	1.2	36,285	2,101,007	1.7
28347 —	Vitamin, nutrient, and hematinic preparations, for human use . . . . .	4,402,072	131,387	3.0	27,642	4,298,327	0.6
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use . . . . .	7,257,365	626,634	8.6	702,783	7,333,514	9.6
28349 —	Pharmaceutical preparations for veterinary use . . . . .	1,630,982	60,741	3.7	99,699	1,669,940	6.0

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Apparent consumption represents new domestic supply and is derived by subtracting exports from total of manufacturers' shipments plus imports.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

**HISTORICAL NOTE**

Data on pharmaceutical preparations, except biologicals, have been collected by the Bureau of the Census since 1962. Historical data may be obtained from Current Industrial Reports available at your local Federal

Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Walter R. Hunter, Jr., 301-457-4798.

---

## Chapter 5. Glass Products

---

### FLAT GLASS (MQ32A)

#### INTRODUCTION

The data in this section are from a survey of all companies engaged in the manufacturing of flat or float glass, except laminated or otherwise fabricated flat glass products, as collected on the quarterly report MQ32A, Flat Glass. The survey panel includes all known manufacturers of flat glass, approximately 6 companies. Prior to 1975, the panel included approximately 10 companies.

#### SUMMARY OF FINDINGS

Flat glass production increased 5.3 percent to 5.6 billion square feet in 1995, from 5.3 billion square feet in 1994. The quantity of flat glass shipments decreased 5.1 percent to 5.3 billion square feet in 1995, from 5.6 billion square feet in 1994. Also, the value of flat glass shipments increased 3.1 percent to \$1.92 billion in 1995, from \$1.86 billion in 1994.

By type, sheet, plate, and float glass up to .107 inch accounted for approximately 45 percent of the total production and total quantity of shipments in 1995 and 46 percent of the total production and total quantity of shipments in 1994. By color, clear glass accounted for approximately 60 percent of total production and total quantity of shipments in 1995 and 1994.

In 1995, outside customer sales accounted for 64.6 percent of total production, 69.4 percent of total quantity of shipments, and 71.7 percent of total value of shipments. This compares with 63.5 percent of total production, 68.7 percent of total quantity of shipments, and 70.8 percent of total value of shipments in 1994.

#### EXPLANATION OF TERMS

**Unit of measure.** Quantities of glass by thickness, by color designation, and outside customer sales are reported in short tons and thousands of square feet. Total value of

shipments is reported in thousands of dollars. Tonnage is based on a conversion of actual square feet at 0.01294 pound/square foot/mil of thickness for thickness category.

**Production.** Includes flat glass packed direct from the production line for shipments to customers, finished glass transferred to other establishments of the producing company or added to finished inventory, and consumption within the same plant. Glass blanks are included in production when they are cut and packed for shipments or put into finished inventory. Blanks transferred to another raw glass producing plant of the same company are reported by the receiving plant when cut and packed for shipment or added to finished inventory.

**Quantities produced and consumed.** Includes quantities of each type of glass produced by each company for internal consumption within each company (i.e., the quantity of interplant transfer and the quantity produced and consumed within that same producing plant).

**Stocks.** Includes total quantity of ending finished stock inventory, excluding glass blanks.

**Sheet glass.** Flat glass made by continuous drawing.

**Plate glass.** Flat glass formed by a rolling process, ground and polished on both sides, with surfaces essentially plane and parallel.

**Float glass.** Flat glass, identical in appearance to plate glass, but formed by a process in which thickness is controlled by floating the glass on a molten bed of tin.

**Sales to outside customers.** Sales outside the reporting company to nonraw glass producing companies.

Table 1. Summary of Flat Glass Production, Shipments, and Inventories: 1993 to 1995

Year and quarter	Production		Total shipments			Quantity produced and consumed within each company (1,000 sq. ft.)	Inventory (end of quarter) (1,000 sq. ft.)	Producer Price Index (1982=100.0)
	Total (short tons)	Total (1,000 sq. ft.)	Quantity (includes produced and consumed within each company) (1,000 sq. ft.)	Value in current dollars (\$1,000)	Value in constant dollars <sup>1</sup> (\$1,000)			
<b>1995</b>								
<b>Total . . . . .</b>	<b>4,437,545</b>	<b>5,635,303</b>	<b>5,309,957</b>	<b>1,921,143</b>	<b>1,669,132</b>	<b>1,655,565</b>	<b>(X)</b>	<b>(X)</b>
Fourth quarter . . . . .	1,082,985	1,356,223	1,322,945	467,924	403,731	397,232	783,171	115.9
Third quarter . . . . .	1,121,069	1,440,564	1,323,459	476,672	408,459	388,644	749,893	116.7
Second quarter . . . . .	1,135,495	1,440,675	1,300,923	473,996	405,818	417,602	632,788	116.8
First quarter . . . . .	1,097,996	1,397,841	1,362,630	502,551	451,123	452,087	493,036	111.4
<b>1994</b>								
<b>Total . . . . .</b>	<b>4,288,390</b>	<b>5,349,865</b>	<b>5,578,868</b>	<b>1,863,444</b>	<b>1,741,901</b>	<b>1,743,969</b>	<b>(X)</b>	<b>(X)</b>
Fourth quarter . . . . .	1,119,448	1,377,332	1,399,291	482,768	430,275	436,137	457,825	112.2
Third quarter . . . . .	1,097,391	1,379,567	1,449,596	489,757	445,234	429,268	479,784	110.0
Second quarter . . . . .	1,049,248	1,300,991	1,403,755	461,784	438,541	430,667	549,813	105.3
First quarter . . . . .	1,022,303	1,291,975	1,326,226	429,135	427,851	447,897	652,577	100.3
<b>1993</b>								
<b>Total . . . . .</b>	<b>4,004,019</b>	<b>4,963,582</b>	<b>5,073,498</b>	<b>1,622,705</b>	<b>1,677,514</b>	<b>1,642,840</b>	<b>(X)</b>	<b>(X)</b>
Fourth quarter . . . . .	1,088,842	1,345,491	1,328,204	425,455	432,373	417,985	686,828	98.4
Third quarter . . . . .	1,038,758	1,269,171	1,290,146	412,306	428,147	392,874	669,541	96.3
Second quarter . . . . .	948,129	1,203,420	1,290,013	413,263	431,832	432,216	690,504	95.7
First quarter . . . . .	928,290	1,145,500	1,165,135	371,681	385,162	399,765	777,246	96.5

X Not applicable.

<sup>1</sup>Adjustments for price changes were made to data using producer price index for flat glass as published by the Bureau of Labor Statistics (BLS).

Table 2. Summary of Production, Shipments, and Inventories of Flat Glass: 1995

Product code	Product description	Number of companies	Production		Total shipments		Quantity produced and consumed within each company (1,000 sq. ft.)	Inventory (end of quarter) (1,000 sq. ft.) <sup>1</sup>
			Total (short tons)	Total (1,000 sq. ft.)	Quantity (includes produced and consumed within each company) (1,000 sq. ft.)	Value in current dollars (\$1,000)		
32110 00	<b>Flat glass</b> . . . . .	(X)	<b>4,437,545</b>	<b>5,635,303</b>	<b>5,309,957</b>	<b>1,921,143</b>	<b>1,655,565</b>	(X)
	Fourth quarter . . . . .	6	1,082,985	1,356,223	1,322,945	467,924	397,232	783,171
	Third quarter . . . . .	6	1,121,069	1,440,564	1,323,459	476,672	388,644	749,893
	Second quarter . . . . .	6	1,135,495	1,440,675	1,300,923	473,996	417,602	632,788
	First quarter . . . . .	6	1,097,996	1,397,841	1,362,630	502,551	452,087	493,036
	By type:							
32115 12	Sheet, plate, and float glass up to .107 inch . . . . .	(X)	1,350,704	2,545,903	2,375,978	(X)	631,346	(X)
	Fourth quarter . . . . .	6	321,221	593,154	584,903	(X)	156,728	344,066
	Third quarter . . . . .	6	349,813	663,491	593,087	(X)	136,604	335,815
	Second quarter . . . . .	6	349,737	667,618	594,016	(X)	163,944	265,411
	First quarter . . . . .	6	329,933	621,640	603,972	(X)	174,070	191,809
32115 13	.108 inch through .134 inch . . . . .	(X)	1,121,220	1,254,385	(D)	(X)	483,601	(X)
	Fourth quarter . . . . .	6	295,893	332,420	(D)	(X)	115,796	(D)
	Third quarter . . . . .	6	277,225	316,379	(D)	(X)	124,144	(D)
	Second quarter . . . . .	6	277,030	291,504	(D)	(X)	119,428	(D)
	First quarter . . . . .	6	271,072	314,082	(D)	(X)	124,233	(D)
32115 14	.135 inch through .199 inch . . . . .	(X)	1,052,530	1,210,819	1,182,173	(X)	486,542	(X)
	Fourth quarter . . . . .	6	240,051	277,026	285,854	(X)	111,414	157,721
	Third quarter . . . . .	6	270,895	312,774	289,850	(X)	115,007	166,549
	Second quarter . . . . .	6	281,891	319,422	292,704	(X)	120,081	143,625
	First quarter . . . . .	6	259,693	301,597	313,765	(X)	140,040	116,907
32115 15	.200 inch and thicker . . . . .	(X)	913,091	624,196	(D)	(X)	54,076	(X)
	Fourth quarter . . . . .	6	225,820	153,623	(D)	(X)	13,294	(D)
	Third quarter . . . . .	6	223,136	147,920	(D)	(X)	12,889	(D)
	Second quarter . . . . .	6	226,837	162,131	(D)	(X)	14,149	(D)
	First quarter . . . . .	6	237,298	160,522	(D)	(X)	13,744	(D)
	By color:							
32110 14	Pyrolytically coated . . . . .	(X)	209,181	243,525	234,288	(X)	61,524	43,981
	Fourth quarter . . . . .	4	(X)	(X)	59,612	(X)	15,385	(X)
	Third quarter . . . . .	4	(X)	(X)	59,553	(X)	14,821	(X)
	Second quarter . . . . .	4	(X)	(X)	56,217	(X)	14,267	(X)
	First quarter . . . . .	4	(X)	(X)	58,906	(X)	17,051	(X)
	Nonpyrolytically coated:							
32110 15	Clear . . . . .	(X)	2,622,965	3,392,672	3,197,363	(X)	690,394	398,165
	Fourth quarter . . . . .	6	(X)	(X)	811,322	(X)	166,634	(X)
	Third quarter . . . . .	6	(X)	(X)	812,549	(X)	173,076	(X)
	Second quarter . . . . .	6	(X)	(X)	772,516	(X)	171,422	(X)
	First quarter . . . . .	6	(X)	(X)	800,976	(X)	179,262	(X)
32110 16	Green . . . . .	(X)	1,058,187	1,411,379	1,325,970	(X)	696,828	212,501
	Fourth quarter . . . . .	4	(X)	(X)	309,041	(X)	165,035	(X)
	Third quarter . . . . .	4	(X)	(X)	319,624	(X)	157,155	(X)
	Second quarter . . . . .	4	(X)	(X)	335,382	(X)	177,183	(X)
	First quarter . . . . .	4	(X)	(X)	361,923	(X)	197,455	(X)
32110 17	Bronze . . . . .	(X)	128,258	108,504	(X)	(X)	(D)	(D)
	Fourth quarter . . . . .	4	(X)	(X)	24,447	(X)	(D)	(X)
	Third quarter . . . . .	4	(X)	(X)	23,246	(X)	(D)	(X)
	Second quarter . . . . .	4	(X)	(X)	23,639	(X)	(D)	(X)
	First quarter . . . . .	4	(X)	(X)	22,798	(X)	(D)	(X)
32110 18	Other . . . . .	(X)	418,954	479,223	458,206	(X)	(D)	(D)
	Fourth quarter . . . . .	5	(X)	(X)	118,523	(X)	(D)	(X)
	Third quarter . . . . .	5	(X)	(X)	108,487	(X)	(D)	(X)
	Second quarter . . . . .	5	(X)	(X)	113,169	(X)	(D)	(X)
	First quarter . . . . .	5	(X)	(X)	118,027	(X)	(D)	(X)
32110 04	Outside customer sales . . . . .	(X)	2,863,641	3,638,526	3,684,392	1,378,371	(X)	(X)
	Fourth quarter . . . . .	6	(X)	(X)	925,713	343,117	(X)	(X)
	Third quarter . . . . .	6	(X)	(X)	934,815	354,873	(X)	(X)
	Second quarter . . . . .	6	(X)	(X)	883,321	339,924	(X)	(X)
	First quarter . . . . .	6	(X)	(X)	940,543	340,457	(X)	(X)
32110 21	Glass tempered by primary producers of flat glass . . . . .	(X)	388,408	421,775	426,074	(X)	335,916	(D)
	Fourth quarter . . . . .	5	(X)	(X)	93,163	(X)	66,940	(X)
	Third quarter . . . . .	5	(X)	(X)	101,549	(X)	73,096	(X)
	Second quarter . . . . .	5	(X)	(X)	106,872	(X)	96,078	(X)
	First quarter . . . . .	5	(X)	(X)	124,490	(X)	99,802	(X)
32110 23	Glass used for high-speed tempered residential products . . . . .	(X)	252,007	297,751	294,442	(X)	272,974	(D)
	Fourth quarter . . . . .	4	(X)	(X)	67,363	(X)	62,161	(X)
	Third quarter . . . . .	4	(X)	(X)	73,829	(X)	68,329	(X)
	Second quarter . . . . .	4	(X)	(X)	75,787	(X)	70,334	(X)
	First quarter . . . . .	4	(X)	(X)	77,463	(X)	72,150	(X)

D Withheld to avoid disclosing data for individual companies. X Not applicable.

<sup>1</sup>Total ending inventories for 1995 are those shown for fourth quarter.

Note: Data are limited to inventories at manufacturing establishments. For some items, the sum of inventories at the beginning of the quarter, plus production, minus quantity of shipments, may not equal inventories at the end of the quarter. This is due to breakage and inventory adjustments.

Table 3. Summary of Production, Shipments, and Inventories of Flat Glass: 1994

Product code	Product description	Number of companies	Production		Total shipments		Quantity produced and consumed within each company (1,000 sq. ft.)	Inventory (end of quarter) (1,000 sq. ft.) <sup>1</sup>
			Total (short tons)	Total (1,000 sq. ft.)	Quantity (includes produced and consumed within each company) (1,000 sq. ft.)	Value in current dollars (\$1,000)		
32110 00	<b>Flat glass</b> . . . . .	(X)	<b>4,288,390</b>	<b>5,349,865</b>	<b>5,578,868</b>	<b>1,863,444</b>	<b>1,743,969</b>	<b>(X)</b>
	Fourth quarter . . . . .	6	1,119,448	1,377,332	1,399,291	482,768	436,137	457,825
	Third quarter . . . . .	6	1,097,391	1,379,567	1,449,596	489,757	429,268	479,784
	Second quarter . . . . .	6	1,049,248	1,300,991	1,403,755	461,784	430,667	549,813
	First quarter . . . . .	6	1,022,303	1,291,975	1,326,226	429,135	447,897	652,577
	By type:							
32115 12	Sheet, plate, and float glass up to .107 inch . . . . .	(X)	1,360,363	2,446,862	2,570,597	(X)	665,978	(X)
	Fourth quarter . . . . .	6	350,491	617,328	638,525	(X)	168,943	174,141
	Third quarter . . . . .	6	361,717	646,279	668,642	(X)	155,275	195,338
	Second quarter . . . . .	6	327,978	598,412	654,670	(X)	163,054	217,701
	First quarter . . . . .	6	320,177	584,843	608,760	(X)	178,706	273,959
32115 13	.108 inch through .134 inch . . . . .	(X)	1,104,749	1,177,211	1,235,701	(X)	500,162	(X)
	Fourth quarter . . . . .	6	289,126	306,070	313,563	(X)	(D)	97,959
	Third quarter . . . . .	6	309,633	326,364	330,698	(X)	(D)	105,452
	Second quarter . . . . .	6	241,120	251,014	306,811	(X)	115,938	109,786
	First quarter . . . . .	6	264,870	293,763	284,629	(X)	120,938	165,583
32115 14	.135 inch through .199 inch . . . . .	(X)	1,025,598	1,169,353	1,193,667	(X)	526,161	(X)
	Fourth quarter . . . . .	6	293,251	329,175	305,304	(X)	130,565	129,075
	Third quarter . . . . .	6	222,565	264,603	297,192	(X)	122,131	105,204
	Second quarter . . . . .	6	281,472	313,214	301,013	(X)	138,332	137,793
	First quarter . . . . .	6	228,310	262,361	290,158	(X)	135,133	125,592
32115 15	.200 inch and thicker . . . . .	(X)	797,680	556,439	578,903	(X)	51,668	(X)
	Fourth quarter . . . . .	6	186,580	124,759	141,899	(X)	(D)	56,650
	Third quarter . . . . .	6	203,476	142,321	153,064	(X)	(D)	73,790
	Second quarter . . . . .	6	198,678	138,351	141,261	(X)	13,343	84,533
	First quarter . . . . .	6	208,946	151,008	142,679	(X)	13,120	87,443
	By color:							
32110 14	Pyrolytically coated . . . . .	(X)	186,687	237,540	247,154	(X)	66,699	34,744
	Fourth quarter . . . . .	4	(X)	(X)	60,616	(X)	16,633	(X)
	Third quarter . . . . .	4	(X)	(X)	66,155	(X)	15,476	(X)
	Second quarter . . . . .	4	(X)	(X)	65,232	(X)	16,956	(X)
	First quarter . . . . .	4	(X)	(X)	55,151	(X)	17,634	(X)
	Nonpyrolytically coated:							
32110 15	Clear . . . . .	(X)	2,639,239	3,255,026	3,396,079	(X)	704,411	202,856
	Fourth quarter . . . . .	6	(X)	(X)	852,079	(X)	168,894	(X)
	Third quarter . . . . .	6	(X)	(X)	907,751	(X)	189,566	(X)
	Second quarter . . . . .	6	(X)	(X)	860,530	(X)	168,903	(X)
	First quarter . . . . .	6	(X)	(X)	775,719	(X)	177,048	(X)
32110 16	Green . . . . .	(X)	985,132	1,323,110	1,407,448	(X)	727,115	127,092
	Fourth quarter . . . . .	4	(X)	(X)	357,932	(X)	191,903	(X)
	Third quarter . . . . .	4	(X)	(X)	337,663	(X)	165,126	(X)
	Second quarter . . . . .	4	(X)	(X)	340,641	(X)	176,166	(X)
	First quarter . . . . .	4	(X)	(X)	371,212	(X)	193,920	(X)
32110 17	Bronze . . . . .	(X)	(D)	(D)	100,319	(X)	(D)	(D)
	Fourth quarter . . . . .	4	(X)	(X)	23,687	(X)	(D)	(X)
	Third quarter . . . . .	4	(X)	(X)	25,262	(X)	(D)	(X)
	Second quarter . . . . .	4	(X)	(X)	25,091	(X)	(D)	(X)
	First quarter . . . . .	4	(X)	(X)	26,279	(X)	(D)	(X)
32110 18	Other . . . . .	(X)	(D)	(D)	427,868	(X)	(D)	(D)
	Fourth quarter . . . . .	5	(X)	(X)	104,977	(X)	(D)	(X)
	Third quarter . . . . .	5	(X)	(X)	112,765	(X)	(D)	(X)
	Second quarter . . . . .	5	(X)	(X)	112,261	(X)	(D)	(X)
	First quarter . . . . .	5	(X)	(X)	97,865	(X)	(D)	(X)
32110 04	Outside customer sales . . . . .	(X)	2,739,663	3,398,584	3,834,911	1,319,766	(X)	(X)
	Fourth quarter . . . . .	6	(X)	(X)	963,154	345,614	(X)	(X)
	Third quarter . . . . .	6	(X)	(X)	1,020,328	357,975	(X)	(X)
	Second quarter . . . . .	6	(X)	(X)	973,087	325,385	(X)	(X)
	First quarter . . . . .	6	(X)	(X)	878,342	290,792	(X)	(X)
32110 21	Glass tempered by primary producers of flat glass . . . . .	(X)	482,759	531,629	532,846	(X)	410,453	(D)
	Fourth quarter . . . . .	5	(X)	(X)	123,572	(X)	92,033	(X)
	Third quarter . . . . .	5	(X)	(X)	143,441	(X)	108,432	(X)
	Second quarter . . . . .	5	(X)	(X)	135,017	(X)	108,522	(X)
	First quarter . . . . .	5	(X)	(X)	130,816	(X)	101,466	(X)
32110 23	Glass used for high-speed tempered residential products . . . . .	(X)	264,631	312,844	310,358	(X)	267,726	(D)
	Fourth quarter . . . . .	4	(X)	(X)	72,473	(X)	65,187	(X)
	Third quarter . . . . .	4	(X)	(X)	79,786	(X)	72,330	(X)
	Second quarter . . . . .	4	(X)	(X)	81,214	(X)	74,422	(X)
	First quarter . . . . .	4	(X)	(X)	76,885	(X)	70,001	(X)

D Withheld to avoid disclosing data for individual companies. X Not applicable.

<sup>1</sup>Total ending inventories for 1994 are those shown for the fourth quarter.

Note: Data are limited to inventories at manufacturing establishments. For some items, sum of inventories at beginning of quarter, plus production, minus quantity of shipments, may not equal inventories at the end of the quarter. This is due to breakage and inventory adjustments.



Table 4. Value of Shipments, Exports, and Imports of Flat Glass: 1993 to 1995

[Thousands of dollars]

Year and quarter	Manufacturers' shipments (f.o.b. plant) <sup>1</sup>	Exports of domestic merchandise <sup>2</sup> (value at port)	Percent exports to manufacturers' shipments	Imports for consumption <sup>3</sup> (value at port)	Apparent consumption <sup>4</sup>	Percent imports to apparent consumption
<b>1995</b>						
<b>Total</b> .....	<b>1,921,143</b>	<b>422,825</b>	<b>22.0</b>	<b>168,748</b>	<b>1,667,066</b>	<b>10.1</b>
Fourth quarter .....	467,924	119,577	25.6	31,250	379,597	8.2
Third quarter .....	476,672	121,733	25.5	42,621	397,560	10.7
Second quarter .....	473,996	90,757	19.1	43,448	426,687	10.2
First quarter .....	502,551	90,758	18.1	51,429	463,222	11.1
<b>1994</b>						
<b>Total</b> .....	<b>1,863,444</b>	<b>363,835</b>	<b>19.5</b>	<b>157,154</b>	<b>1,656,763</b>	<b>9.5</b>
Fourth quarter .....	482,768	92,475	19.2	53,392	443,685	12.0
Third quarter .....	489,757	90,230	18.4	36,098	435,625	8.3
Second quarter .....	461,784	91,618	19.8	33,650	403,816	8.3
First quarter .....	429,135	89,512	20.9	34,014	373,637	9.1
<b>1993</b>						
<b>Total</b> .....	<b>1,622,705</b>	<b>342,903</b>	<b>21.1</b>	<b>124,851</b>	<b>1,404,653</b>	<b>8.9</b>
Fourth quarter .....	425,455	83,344	19.6	32,086	374,197	8.6
Third quarter .....	412,306	78,557	19.1	31,580	365,329	8.6
Second quarter .....	413,263	93,112	22.5	29,974	350,125	8.6
First quarter .....	371,681	87,890	23.6	31,211	315,002	9.9

<sup>1</sup>Value of "Manufacturers' shipments" is in current dollars.<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>4</sup>Apparent consumption is derived by subtracting exports from the total of manufacturers' shipments plus imports, including duty.**HISTORICAL NOTE**

Data on flat glass have been collected by the Bureau of the Census since 1957. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also

available on microfiche; contact the Bureau of the Census, Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Susan Sundermann, 301-457-4837.

## CONSUMER, SCIENTIFIC, TECHNICAL, AND INDUSTRIAL GLASSWARE (MA32E)

### INTRODUCTION

The data in this section are from a survey of manufacturers of consumer, scientific, technical, and industrial glassware in the United States. Establishments manufacturing glassware from glass produced in their own establishment, and establishments manufacturing glassware from glass purchased or transferred from other establishments are included. Data are collected by value of shipments in three major categories: table, kitchen, art, and novelty glassware; lighting and electronic glassware; and all other glassware. Related import and export data are also shown.

### SUMMARY OF FINDINGS

In 1995, total factory shipments of consumer, scientific, technical, and industrial glassware amounted to \$5,000.2 million, an increase of 7 percent from the \$4,690.5 million reported in 1994. Establishments manufacturing glassware from glass produced in their own establishment accounted for approximately 69 percent of the total glassware shipments.

Consumer (table, kitchen, art, and novelty) glassware accounted for approximately 37 percent of the total glassware shipments and showed a 5-percent increase for the 1995 shipments of \$1,827.2 million, from the 1994 level of \$1,747 million.

### EXPLANATION OF TERMS

**Tumblers.** Nonstemmed drinking glasses. Excludes packers' tumblers.

**Stemware.** Vessels with long and short stem and footed-ware used generally for drinking; however, may be used as dessert dishes.

**Tableware.** Items from which food and beverages are served or consumed, but not prepared. Excludes stemware and tumblers.

**Cookware, ovenware, and kitchenware.** Items of ceramic glass and heat-resistant glass used to cook over direct heat or in the oven, and items used in the preparation and storage of foods (e.g., cookie jars, mixing bowls, refrigerator dishes, and measuring cups).

**Microwave specialty pieces.** Cookware and ovenware designed especially for microwave usage.

**Ornamental, decorative, novelty glassware, and smokers' accessories.** Includes floralware, ash trays, humidors, apothecary, bathroom dishes, candy dishes, beverage coasters, fish bowls, and piggy banks.

**Automotive lighting glassware.** Includes sealed beam lenses, and other outside lenses, and interior automotive glassware.

**Searchlight and other lenses.** Includes railroad, marine, air, and traffic lighting glassware.

**Electric light bulb blanks.** Includes incandescent, photo flash and mercury vapor, and high temperature lamps.

**Tubing and cane for electric light bulbs and fluorescent and neon lighting.** Includes exhaust tubes and flares for incandescent and fluorescent lamps.

**Electronic tube blanks.** Includes radio, X-ray, radar, special tubes, cathode ray, power tubes, microwave, and storage tubes. Excludes television picture tube blanks and parts.

**Television tube blanks and parts.** Includes cylinders, rod-support insulators, diodebeads and bodies, multiform parts, and moisture getters.

**Bowls and enclosing globes, etc.** Includes lantern globes, chimneys, enclosing globes, shades, prismatic and diffusing globes, luminaire globes, decorative lighting glass parts, and shields and plates for fluorescent and incandescent lighting fixtures.

**Other lighting and electronic glassware.** Includes dials, insulators, custom-made lighting, and electronic glassware.

**Scientific and laboratory glassware.** Includes beads, beakers, bottles, burrets, centrifuge tubes, condensers, connecting tubes, crucibles, cylinders, desiccators, fritted discs, flasks, funnels, ground joints, jars, microscope slides, cover glasses, Petri culture dishes, pipets, special laboratory apparatus, stopcocks, test and culture tubes, thermometer and hydrometer blanks, and custom-made laboratory apparatus.

**Tubing, rods, and canes, all types (except electrical and electronic).** Items used for volumetric ware, advertising purposes, heat absorbing uses, and precision base applications.

**Industrial and technical glassware.** Includes battery jars, industrial beads, blender jars, caps and bodies, coffee urn liners, explosion capsules, flow meter blanks, gauge glasses, lubrication glasses, copy machine cylinders, sight glasses, vacuum bottle parts, godet wheels, heat exchangers, milking machine accessories, glass pipe for chemical and food process and drainlines, rashing rings, ground glass, glass knobs, and insulators.

filters, photographic window blanks, prism blanks, telescope mirror blanks, infrared and ultraviolet transmitting glasses, and fiber optic glass parts. Excludes finished or semifinished lenses.

**Ophthalmic lens blanks and optical instrument lens blanks.** Includes ophthalmic and optical lens blanks, color

**Other glassware.** Includes such products as glass blocks, nursery bottles, balls, radomes, nose cones, vials, and towel bars.

**Table 5. Value of Shipments of Consumer, Scientific, Technical, and Industrial Glassware: 1991 to 1995**

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991
32295, 32298, 32311, 32312	Table, kitchen, art, and novelty glassware <sup>1</sup> . . . . .	1,827.2	1,747.0	1,633.9	1,575.5	1,433.6
32296, 32298, 32311, 32312	Lighting and electronic glassware <sup>1</sup> . . . . .	1,564.1	1,523.2	1,370.6	1,288.6	1,187.1
32297, 32298, 32311, 32312	All other glassware <sup>1</sup> . . . . .	1,598.7	<sup>1</sup> 1,410.7	1,273.1	1,241.1	1,079.1

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Difference between industry 3229 and 3231 is as follows: industry 3229 represents glassware produced from glass made in same establishment; whereas, industry 3231 represents glassware produced or fabricated from glass purchased or transferred from other establishments.

**Table 6. Value of Shipments of Consumer, Scientific, Technical, and Industrial Glassware by Industry: 1995 and 1994**

[Millions of dollars]

Product code	Product description	1995			1994		
		Total (all industries)	SIC 3229	All other industries	Total (all industries)	SIC 3229	All other industries
3229 —, 32311 —, 32312 —	Consumer, scientific, technical, and industrial glassware . . . . .	5,000.2	3,462.1	1,538.1	4,690.5	3,235.9	<sup>1</sup> 1,454.6
32295 —, 32298 —, 32311 —, 32312 —	Table, kitchen, art, and novelty glassware . . . . .	1,827.2	1,131.0	696.2	1,747.0	1,084.9	<sup>1</sup> 662.1
32296 —, 32298 —, 32311 —, 32312 —	Lighting and electronic glassware . . . . .	1,564.1	1,483.0	81.1	1,523.2	1,4301.1	<sup>1</sup> 93.1
32297 —, 32298 —, 32311 —, 32312 —	All other glassware . . . . .	1,598.7	840.5	758.2	<sup>1</sup> 1,410.7	713.8	<sup>1</sup> 696.9
32295 00, 32296 00, 32297 00, 32298 00, 32311 00, 32312 00	Consumer, scientific, technical, and industrial glassware, n.s.k. . . . .	10.2	7.6	2.6	9.6	7.1	2.5

n.s.k. Not specified by kind. <sup>1</sup>Revised by 5 percent or more from previously published data.

Note: Detail may not add to the total because of independent rounding.

Table 7. Shipments of Consumer Glassware: 1995 and 1994

[Value in thousands of dollars]

Product code	Product description <sup>1</sup>	Unit of measure	Number of companies	Total (all industries)		Machine-made <sup>2</sup> (SIC 3229)		Handmade <sup>2</sup> (SIC 3229)	
				Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>									
32295 —, 32298 —, 32311 —, 32312 —	Table, kitchen, art, and novelty glassware .....	.....(X).....	(X)	(X)	1,827,200	(X)	1,034,006	(X)	97,017
3229X 21, 3231X 21	Tumblers (one piece, excluding packers' tumblers) .....	Mil dozens ..	20	45,132	277,387	43,802	270,828	(D)	(D)
3229X 22, 3231X 22	Stemware .....	.....do.....	23	13,366	160,735	(D)	(D)	(D)	(D)
3229X 23, 3231X 23	Tableware .....	Mil pieces ...	26	130,703	270,678	109,188	101,515	(D)	(D)
3229X 25, 3231X 25, 3229X 27, 3231X 27	Cookware, ovenware, and kitchenware, including microwave specialty pieces ...	.....do.....	(NA)	97,683	292,476	(D)	(D)	-	-
3229X 28, 3231X 28	Ornamental, decorative, and novelty glassware, and smokers' accessories ...	.....do.....	60	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
3229X 38, 3231X 38	Other table, kitchen, art, and novelty glassware .....	.....(X).....	30	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
3229X 39, 3231X 39	Interplant transfers of shipments of partially made glassware to other glassware establishments <sup>4</sup> .....	.....(X).....	(X)	(X)	<sup>3</sup> 825,924	(X)	<sup>3</sup> 472,549	(X)	<sup>3</sup> 63,709
<b>1994</b>									
32295 —, 32298 —, 32311 —, 32312 —	Table, kitchen, art, and novelty glassware .....	.....(X).....	(X)	(X)	1,746,978	(X)	989,563	(X)	95,355
3229X 21, 3231X 21	Tumblers (one piece, excluding packers' tumblers) .....	Mil dozens ..	20	45,611	263,982	44,239	257,476	(D)	(D)
3229X 22, 3231X 22	Stemware .....	.....do.....	23	13,471	<sup>1</sup> 163,912	(D)	(D)	(D)	(D)
3229X 23, 3231X 23	Tableware .....	Mil pieces ...	26	120,119	270,541	100,543	107,058	(D)	(D)
3229X 25, 3231X 25, 3229X 27, 3231X 27	Cookware, ovenware, and kitchenware, including microwave specialty pieces ...	.....do.....	(NA)	84,256	256,742	(D)	(D)	-	-
3229X 28, 3231X 28	Ornamental, decorative, and novelty glassware, and smokers' accessories ...	.....do.....	60	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
3229X 38, 3231X 38	Other table, kitchen, art, and novelty glassware .....	.....do.....	(X)	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
3229X 39, 3231X 39	Interplant transfers of shipments of partially made glassware to other glassware establishments <sup>4</sup> .....	.....(X).....	(X)	(X)	<sup>3</sup> 791,801	(X)	<sup>3</sup> 435,915	(X)	<sup>3</sup> 60,900

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>See text for specific definitions of individual products.

<sup>2</sup>Shipments by establishments manufacturing glassware primarily from glass produced in the same establishment.

<sup>3</sup>Product codes 3229X 28, 3231X 28, 3229X 38, and 3231X 38 are included with product codes 3229X 39 and 3231X 39 to avoid disclosure of individual company data.

<sup>4</sup>Processing establishments report finished product on the appropriate lines, in order to avoid duplicate reporting of same product by separate establishments.

Table 8. Value of Shipments of Scientific, Technical, and Industrial Glassware: 1995 and 1994

[Value in thousands of dollars]

Product code	Product description <sup>1</sup>	Number of companies	1995		1994	
			Total (all industries)	Machine-made <sup>2</sup> (SIC 3229)	Total (all industries)	Machine-made <sup>2</sup> (SIC 3229)
32296 —, 32298 —, 32311 —, 32312 —	Lighting and electronic glassware.....	(X)	1,564,116	1,483,018	1,523,178	1,430,101
3229Y 41, 3231Y 41	Automotive lighting glassware.....	6	(D)	(D)	(D)	(D)
3229Y 43, 3231Y 43	Searchlight and other lenses.....	6	12,820	(D)	10,461	(D)
3229Y 45, 3231Y 45	Electric light bulb blanks.....	5	126,256	126,256	139,590	139,590
3229Y 47, 3231Y 47	Tubing and cane for electric light bulbs and fluorescent and neon lighting.....	6	(D)	(D)	(D)	(D)
3229Y 51, 3231Y 51	Electric tube blanks (except television).....	7	14,119	(D)	12,612	(D)
3229Y 55, 3231Y 55	Television tube blanks and parts; tubing, cane, and glass parts for electronic tubes and devices.....	18	952,985	917,583	883,240	841,878
3229Y 57, 3231Y 57	Bowls and enclosing globes, lamp chimneys, lamp parts, shades, reflectors, and torchieres: Interior.....	25	52,250	47,404	84,144	78,095
3229Y 59, 3231Y 59	Exterior.....	11	15,831	12,224	10,464	(D)
3229Y 65, 3231Y 65	Other lighting and electronic glassware.....	10	(D)	7,747	(D)	(D)
3229Y 69, 3231Y 69	Interplant transfers and shipments of partially made glassware to other glassware establishments <sup>3</sup> .....	(X)	131,193	126,066	133,728	128,582
32297—, 32298—, 32311—, 32312—	All other glassware.....	(X)	1,598,663	840,464	1,410,722	713,823
3229Z 71, 3231Z 71	Tubing, rods, canes, all types (except electrical and electronic).....	21	58,324	(D)	(D)	(D)
3229Z 72, 3231Z 72	Scientific and laboratory glassware.....	(X)	581,171	333,647	'504,680	'262,013
3229Z 74, 3231Z 74	Reusable.....	63	288,244	159,749	226,530	98,930
3229Z 75, 3231Z 75	Disposable.....	23	292,927	173,898	'278,150	'163,083
3229Z 77, 3231Z 77	Technical and industrial glassware.....	52	503,719	138,721	'458,124	134,894
3229Z 79, 3231Z 79	Ophthalmic lens blanks and optical instruments' lens blanks.....	18	113,797	102,301	106,681	96,550
3229Z 89, 3231Z 89	Other glassware (e.g., radomes, nose cones, nursery bottles, and vials).....	29	279,803	162,642	'250,629	'140,921
32295 00, 32296 00, 32297 00, 32298 00, 32311 00, 32312 00	Interplant transfers and shipments of partially made glassware to other glassware establishments <sup>3</sup> .....	7	61,849	(D)	(D)	(D)
32295 00, 32296 00, 32297 00, 32298 00, 32311 00, 32312 00	Consumer, scientific, technical, and industrial glassware, n.s.k. <sup>4</sup> .....	(X)	10,210	7,608	9,578	7,144

D Withheld to avoid disclosing data for individual companies. n.s.k. Not specified by kind. 'Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>See text for specific definitions of individual products.

<sup>2</sup>Shipments by establishments manufacturing glassware primarily from glass produced in same establishment.

<sup>3</sup>Processing establishments report the finished product on the appropriate lines, in order to avoid duplicate reporting of the same product by separate establishments.

<sup>4</sup>Not specified by kind (n.s.k.) represents value of shipments for establishments that did not provide detailed information by type of product. These establishments, typically with less than five employees, are not included in the MA32E mailing panel. Value of shipments has been estimated for series MA32E based on year-to-year rate of change for reporting establishments applied to previous year's n.s.k. value.

Table 9. Value of Shipments, Exports, Imports, and Apparent Consumption of Consumer, Scientific, Technical, and Industrial Glassware: 1995 and 1994

[Thousands of dollars]

Product description	Manu- facturers' shipments	Exports of domestic merchandise <sup>1 2</sup>	Percent exports to manufac- turers' shipments	Imports for consumption <sup>1 3</sup>	Apparent consumption <sup>4</sup>	Percent imports to apparent consumption
<b>1995</b>						
Table, kitchen, art, and novelty glassware . . . . .	1,827,200	200,017	10.9	844,453	2,471,636	34.2
Searchlight and other lenses . . . . .	12,820	27,125	211.6	4,250	(10,055)	-42.3
Lighting glassware . . . . .	126,256	33,699	26.7	18,321	110,878	16.5
Electronic tube blanks, including television tube blanks and parts. . . . .	967,104	69,851	7.2	239,429	1,136,682	21.1
Lamp chimneys, bowls, shades, globes, parts, and other glassware, interior and exterior. . . . .	68,081	12,163	17.9	85,636	141,554	60.5
Glass tubing, rods, and canes, all types (except electrical and electronic). . . . .	58,324	112,300	192.5	92,977	39,001	238.4
Scientific and laboratory glassware, reusable and disposable . . . . .	581,171	121,267	20.9	30,544	490,448	6.2
Ophthalmic lens blanks and optical lens blanks. . .	113,797	57,198	50.3	19,441	76,040	25.6
<b>1994</b>						
Table, kitchen, art, and novelty glassware . . . . .	1,746,978	194,227	11.1	735,739	2,288,490	32.1
Searchlight and other lenses . . . . .	10,461	24,932	238.3	2,860	(11,611)	-24.6
Lighting glassware . . . . .	139,590	24,271	17.4	13,088	128,407	10.2
Electronic tube blanks, including television blanks and parts. . . . .	895,852	28,236	3.2	8,087	875,703	0.9
Lamp chimneys, bowls, shades, globes, parts, and other glassware, interior and exterior. . . . .	94,608	11,769	12.6	81,032	162,948	49.7
Glass tubing, rods, and canes, all types (except electrical and electronic). . . . .	(D)	48,885	(D)	92,604	(D)	(D)
Scientific and laboratory glassware, reusable and disposable . . . . .	'504,680	109,038	21.6	27,623	423,265	6.5
Ophthalmic lens blanks and optical lens blanks. . .	106,681	39,403	36.9	15,547	82,825	18.8

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.<sup>2</sup>Source: Bureau of the Census data relating to EM 545, *U.S. Exports*.<sup>3</sup>Source: Bureau of the Census data relating to IM 146, *U.S. Imports for Consumption and General Imports*.<sup>4</sup>Apparent consumption is derived by subtracting exports from total of shipments, plus imports, including duty.**HISTORICAL NOTE**

Data on glassware have been collected by the Bureau of the Census since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact the Bureau of the Census, Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Joyce Pomeroy, 301-457-4840.

## GLASS CONTAINERS (M32G)

### INTRODUCTION

The series on glass containers provides data on the production of glass containers regardless of where they are manufactured. Many containers are actually produced by companies that produce the container as a secondary operation to making the product that goes in the container.

### SUMMARY OF FINDINGS

In 1995, production of glass containers amounted to 270.6 million gross, while shipments were 269.3 million gross. This compares with 1994 production of 288.6 million gross and shipments of 284.7 million gross. In 1995, shipments of narrow neck containers amounted to 184.3 million gross, and shipments of wide mouth containers were 85.0 million gross. Stocks on hand at the end of 1995 totaled 45.5 million gross.

### EXPLANATION OF TERMS

**Food.** Narrow neck bottles for commercial food packers. For example, bottles to contain the following: catsup; concentrated beverage syrup; edible oils; flavoring extracts; fruit juices, blends and ades, including milk style bottle; meat sauces; infant formula; syrups; liquid salad dressings; vegetable juices; and vinegars.

**Medicinal and health supplies.** Narrow neck containers for products that are primarily intended to improve or maintain the health of human beings or animals. Examples of the products/bottles are as follows: citrate of magnesia; essential oils; extracts for medicinal purposes; liniments; nursing bottles; oral antiseptic; pharmaceuticals; prescription bottles; proprietary medicines; serums and parenterals; and veterinary supplies.

**Chemical, household, and industrial.** Narrow neck containers for products not used in connection with human or animal bodies. Examples of the products/bottles are as follows: ammonias; bleaches; bluing; cements; cleaning fluids; disinfectants; dyes; embalming fluids; glues; inks; insecticides; lubricating oils; polishes and waxes; refrigerator water bottles; and waxes.

**Toiletries and cosmetics.** Narrow neck containers for products intended primarily to improve personal appearance or to impart a pleasing odor. Examples of these products are as follows: bath salts and oils; hair

shampoos/conditioners; hair tonics; hand/body lotions and creams; liquid soaps; nail care products; perfumes and colognes; personal deodorants; powders; and toilet waters.

**Beverage, refillable.** Bottles for soft drinks, carbonated or noncarbonated, designed for multiple-trip use.

**Beverage, nonrefillable.** Bottles for soft drinks, carbonated or noncarbonated, designed for single-trip use.

**Beer, refillable.** Bottles for alcoholic cereal beverages (e.g., beer, ale, and porter) designed for multiple-trip use, including malt coolers.

**Beer, nonrefillable.** Bottles for alcoholic cereal beverages designed for single-trip use, including malt coolers.

**Liquors.** Bottles designed for bottling alcoholic beverages, except wines and malt beverages. Included are such products as brandies, cordials, gins, rum, and distilled spirits.

**Wine.** Bottles designed for bottling wines, whether sparkling or still, and champagnes and vermouths, including wine coolers.

**Food (including packers' tumblers, fruit jars, and jelly glasses).** Wide mouth containers sold to commercial food packers and for home canning. Examples of the products put in these jars are as follows: baby foods; candies; coffee; edible oils; fruits and vegetables; fruit juices (e.g., apple juice and orange juice); mayonnaise and salad dressings; meat and fish products; mustard; peanut butter; pickles and relishes; preserves; jams and jellies; and syrups.

**Dairy products.** Containers used by dairies for fluid milk and cream; cottage cheese; whole or skim milk (flavored or unflavored) when bottled at the dairy, are included under dairy products even though they are bottled in beverage style bottles with crown closures.

**Export.** This classification applies to any of the above shipped to packers and bottlers outside the 50 States and the District of Columbia, including shipments to Puerto Rico as exports.

**Narrow neck.** Less than 38-millimeter outside diameter.

**Wide mouth.** 38-millimeter or greater outside diameter.

Table 10. Summary of Shipments, Production, and Stocks of Glass Containers: 1995 and 1994

[Thousands of gross]

Month and year	Shipments			Production			Stocks, end of month		
	Total	Narrow neck containers	Wide mouth containers	Total	Narrow neck containers	Wide mouth containers	Total	Narrow neck containers	Wide mouth containers
<b>1995</b>									
<b>Total .....</b>	<b>269,289</b>	<b>184,254</b>	<b>85,035</b>	<b>270,620</b>	<b>184,939</b>	<b>85,681</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>
December .....	17,034	12,056	4,978	16,868	11,909	4,959	45,469	28,384	17,085
November .....	19,309	13,447	5,862	19,960	14,231	5,729	45,633	28,333	17,300
October .....	22,415	15,129	7,286	23,526	16,299	7,227	45,163	27,915	17,248
September .....	22,382	14,958	7,424	20,376	14,055	6,321	44,167	26,879	17,288
August .....	25,110	17,126	7,984	23,976	16,601	7,375	46,203	27,801	18,402
July .....	22,697	15,762	6,935	23,721	16,308	7,413	47,488	28,335	19,153
June .....	25,161	17,456	7,705	24,406	16,034	8,372	46,621	27,901	18,720
May .....	25,472	17,423	8,049	24,610	16,547	8,063	47,380	29,194	18,186
April .....	22,217	15,197	7,020	23,335	15,656	7,679	48,404	30,262	18,142
March .....	25,491	17,254	8,237	25,358	17,003	8,355	47,583	29,942	17,641
February .....	20,654	13,905	6,749	22,259	15,163	7,096	47,765	30,101	17,664
January .....	21,347	14,541	6,806	22,228	15,136	7,092	46,221	29,343	16,878
<b>1994</b>									
<b>Total .....</b>	<b>284,667</b>	<b>196,466</b>	<b>88,201</b>	<b>288,570</b>	<b>199,541</b>	<b>89,029</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>
December .....	19,689	14,246	5,443	18,868	13,516	5,352	45,261	28,483	16,778
November .....	20,395	14,401	5,994	22,771	15,511	7,260	46,312	29,276	17,036
October .....	23,201	15,570	7,631	25,910	17,490	8,420	44,199	28,343	15,856
September .....	22,671	15,403	7,268	23,123	15,805	7,318	41,383	26,426	14,957
August .....	25,605	17,464	8,141	24,865	17,177	7,688	40,950	26,071	14,879
July .....	25,330	17,561	7,769	26,176	18,513	7,663	41,603	26,251	15,352
June .....	26,419	18,045	8,374	26,288	18,408	7,880	40,766	25,343	15,423
May .....	26,143	17,964	8,179	25,224	17,493	7,731	41,178	25,332	15,846
April .....	25,511	17,625	7,886	25,277	17,311	7,966	42,071	25,601	16,470
March .....	26,092	18,109	7,983	25,597	17,550	8,047	43,764	27,420	16,344
February .....	22,004	15,150	6,854	22,923	15,939	6,984	44,137	28,163	15,974
January .....	21,607	14,928	6,679	21,548	14,828	6,720	43,541	27,757	15,784

<sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.



Table 11. Shipments and Production of Glass Containers by Type of Containers: 1990 to 1995

[Thousands of gross]

Product code	Product description	1995	1994	1993	1992	1991	1990
	<b>SHIPMENTS</b>						
	All types .....	269,289	284,667	289,501	282,703	278,575	284,986
	Narrow neck containers <sup>1</sup> .....	184,254	196,466	212,390	210,437	203,892	213,019
	Wide mouth containers .....	85,035	88,201	77,111	72,266	74,683	71,967
	By end use:						
	Food:						
32210 11	Narrow neck .....	19,959	23,566	31,846	26,516	23,477	23,546
32210 31, 37	Wide mouth, including dairy .....	85,035	88,201	77,111	72,266	74,683	71,967
32210 19, 50	Beverages (refillable and nonrefillable) . . .	16,410	30,713	45,602	53,865	57,141	60,261
32210 23, 60	Beer (refillable and nonrefillable) .....	111,030	104,372	94,747	88,825	84,304	88,551
32210 27	Liquor .....	10,148	10,547	11,434	11,312	10,565	11,185
32210 29	Wine .....	14,000	13,567	14,151	14,591	13,473	15,112
	Other (narrow neck and wide mouth):						
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth) .....	6,892	7,911	8,629	9,056	8,872	9,180
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth) .....	1,131	1,122	1,161	1,236	1,198	1,174
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth) .....	4,684	4,668	4,820	5,036	4,862	4,010
	<b>PRODUCTION</b>						
	All types .....	270,620	288,570	291,624	286,046	282,048	289,704
	Narrow neck containers <sup>1</sup> .....	184,939	199,541	214,014	212,646	207,944	216,501
	Wide mouth containers .....	85,681	89,029	77,610	73,400	74,104	73,203
	By end use:						
	Food:						
32210 11	Narrow neck .....	19,993	23,774	33,279	28,282	24,641	24,309
32210 31, 37	Wide mouth, including dairy .....	85,681	89,029	77,610	73,400	74,104	73,203
32210 19, 50	Beverages (refillable and nonrefillable) . . .	14,182	31,599	44,316	49,900	57,119	59,412
32210 23, 60	Beer (refillable and nonrefillable) .....	113,295	106,290	95,843	91,229	84,601	90,581
32210 27	Liquor .....	10,217	10,976	11,227	11,663	11,261	11,354
32210 29	Wine .....	14,217	13,665	13,975	13,726	13,906	15,626
	Other (narrow neck and wide mouth):						
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth) .....	7,042	7,452	8,627	11,138	10,140	9,736
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth) .....	1,170	1,107	1,103	1,352	1,246	1,234
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth) .....	4,823	4,678	5,644	5,356	5,030	4,249

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Includes data for wide mouth containers in following categories: Medicinal and health; Chemical, household, and industrial; and Toiletries and cosmetics to avoid disclosing data for individual companies.



Table 12. Shipments, Production, and Stocks of Glass Containers: 1995—Con.

Product code	Product description	Total	January	February	March	April	May	June	July	August	Sep- tember	October	Novem- ber	December
	<b>STOCKS, END OF MONTH<sup>3</sup></b> (Thousands of gross)													
	All types . . . . .	(X)	46,221	47,765	47,583	48,404	47,380	46,621	47,488	46,203	44,167	45,163	45,633	45,469
	Narrow neck containers <sup>2</sup> . . . . .	(X)	29,343	30,101	29,942	30,262	29,194	27,901	28,335	27,801	26,879	27,915	28,333	28,384
	Wide mouth containers .	(X)	16,878	17,664	17,641	18,142	18,186	18,720	19,153	18,402	17,288	17,248	17,300	17,085
	By end use:													
	Food:													
32210 11	Narrow neck . . . . .	(X)	4,255	3,809	3,593	3,681	3,585	3,585	3,724	3,500	3,350	3,565	3,648	3,985
32210 31, 37	Wide mouth, including dairy.	(X)	16,878	17,664	17,641	18,142	18,186	18,720	19,153	18,402	17,288	17,248	17,300	17,085
32210 19, 50	Beverages (refillable and nonrefillable) . . . . .	(X)	4,784	5,224	4,991	4,698	4,462	3,987	3,684	3,030	2,891	2,974	3,015	2,676
32210 23, 60	Beer (refillable and nonrefillable) . . . . .	(X)	10,787	11,388	11,688	12,110	11,487	10,974	11,332	11,899	11,206	11,844	11,970	12,121
32210 27	Liquor . . . . .	(X)	2,411	2,459	2,556	2,657	2,614	2,461	2,515	2,404	2,436	2,379	2,342	2,239
32210 29	Wine . . . . .	(X)	2,842	3,066	2,939	2,980	2,952	2,828	2,973	2,824	2,860	2,951	3,058	2,952
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth) . . .	(X)	2,229	2,133	2,138	2,083	'2,029	'2,005	'2,048	'2,096	'2,089	'2,172	'2,259	'2,330
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth) . . . . .	(X)	'328	313	322	341	343	350	352	333	334	327	323	352
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth) . . . . .	(X)	'1,707	'1,709	'1,715	'1,712	'1,722	'1,711	'1,707	'1,715	'1,713	'1,703	'1,718	'1,729

<sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Weight is based on production of glass containers.

<sup>2</sup>Includes data for wide mouth containers in following categories: Medicinal and health; Chemical, household, and industrial; and Toiletries and cosmetics to avoid disclosing data for individual companies.

<sup>3</sup>Data are limited to inventories at manufacturing establishments. Sum of inventories at beginning of month may not equal inventories at end of the month. This is due to breakage and inventory adjustment.



Table 13. Shipments, Production, and Stocks of Glass Containers: 1994—Con.

Product code	Product description	Total	January	February	March	April	May	June	July	August	Sep-tember	October	Novem-ber	December
	<b>PRODUCTION—Con.</b> (Thousands of gross)													
	By end use—Con.													
	Other (narrow neck and wide mouth)—Con.													
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth) . . . . .	1,107	126	70	92	80	102	79	94	120	58	62	119	105
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth) . . . . .	4,678	399	384	419	396	392	410	394	385	375	392	375	357
	<b>STOCKS, END OF MONTH<sup>3</sup></b> (Thousands of gross)													
	All types . . . . .	(X)	43,541	44,137	43,764	42,071	41,178	40,766	41,603	40,950	41,383	44,199	46,312	45,261
	Narrow neck containers <sup>2</sup> . . . . .	(X)	27,757	28,163	27,420	25,601	25,332	25,343	26,251	26,071	26,426	28,343	29,276	28,483
	Wide mouth containers . . . . .	(X)	15,784	15,974	16,344	16,470	15,846	15,423	15,352	14,879	14,957	15,856	17,036	16,778
	By end use:													
	Food:													
32210 11	Narrow neck . . . . .	(X)	4,361	4,337	4,264	4,128	4,026	3,934	3,892	3,707	3,706	3,774	3,943	4,080
32210 31, 37	Wide mouth, including dairy . . . . .	(X)	15,784	15,974	16,344	16,470	15,846	15,423	15,352	14,879	14,957	15,856	17,036	16,778
32210 19, 50	Beverages (refillable and nonrefillable). . . . .	(X)	5,245	5,265	5,088	3,933	3,688	4,460	4,519	4,226	4,286	4,891	4,980	4,842
32210 23, 60	Beer (refillable and nonrefillable). . . . .	(X)	8,859	8,985	8,754	8,359	8,404	8,167	8,992	9,473	9,749	10,683	11,255	10,461
32210 27	Liquor . . . . .	(X)	2,165	2,315	2,091	2,032	2,063	1,958	2,149	2,190	2,145	2,232	2,289	2,340
32210 29	Wine . . . . .	(X)	2,615	2,681	2,761	2,762	2,815	2,580	2,388	2,216	2,426	2,627	2,675	2,722
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth) . . . . .	(X)	2,778	2,856	2,741	2,684	2,635	2,550	2,595	2,524	2,418	2,452	2,423	2,338
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth) . . . . .	(X)	368	344	341	328	333	329	326	349	322	293	319	309
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth) . . . . .	(X)	1,366	1,380	1,380	1,375	1,368	1,365	1,390	1,386	1,374	1,391	1,392	1,391

X Not applicable.

<sup>1</sup>Weight is based on production of glass containers.

<sup>2</sup>Includes data for wide mouth containers in the following categories: Medicinal and health; Chemical, household, and industrial; and Toiletries and cosmetics to avoid disclosing data for individual companies.

<sup>3</sup>Data are limited to inventories at manufacturing establishments. Sum of the inventories at the beginning of month may not equal inventories at end of month. This is due to breakage and inventory adjustment.

**HISTORICAL NOTE**

Data on glass containers have been collected by the Bureau of the Census since 1945. Historical data may be obtained from the Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**FUNDING**

For several years, these data have been collected under the sponsorship of the Glass Packaging Institute.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Jim Jamski, 301-457-1603.

## Chapter 6. Primary Metals

### IRON AND STEEL CASTINGS (MA33A)

#### INTRODUCTION

These data cover producers of ferrous castings, whether for commercial sale or for use by the producing company. The statistics originate from the annual data for 1995 collected on Bureau of the Census form MA33A, Iron and Steel Foundries. The annual survey panel consists of approximately 561 selected establishments, taken from a list of over 900 known producers from the 1992 Census of Manufactures universe.

The panel for this survey was selected using a cut-off sampling methodology from a frame that was constructed from the 1992 Census of Manufactures. The sampling frame consisted of all establishments in the census that satisfied at least one of the following criteria:

1. Shipments of castings were reported, or
2. Consumption of materials commonly used in the manufacture of castings was reported, or
3. Foundry activity was indicated by the completion of a special census inquiry.

For sampling purposes, a number of item codes, roughly equivalent to the items collected on the annual survey form, were created from the census product class and materials consumed codes defined by the above criteria. In some cases, the relationship between the item code and a corresponding census code was one to one. In other cases, the item code consisted of a combination of census codes. In either of these cases, a value was assigned to the item code at the establishment level to the corresponding summed values (quantities) of the census codes comprising it. Potentially, a given establishment might have had a multiple number of item codes assigned.

Each individual item code was sampled independently by cutoff methods, by first arraying the establishments with the item in descending order of value and by selecting the largest establishments, which in the cumulative accounted for 85 percent of the total item value. Because of the potential for establishments to be coded to more than one

item code, the effective coverage of all item codes exceeded 85 percent. Plants selected because of their size in one code contributed to the coverage in other codes for which they had a small amount of data.

The select cases constitute the mailing panel for the annual survey. For a given survey year, final estimates are formed for a given item by summing the data obtained for the mail panel and adjusting it by the coverage rate for the item, so that a complete coverage estimate is obtained. This methodology presumes that the nonmail cases exhibit the same growth characteristics as the mail cases.

#### SUMMARY OF FINDINGS

In 1995, the total ferrous castings shipments were 11.5 million short tons, a 1-percent decrease from the 11.4 million short tons shipped in 1994.

The shipments of ductile iron castings in 1995 were 4.0 million short tons, a 5-percent increase from the 3.8 million shipped in 1994. Gray iron castings decreased 1 percent, from 6.4 million short tons in 1994 to 6.3 million short tons in 1995. Shipments of malleable castings decreased 2 percent, from the 300 thousand short tons in 1994 to 293 thousand short tons shipped in 1995. Steel castings decreased 1 percent, from 1.0 million short tons in 1994 to 922 thousand short tons in 1995. Steel investment castings increased by 2 percent in 1995 to 92.7 million pounds, from 91.0 million pounds in 1994.

#### EXPLANATION OF TERMS

**Shipments for sale.** Represents commercial sales only (castings shipped to the trade). Intracompany sales are not included in this category.

**Shipments for own use.** Represents castings shipped for use by the reporting company or by a subsidiary, parent, or other affiliated company. Castings produced and consumed at the same location in the production of finished products are also included.

**All other gray iron castings.** Includes abrasives, rolls, chilled iron railroad car wheels, grinding balls, white iron castings, semisteel castings, and pressure and soil pipe fittings that require machining, threading, or assembling.

**Cast iron pressure pipe and fittings.** Includes only those fittings that do not require any machining, threading, or assembling.

**Pearlitic malleable.** This classification is reported pursuant to ASTM (American Society for Testing Materials) Designation A220-76.

**Alloy steel.** Steel that contains alloying elements in excess of the maximum standard ranges of the American Iron and Steel Institute as follows:

Manganese ..... in excess of 1.65%  
 Silicon..... in excess of .60%  
 Copper..... in excess of .40%  
 Chromium..... in excess of .30%

Aluminum, cobalt, Any amount specified  
 niobium, molybdenum, nickel, or known to have  
 titanium, tungsten, vanadium, been added to  
 zirconium, or any other obtain a desired  
 alloying element. alloying effect.

**High alloy steel castings.** Heat and/or corrosion resistant steel castings containing 8 percent or more of chromium or nickel or both, with or without molybdenum or other elements.

Table 1. **Quantity of Shipments of Iron and Steel Castings: 1995 and 1994**

[Thousands of short tons]

Year	Ductile iron castings			Gray iron castings			Malleable iron castings			Steel castings		
	Total	For sale	For own use	Total	For sale	For own use	Total	For sale	For own use	Total	For sale	For own use
1995.....	3,940	3,505	435	6,334	4,617	1,717	293	141	152	922	889	33
1994.....	3,709	3,263	446	6,401	4,567	1,834	300	143	157	1,039	1,007	32

Table 2. **Value of Shipments of Iron and Steel Castings: 1995 and 1994**

[Millions of dollars]

Product description	Value of shipments		Standard error of estimate (percent) for column—	
	1995	1994	A	B
	A	B	A	B
Ductile iron castings.....	3,387.2	2,968.0	1.0	(NA)
Gray iron castings.....	4,397.6	3,840.6	1.1	(NA)
Malleable iron castings.....	273.3	277.0	1.4	(NA)
Steel castings.....	2,034.9	1,892.3	2.2	(NA)
Steel investment castings.....	4,316.4	4,150.7	16.1	(NA)

NA Not available. †Revised by 5 percent or more from previously published data.

Note: Dollar value represents value of castings for sale.



Table 3. Shipments of Iron and Steel Castings by Type of Castings: 1995 and 1994

[Quantity in short tons]

Product code	Product description	1995			1994	
		Number of companies	Quantity	Standard error (percent)	Number of companies	Quantity
	Iron and steel castings (except investment castings) . . . . .	(NA)	11,488,143	(NA)	(NA)	11,449,508
	For sale . . . . .	(NA)	9,151,715	(NA)	(NA)	8,980,583
	For own use . . . . .	(NA)	2,336,428	(NA)	(NA)	2,468,925
	Ductile (nodular) iron castings . . . . .	195	3,939,541	(NA)	343	<sup>1</sup> 3,710,334
	For sale . . . . .	196	3,504,924	(NA)	353	<sup>1</sup> 3,264,029
	For own use . . . . .	13	434,617	(NA)	35	446,305
	Ductile iron pressure pipe:					
33211 32	Under 14 inches (inside diameter) . . . . .	10	1,087,721	1.0	26	<sup>1</sup> 1,012,576
33211 33	14 to 24 inches . . . . .	5	<sup>1</sup> 366,915	1.0	17	<sup>1</sup> 328,261
33211 35	30 inches and over . . . . .	3	( <sup>1</sup> )	(NA)	13	( <sup>1</sup> )
	Ductile iron fittings:					
33211 36	Under 14 inches (inside diameter) . . . . .	21	82,918	2.0	40	<sup>1</sup> 84,113
33211 37	14 to 24 inches . . . . .	11	20,589	1.0	26	30,312
33211 39	30 inches and over . . . . .	10	6,894	1.0	24	9,491
33212 24	Construction and utility castings . . . . .	22	18,589	1.0	55	<sup>1</sup> 15,280
33212 22	Automotive uses . . . . .	45	1,023,488	1.0	78	933,503
33212 33	Machinery uses . . . . .	74	159,962	1.3	151	<sup>1</sup> 284,688
33212 79	Other ductile iron castings (except pressure pipe and fittings):					
	For sale . . . . .	126	737,848	1.4	241	699,662
	For own use . . . . .	25	125,526	1.6	45	136,697
	Gray iron castings . . . . .	250	6,334,235	(NA)	480	6,400,816
	For sale . . . . .	251	4,617,129	(NA)	492	4,567,295
	For own use . . . . .	23	1,717,106	(NA)	48	1,833,521
33216 00	Molds and stools for heavy steel ingots . . . . .	8	191,154	1.0	19	239,247
	Gray iron pressure pipe fittings <sup>2</sup> :					
33217 44	Under 14 inches (inside diameter) . . . . .	24	52,965	1.0	37	50,535
33217 45	14 inches and over (inside diameter) . . . . .	13	5,766	1.0	23	7,460
33218 00	Gray iron soil pipe . . . . .	5	193,314	1.0	16	<sup>1</sup> 187,910
33218 04	Gray iron soil pipe fittings <sup>2</sup> . . . . .	7	84,308	1.0	20	<sup>1</sup> 55,567
33219 39	Automotive uses . . . . .	45	1,145,515	1.2	86	1,271,472
33219 41	Construction and utility castings . . . . .	50	625,825	1.0	105	<sup>1</sup> 609,250
33219 97	All other gray iron castings, including white iron castings:					
	For sale . . . . .	209	2,358,110	1.0	436	2,212,198
	For own use . . . . .	42	388,137	1.5	78	379,648
	Malleable iron castings . . . . .	23	293,010	(NA)	34	299,939
	For sale . . . . .	23	141,108	(NA)	40	142,533
	For own use . . . . .	5	151,902	(NA)	7	157,406
33221 00	Standard malleable . . . . .	18	188,766	1.1	30	208,998
33222 00	Pearlitic malleable . . . . .	15	104,244	1.0	24	90,941
	Steel castings (except investment) . . . . .	137	921,357	(NA)	222	<sup>1</sup> 1,038,419
	For sale . . . . .	138	888,554	(NA)	232	<sup>1</sup> 1,006,726
	For own use . . . . .	29	32,803	(NA)	49	31,693
	Carbon steel . . . . .	102	522,983	(NA)	145	<sup>1</sup> 507,283
33252 02	Railroad specialties . . . . .	24	304,293	(NA)	52	<sup>1</sup> 281,830
	Side frames, bolsters, couplers, yokes, draft gear, snubbers (self-contained unit type), hopper doors and frames, and break beams . . . . .	15	275,546	1.0	27	<sup>1</sup> 256,504
33252 29	Other carbon steel railway and transit rolling stock castings . . . . .	16	28,747	6.2	32	<sup>1</sup> 25,326
33252 39	Other carbon steel castings, including rolls for rolling mills:					
	For sale . . . . .	83	212,407	1.0	134	219,842
	For own use . . . . .	12	6,283	9.1	19	5,611
33255 51	Alloy (except high alloy) steel castings . . . . .	80	267,482	(NA)	137	<sup>1</sup> 364,259
33255 57	Railway specialties . . . . .	22	38,689	1.4	37	43,348
	Other alloy steel castings, including rolls for rolling mills . . . . .	62	228,793	1.6	109	<sup>1</sup> 320,911
33254 00	High alloy steel castings:					
	For sale . . . . .	82	117,002	2.0	149	153,483
	For own use . . . . .	13	13,890	3.8	23	<sup>1</sup> 13,394

See footnotes at end of table.

Table 3. Shipments of Iron and Steel Castings by Type of Castings: 1995 and 1994

[Quantity in short tons]

Product code	Product description	1995			1994	
		Number of companies	Quantity	Standard error (percent)	Number of companies	Quantity
	Iron and steel castings (except investment castings)—Con.					
	Steel investment castings <sup>3</sup> .....	80	92,786	(NA)	127	90,868
	For sale <sup>3</sup> .....	80	87,027	(NA)	131	85,081
	For own use <sup>3</sup> .....	7	5,759	(NA)	16	5,787
33240 63	Carbon, including low alloy <sup>3</sup> .....	68	32,246	1.0	111	28,543
33240 68	Alloy, including stainless <sup>3</sup> .....	79	60,540	1.0	129	62,325

NA Not available. <sup>†</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Product codes 33211 33 and 33211 35 are combined to avoid disclosing data for individual companies.<sup>2</sup>Does not include machined, threaded, or assembled fittings.<sup>3</sup>Shipments are in thousands of pounds.

Table 4. **Manufacturers' Shipments, Exports, and Imports of Iron and Steel Castings: 1995**

[Quantity in short tons]

Product code	Product description <sup>1</sup>	Manufacturers' shipments	Exports of domestic merchandise <sup>1 2</sup>	Imports for consumption <sup>1 3</sup>
33211 32, 33, 35	Ductile iron pressure pipe .....	1,454,636	74,102	-
33211 36, 37, 39	Ductile iron fittings.....	110,401	1,474	5,889
33216 00	Molds for heavy steel ingot .....	191,154	3,897	27,341
33217 44, 45	Gray iron pressure pipe fittings.....	58,731	13,160	26,428
33218 00	Gray iron soil pipe.....	193,314	44,145	-
33218 04	Gray iron soil pipe fittings .....	84,308	42	-
33212 22, 24, 33, 79, 33219 39, 41, 97, 33221 00, 33222 00, 33252 02, 29, 39, 33255 51, 57, 33254 00, 33240 63, 68	Iron and steel castings, n.e.c.....	7,890,153	79,770	220,391

- Represents zero. n.e.c. Not elsewhere classified.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report FT 446, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

## HISTORICAL NOTE

Data on iron and steel castings have been collected by the Bureau of the Census since 1943. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Brenda Campbell, 301-457-1031.

## STEEL MILL PRODUCTS (MA33B)

### INTRODUCTION

These data cover all known producers of steel mill products. The statistics were collected by mail on Bureau of the Census annual Form MA33B, Steel Mill Products. The survey panel includes all known producers of steel mill products, approximately 382 companies.

### SUMMARY OF FINDINGS

Net shipments of steel mill producers during 1995 totaled 98.0 million **metric** tons, a 1-percent decrease from the 99.1 million **metric** tons shipped in 1994.

### EXPLANATION OF TERMS

**Net shipments.** This figure is derived by subtracting domestic receipts from total quantity shipments plus steel consumed in producing plants. Prior to 1980, import receipts were also used in the net shipments calculation. Beginning in 1980, import receipts of steel mill products for further processing were collected separately and were no longer used in the net shipments calculation.

**Carbon steel.** All ferrous materials other than alloy and stainless that are usefully malleable and that contain, by weight, 2 percent or less of carbon (in effect, all steel other than that complying with the definition for alloy or stainless).

**Alloy steel.** Steels not complying with the definition of stainless steel and containing, by weight, one or more of the following elements, in proportion shown: 0.3 percent or more of aluminum, chromium, cobalt, or nickel; 0.0008 percent or more of boron; 0.4 percent or more of copper or lead; 1.65 percent or more of manganese; 0.08 percent or more of molybdenum; 0.06 percent or more of niobium; or 0.6 percent or more of silicon.

**Stainless steel.** Alloy steels containing, by weight, 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements and a minimum of 50-percent iron. However, all tool steel and valve steel are excluded.

**Heat resisting steel.** Alloy steels containing, by weight, less than 0.3 percent of carbon and 4 percent or more, but less than 10.5 percent, of chromium.

Table 5. Value of Shipments of Steel Mill Products by Class of Products: 1990 to 1995

[Value in thousands of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990
	<b>Total</b> .....	<b>66,310,606</b>	<b>62,946,066</b>	<b>55,785,677</b>	<b>52,455,326</b>	<b>50,662,849</b>	<b>56,309,703</b>
33122	Steel ingot and semifinished shapes. ....	4,495,191	4,019,085	4,009,430	3,415,196	3,631,923	3,809,753
33123	Hot rolled sheet and strip, including tin mill products <sup>1</sup> .....	21,979,084	21,591,225	18,309,957	16,975,734	16,936,408	18,774,861
33124	Hot rolled bars and shapes, plates, structural shapes, and piling. ....	12,703,507	11,650,166	10,167,332	10,240,582	9,407,166	11,152,996
33155	Steel wire .....	2,319,680	2,192,747	1,994,117	1,890,995	1,855,641	1,955,873
3315-	Other wire products .....	2,033,216	2,004,631	1,958,214	1,774,025	1,666,042	1,523,532
33170	Steel pipe and tube .....	8,566,786	7,780,954	6,864,754	6,578,797	6,480,766	7,067,239
33167	Cold rolled steel sheet and strip .....	11,490,347	11,219,960	10,193,244	9,503,015	8,763,633	9,820,759
33168	Cold finished steel bars and bar shapes ....	2,278,397	2,047,335	1,880,106	1,700,129	1,586,208	1,868,804
3312C	Other steel mill products (except wire products) .....	444,398	439,963	408,523	376,853	335,062	335,886

<sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Galvanized, metallic coated, and electrical sheet and strip are included in product code 33123, "Hot rolled sheet and strip."

Table 6. Production of Raw Steel: 1993 to 1995

[Thousands of metric tons]

Product description	1995	1994	1993
<b>Total</b> .....	<b>91,589</b>	<b>90,459</b>	<b>87,960</b>
By grade of steel:			
Carbon .....	79,369	79,415	76,926
Alloy .....	10,114	9,197	9,291
Stainless .....	2,106	1,847	1,743
By type of furnace:			
Electric .....	35,127	34,381	32,400
Basic oxygen, open hearth, and other types of furnaces .....	56,462	56,078	55,560

Table 7. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1995

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Number of companies	Receipts <sup>2 3</sup> (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments <sup>4</sup> (quantity)
					Quantity	Value f.o.b. plant	
	Steel .....	(NA)	25,557,604	16,572,651	107,007,513	66,310,606	98,022,560
	Carbon steel .....	284	22,819,600	15,625,505	94,959,518	52,365,453	87,765,423
33122 11	Ingots .....	9	(D)	(D)	201,801	74,940	372,792
	Semifinished products:						
33122 13	Blooms, billets, sheet bars, tin mill bars, tube rounds, and skelp .....	34	3,963,807	6,573,675	2,092,637	718,230	4,702,505
33122 19	Wire rods .....	21	2,908,278	1,727,413	4,802,393	1,921,007	3,621,528
33122 20	Slabs .....	11	761,187	775,171	812,225	227,734	826,210
	Finished products:						
33124 13	Plates, cut lengths .....	16	(D)	(D)	3,821,406	1,873,173	3,826,727
33124 14	Plates, in coils .....	6	(D)	(D)	361,144	162,348	364,056
	Sheet:						
33123 11	Hot rolled, including hot rolled bands .....	24	10,654,113	3,569,008	19,948,333	8,155,539	12,863,228
33167 11	Cold rolled .....	23	1,230,862	546,389	12,841,001	6,843,386	12,156,527
	Sheet and strip:						
	Galvanized:						
33123 13	Hot dipped .....	16	155,773	21,236	8,136,327	5,450,612	8,001,790
33123 15	Electrolytic .....	14	(D)	(D)	2,343,625	1,859,263	2,332,427
33123 17	Electrical .....	3	(D)	(D)	(D)	(D)	(D)
33123 18	All other metallic coated, including long ternes ..	11	14,026	10,206	1,040,847	785,738	1,037,026
	Strip:						
33123 19	Hot rolled .....	18	(D)	(D)	1,296,254	1,190,247	1,362,166
33167 15	Cold rolled .....	25	288,678	307,138	1,564,899	1,289,636	1,583,359
	Tin mill products:						
33123 24	Blackplate .....	9	(D)	(D)	445,701	243,500	438,506
33123 26	Electrolytic and hot dipped tinplate .....	8	(D)	(D)	2,552,170	1,755,614	2,553,480
33123 28	Tin free steel .....	6	(D)	(D)	449,961	298,436	449,961
33123 29	All other tin mill products, including short ternes and foil .....	2	-	-	(D)	(D)	(D)
	Structural shapes (heavy):						
33124 15	Wide flange .....	5	(D)	(D)	2,904,656	1,182,913	2,904,888
33124 17	Standard heavy shapes .....	9	(D)	(D)	2,307,614	1,050,835	2,307,490
33124 18	Sheet piling and bearing piles .....	5	(D)	(D)	(D)	(D)	(D)
	Bars:						
33124 22	Hot-rolled bars (except concrete reinforcing) ....	36	(D)	(D)	6,136,374	2,972,938	5,293,488
33124 24	Light structurals (under 3 inches) .....	10	28	31	1,474,405	624,926	1,474,408
33124 26	Concrete reinforcing bars .....	19	(D)	(D)	4,240,207	1,453,667	4,265,768
33168 11	Cold-finished bars .....	36	(D)	(D)	1,368,034	1,187,874	1,314,660
3312C —	Rails, wheels, and track accessories <sup>5</sup> .....	13	142,957	132,445	679,268	444,398	668,756
	Pipe and tubes: <sup>6</sup>						
	Line pipe:						
33170 14	16 inches outside diameter and under .....	24	(D)	(D)	1,093,662	660,997	1,094,310
33170 15	Over 16 inches outside diameter .....	9	-	-	475,252	335,550	475,252
33170 19	Oil country goods .....	14	(D)	(D)	767,167	516,739	765,964
	Pressure tubing:						
33170 21	Seamless .....	8	(D)	(D)	50,883	71,425	44,236
33170 22	Welded .....	16	(D)	(D)	297,049	375,915	297,781
	Mechanical tubing:						
33170 23	Seamless .....	13	(D)	(D)	102,810	126,141	100,110
33170 24	Welded .....	55	64,503	12,355	2,061,344	2,103,611	2,009,195
33170 27	Structurals .....	26	(D)	(D)	1,162,930	750,383	1,159,424
33170 29	Miscellaneous, including standard pipe .....	31	(D)	(D)	1,554,260	1,179,432	1,500,143
	Wire:						
	Plain wire:						
33155 01	Flat wire .....	9	(D)	(D)	31,020	34,059	29,085
	Round wire:						
	Thermally treated:						
33155 02	Under 1.5 mm in diameter .....	17	51,370	64,745	55,519	65,083	68,894
33155 03	1.5 mm or above in diameter .....	22	71,462	63,537	220,545	186,238	212,620
	Other round wire:						
33155 04	Under 1.5 mm in diameter .....	14	(D)	(D)	221,520	266,307	242,900
33155 05	1.5 mm or above in diameter .....	35	143,509	201,604	1,158,139	648,714	1,216,233
33155 06	Other shape wire .....	10	(D)	(D)	276,270	142,071	276,105

See footnotes at end of table.

Table 7. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1995—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Number of companies	Receipts <sup>2 3</sup> (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments <sup>4</sup> (quantity)
					Quantity	Value f.o.b. plant	
	Steel—Con.						
	Carbon steel—Con.						
	Finished products—Con.						
	Plated or coated with zinc:						
	Round wire:						
33155 13	Under 1.5 mm in diameter . . . . .	12	20,228	19,386	46,246	38,133	45,404
33155 14	1.5 mm or above in diameter . . . . .	22	71,884	13,902	300,368	207,160	242,386
33155 15	Other shape wire, including flat . . . . .	8	(D)	(D)	82,284	60,800	65,411
	Other coated wire:						
33155 17	Flat wire . . . . .	2	(D)	(D)	(D)	(D)	(D)
33155 18	Round wire . . . . .	17	(D)	(D)	115,291	128,816	134,874
33155 21	Other shape wire . . . . .	6	(D)	(D)	51,003	59,082	51,000
	Wire products: <sup>6</sup>						
33152 21	Nails and staples . . . . .	22	(D)	(D)	519,532	675,890	518,955
33159 51	Barbed and twisted wire . . . . .	8	(D)	(D)	144,802	150,595	144,797
33156 21	Wire fence, woven and welded . . . . .	12	(D)	(D)	415,634	287,976	415,103
33159 55	Bale ties . . . . .	7	-	-	34,961	28,276	34,961
33151 13	Wire rope and cable . . . . .	14	(D)	(D)	173,467	352,002	173,617
	Wire strand:						
33151 33	For prestressed concrete . . . . .	7	-	-	261,563	171,619	261,563
33151 35	Other . . . . .	13	-	-	234,009	276,206	234,009
33157 71	Woven wire netting . . . . .	10	(D)	(D)	97,721	90,652	96,464
	Alloy steel . . . . .	84	1,539,934	667,253	9,384,891	6,907,228	8,512,210
33122 31	Ingots . . . . .	11	19,771	114,358	301,754	186,719	396,342
	Semifinished products:						
33122 37	Blooms, billets, sheet bars, rounds, and skelp . . . . .	17	<sup>7</sup> 1,062,225	<sup>7</sup> 329,169	<sup>7</sup> 1,402,489	<sup>7</sup> 762,031	<sup>7</sup> 669,433
33122 39	Wire rods . . . . .	3	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
33122 41	Slabs . . . . .	4	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
	Finished products:						
33124 33	Plates, cut lengths . . . . .	7	<sup>8</sup> 3,810	<sup>8</sup> 3,733	<sup>8</sup> 693,843	<sup>8</sup> 486,416	<sup>8</sup> 693,766
33124 36	Plates, in coils . . . . .	2	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
33124 38	Structural shapes (3 inches and under) . . . . .	4	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
	Sheet:						
33123 31	Hot rolled . . . . .	9	30,830	8,916	1,612,516	710,513	1,590,602
33167 31	Cold rolled . . . . .	10	(D)	(D)	322,950	239,728	321,451
	Sheet and strip:						
	Galvanized:						
33123 35	Hot dipped . . . . .	3	-	-	123,382	92,036	123,382
33123 37	All other metallic coated, including electrolytic . . . . .	5	(D)	(D)	140,254	184,512	140,232
	Strip:						
33123 39	Hot rolled . . . . .	4	(D)	(D)	(D)	(D)	(D)
33167 35	Cold finished . . . . .	12	(D)	(D)	288,492	401,834	280,719
	Bars:						
33124 41	Hot rolled, including structural shapes under 3 inches . . . . .	20	(D)	(D)	2,334,492	1,481,404	2,269,436
33168 31	Cold finished . . . . .	23	(D)	(D)	455,088	442,031	477,878
	Tool steel:						
33124 48	High speed . . . . .	6	(D)	(D)	(D)	(D)	(D)
33124 49	Other than high speed . . . . .	6	(D)	(D)	43,703	159,368	43,703
	Pipe and tubes:						
33170 32	Oil country goods and line pipe . . . . .	8	(D)	(D)	988,292	729,498	940,475
33170 43	Pressure tubing . . . . .	7	(D)	(D)	10,369	33,943	10,156
33170 45	Mechanical tubing . . . . .	11	(D)	(D)	501,219	681,935	399,408
33170 48	Miscellaneous, including standard and structural . . . . .	5	(D)	(D)	(D)	(D)	(D)
33155 37	Wire (plain and coated) . . . . .	16	(D)	(D)	59,249	109,959	55,526

See footnotes at end of table.

Table 7. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1995—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Number of companies	Receipts <sup>2 3</sup> (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments <sup>4</sup> (quantity)
					Quantity	Value f.o.b. plant	
	Steel—Con.						
33122 51	Stainless steel.....	85	1,198,071	279,893	2,663,104	7,037,925	1,744,927
	Ingots .....	10	(D)	(D)	27,581	39,101	23,792
	Semifinished products:						
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp .....	14	341,924	74,254	306,181	460,537	(D)
33122 59	Wire rods .....	4	(D)	(D)	33,165	104,892	21,417
	Finished products:						
33124 53	Plates and structurals .....	7	(D)	(D)	200,835	669,880	197,808
	Sheet and strip:						
33123 57	Hot rolled .....	5	656,892	82,645	(D)	(D)	(D)
33167 57	Cold rolled .....	16	101,077	65,955	1,123,614	2,715,763	1,088,492
	Bars:						
33124 61	Hot rolled .....	8	(D)	(D)	59,671	245,767	41,924
33168 51	Cold finished .....	15	(D)	(D)	134,777	648,492	132,542
	Pipe and tubes:						
	Pressure tubing:						
33170 61	Seamless .....	7	(D)	(D)	8,579	86,032	8,581
33170 62	Welded .....	13	-	-	66,191	361,501	66,191
	Mechanical tubing:						
33170 63	Seamless .....	4	(D)	(D)	(D)	(D)	(D)
33170 64	Welded .....	17	(D)	(D)	71,497	381,785	71,342
33170 65	Other pipe and tube .....	6	(D)	(D)	3,599	22,553	3,621
	Wire:						
	Round wire:						
33155 52	Under 0.75 mm in diameter .....	13	(D)	(D)	11,669	78,398	10,619
33155 53	0.75 mm to under 1.5 mm in diameter .....	10	121	61	4,765	29,822	4,705
33155 54	1.5 mm and above in diameter .....	14	1,585	1,273	45,225	209,593	44,913
33155 57	Other shape wire, including flat wire .....	9	(D)	(D)	(D)	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. In some cases, figures that are otherwise publishable are withheld to avoid disclosing by subtraction from higher-level totals or from related figures. NA Not available.

<sup>1</sup>Product codes in 33155 series also include products in 33125 series; same applies for 33167 and 33127; 33168 and 33128; and 33170 and 33126.

<sup>2</sup>Excludes receipts and shipments of steel processed on a conversion basis for nonsteel producing companies. Receipts data represent receipts at producing mills only and include receipts from domestic sources.

<sup>3</sup>Import receipts of steel mill products for 1995 are as follows: total, 4,772,313 metric tons; carbon, 4,455,861 metric tons; alloy, 167,788 metric tons; stainless 148,664 metric tons.

<sup>4</sup>Net shipments are derived by subtracting domestic receipts from total quantity shipments, plus steel consumed in producing plants.

<sup>5</sup>Product code 3312C combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

<sup>6</sup>Represents wire products produced within steel works and wire drawing establishments. See the 1992 Census of Manufactures, MC92-I-33A, tables 6A-1, 6A-2, and 6A-3 for detailed information.

<sup>7</sup>Product codes 33122 39 and 33122 41 are combined with 33122 37 to avoid disclosing data for individual companies.

<sup>8</sup>Product codes 33124 36 and 33124 38 are combined with 33124 33 to avoid disclosing data for individual companies.

Note: Quantity data converted to metric tons; therefore, detail may not add to total because of rounding.



Table 8. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1994

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Number of companies	Receipts <sup>2 3</sup> (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments <sup>4</sup> (quantity)
					Quantity	Value f.o.b. plant	
	Steel .....	(NA)	'26,570,112	'16,403,908	109,310,071	62,946,066	99,143,867
33122 11	Carbon steel .....	289	'24,003,922	'15,572,735	98,544,432	51,386,862	90,113,245
	Ingots .....	8	(D)	(D)	273,318	82,725	381,365
33122 13	Semifinished products:						
	Blooms, billets, sheet bars, tin mill bars, tube rounds, and skelp .....	38	'3,874,287	'5,920,333	2,034,008	699,693	'4,080,054
33122 19	Wire rods .....	20	'2,940,235	'1,670,473	'4,777,019	1,790,661	'3,507,256
33122 20	Slabs .....	9	'1,226,078	'1,499,674	752,274	199,365	'1,025,871
	Finished products:						
33124 13	Plates, cut lengths .....	15	(D)	(D)	'4,057,805	'1,916,584	'4,063,290
33124 14	Plates, in coils .....	6	(D)	(D)	'275,707	'111,863	'284,642
	Sheet:						
33123 11	Hot rolled, including hot rolled bands .....	24	11,054,423	3,438,260	'22,733,996	'8,648,517	'15,117,834
33167 11	Cold rolled .....	23	'1,384,750	551,034	13,866,046	6,986,628	13,032,330
	Sheet and strip:						
	Galvanized:						
33123 13	Hot dipped .....	17	152,761	18,573	8,190,309	5,259,858	8,056,122
33123 15	Electrolytic .....	14	18,328	1,228	'2,442,927	'1,770,319	'2,425,826
33123 17	Electrical .....	3	(D)	(D)	(D)	(D)	(D)
33123 18	All other metallic coated, including long ternes ..	10	17,060	11,123	1,058,779	793,785	1,052,841
	Strip:						
33123 19	Hot rolled .....	18	(D)	(D)	1,094,007	1,001,286	'1,161,774
33167 15	Cold rolled .....	26	'322,115	'321,793	1,661,803	1,299,952	1,661,481
	Tin mill products:						
33123 24	Blackplate .....	9	(D)	(D)	'493,936	'262,847	'486,041
33123 26	Electrolytic and hot dipped tin plate .....	8	(D)	(D)	2,662,688	1,794,877	2,661,457
33123 28	Tin free steel .....	5	(D)	(D)	443,022	279,124	443,022
33123 29	All other tin mill products, including short ternes and foil .....	3	-	-	(D)	(D)	(D)
	Structural shapes (heavy):						
33124 15	Wide flange .....	5	(D)	(D)	2,688,716	1,063,662	2,690,257
33124 17	Standard heavy shapes .....	8	(D)	(D)	1,990,961	852,046	1,990,961
33124 18	Sheet piling and bearing piles .....	5	-	-	(D)	(D)	(D)
	Bars:						
33124 22	Hot-rolled bars (except concrete reinforcing) .....	37	'976,978	121,077	6,331,955	2,813,029	5,476,053
33124 24	Light structurals (under 3 inches) .....	9	(D)	(D)	1,202,282	490,468	1,200,366
33124 26	Concrete reinforcing bars .....	21	(D)	(D)	4,554,939	1,509,712	4,546,898
33168 11	Cold finished bars .....	36	(D)	(D)	1,378,011	1,156,177	'1,318,609
3312C —	Rails, wheels, and track accessories <sup>5</sup> .....	12	118,447	122,972	'702,024	'439,963	'706,549
	Pipe and tubes:						
	Line pipe:						
33170 14	16 inches outside diameter and under .....	23	(D)	(D)	902,463	529,310	903,466
33170 15	Over 16 inches outside diameter .....	9	-	-	502,458	334,927	502,458
33170 19	Oil country goods .....	14	(D)	(D)	'824,244	'520,556	'822,462
	Pressure tubing:						
33170 21	Seamless .....	8	(D)	(D)	'86,385	'87,350	77,332
33170 22	Welded .....	15	(D)	(D)	'272,572	'314,948	'273,304
	Mechanical tubing:						
33170 23	Seamless .....	13	(D)	(D)	94,347	113,646	91,925
33170 24	Welded .....	58	'79,889	10,292	2,135,765	2,049,169	2,066,168
33170 27	Structurals .....	26	(D)	(D)	1,238,405	785,264	1,235,717
33170 29	Miscellaneous, including standard pipe .....	28	(D)	(D)	1,436,484	1,077,045	1,382,027
	Wire:						
	Plain wire:						
33155 01	Flat wire .....	9	(D)	(D)	36,191	37,111	33,434
	Round wire:						
	Thermally treated:						
33155 02	Under 1.5 mm in diameter .....	17	46,879	60,067	57,371	65,847	70,559
33155 03	1.5 mm or above in diameter .....	23	'64,778	'53,598	'231,780	'192,453	'220,600
	Other round wire:						
33155 04	Under 1.5 mm in diameter .....	14	(D)	(D)	'199,295	236,591	'220,695
33155 05	1.5 mm or above in diameter .....	36	'137,986	'200,339	1,163,859	640,185	1,226,212
33155 06	Other shape wire .....	9	(D)	(D)	266,866	132,378	266,492

See footnotes at end of table.

Table 8. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1994—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Number of companies	Receipts <sup>2 3</sup> (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments <sup>4</sup> (quantity)
					Quantity	Value f.o.b. plant	
	Steel—Con.						
	Carbon steel—Con.						
	Finished products—Con.						
	Plated or coated with zinc:						
	Round wire:						
33155 13	Under 1.5 mm in diameter . . . . .	14	(D)	(D)	'54,385	44,995	'51,880
33155 14	1.5 mm or above in diameter . . . . .	20	'68,219	14,277	302,504	207,788	'248,563
33155 15	Other shape wire, including flat . . . . .	9	(D)	(D)	85,791	62,845	64,797
	Other coated wire:						
33155 17	Flat wire . . . . .	2	(D)	(D)	(D)	(D)	(D)
33155 18	Round wire . . . . .	18	(D)	(D)	'113,313	'126,003	'108,903
33155 21	Other shape wire . . . . .	6	-	-	54,177	54,932	54,177
	Wire products <sup>6</sup> :						
33152 21	Nails and staples . . . . .	25	(D)	(D)	'534,532	'685,584	'536,482
33159 51	Barbed and twisted wire . . . . .	8	(D)	(D)	'150,332	'160,377	'150,318
33156 21	Wire fence, woven and welded . . . . .	11	(D)	(D)	'351,707	'243,451	'351,213
33159 55	Bale ties . . . . .	7	-	-	35,670	29,076	35,670
33151 13	Wire rope and cable . . . . .	14	(D)	(D)	171,779	346,623	171,779
	Wire strand:						
33151 33	For prestressed concrete . . . . .	8	(D)	(D)	210,818	137,272	210,818
33151 35	Other . . . . .	14	(D)	(D)	'265,550	'311,155	'265,550
33157 71	Woven wire netting . . . . .	11	(D)	(D)	98,279	91,093	97,300
	Alloy steel . . . . .	84	1,478,397	'632,907	8,483,023	6,120,659	7,637,533
33122 31	Ingots . . . . .	10	17,785	111,859	282,758	153,723	376,831
	Semifinished products:						
33122 37	Blooms, billets, sheet bars, rounds, and skelp . . . . .	20	'998,392	'304,175	'1,285,860	'661,010	'591,643
33122 39	Wire rods . . . . .	2	(7)	(7)	(7)	(7)	(7)
33122 41	Slabs . . . . .	3	(7)	(7)	(7)	(7)	(7)
	Finished products:						
33124 33	Plates, cut lengths . . . . .	10	'16,916	'14,582	'871,876	'523,089	'779,542
33124 36	Plates, in coils . . . . .	2	(8)	(8)	(8)	(8)	(8)
33124 38	Structural shapes (3 inches and under) . . . . .	4	(8)	(8)	(8)	(8)	(8)
	Sheet:						
33123 31	Hot rolled . . . . .	9	27,454	8,172	1,019,884	478,348	1,000,603
33167 31	Cold rolled . . . . .	11	(D)	(D)	250,163	174,312	248,904
	Sheet and strip:						
	Galvanized:						
33123 35	Hot dipped . . . . .	4	-	-	173,316	124,912	173,316
33123 37	All other metallic coated, including electrolytic . . . . .	6	-	-	185,845	205,927	185,845
	Strip:						
33123 39	Hot rolled . . . . .	5	(D)	(D)	(D)	(D)	(D)
33167 35	Cold finished . . . . .	13	(D)	(D)	260,311	380,184	254,372
	Bars:						
33124 41	Hot rolled, including structural shapes under 3 inches . . . . .	19	(D)	(D)	2,298,828	1,366,941	2,234,733
33168 31	Cold finished . . . . .	21	(D)	(D)	'450,254	394,145	473,131
	Tool steel:						
33124 48	High speed . . . . .	6	(D)	(D)	(D)	(D)	(D)
33124 49	Other than high speed . . . . .	6	(D)	(D)	44,847	155,601	44,316
	Pipe and tubes:						
33170 32	Oil country goods and line pipe . . . . .	8	(D)	(D)	729,531	517,879	683,563
33170 43	Pressure tubing . . . . .	7	(D)	(D)	10,586	32,168	9,820
33170 45	Mechanical tubing . . . . .	12	(D)	(D)	500,378	662,977	383,953
33170 48	Miscellaneous, including standard and structural . . . . .	6	(D)	(D)	(D)	(D)	(D)
33155 37	Wire (plain and coated) . . . . .	16	(D)	(D)	'55,743	98,319	'51,544

See footnotes at end of table.

Table 8. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1994—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Number of companies	Receipts <sup>2 3</sup> (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments <sup>4</sup> (quantity)
					Quantity	Value f.o.b. plant	
	Steel—Con.						
33122 51	Stainless steel .....	85	1,087,793	'198,265	2,282,616	5,438,545	1,393,088
	Ingots .....	7	(D)	(D)	18,692	19,763	11,515
	Semifinished products:						
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp .....	13	287,030	39,066	246,319	334,536	(D)
33122 59	Wire rods .....	4	(D)	(D)	28,687	77,609	15,682
	Finished products:						
33124 53	Plates and structurals .....	6	(D)	(D)	150,505	395,392	148,523
	Sheet and strip:						
33123 57	Hot rolled .....	4	'615,853	'62,790	(D)	(D)	(D)
33167 57	Cold rolled .....	16	'99,617	'57,303	986,621	2,378,884	944,307
	Bars:						
33124 61	Hot rolled .....	9	(D)	(D)	60,611	205,541	40,385
33168 51	Cold finished .....	15	(D)	(D)	'121,647	497,013	'120,511
	Pipe and tubes:						
	Pressure tubing:						
33170 61	Seamless .....	7	(D)	(D)	6,847	64,540	'6,840
33170 62	Welded .....	13	-	-	53,469	239,925	'53,469
	Mechanical tubing:						
33170 63	Seamless .....	4	(D)	(D)	(D)	(D)	(D)
33170 64	Welded .....	17	(D)	(D)	64,598	295,460	64,445
33170 65	Other pipe and tube .....	7	(D)	(D)	'5,373	'32,354	'5,421
	Wire:						
	Round wire:						
33155 52	Under 0.75 mm in diameter .....	13	(D)	(D)	'9,148	'70,477	'8,268
33155 53	0.75 mm to under 1.5 mm in diameter .....	9	183	94	5,383	31,011	5,294
33155 54	1.5 mm and above in diameter .....	13	1,608	'978	36,643	147,901	36,013
33155 57	Other shape wire, including flat wire .....	10	(D)	(D)	(D)	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. In some cases, figures that are otherwise publishable are withheld to avoid disclosing by subtraction from higher-level totals or from related figures. NA Not available. ' Revised by 5 percent or more from previously published data.

<sup>1</sup>Product codes in 33155 series also include products in 33125 series; same applies for 33167 and 33127; 33168 and 33128; and 33170 and 33126.

<sup>2</sup>Excludes receipts and shipments of steel processed on a conversion basis for nonsteel producing companies. Receipts data represent receipts at producing mills only and include receipts from domestic sources.

<sup>3</sup>Import receipts of steel mill products for 1994 are as follows: total, 6,462,536 metric tons; carbon, 6,121,806 metric tons; alloy, 204,934 metric tons; stainless 133,796 metric tons.

<sup>4</sup>Net shipments are derived from subtracting domestic receipts from total quantity shipments, plus steel consumed in producing plants.

<sup>5</sup>Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

<sup>6</sup>Represents wire products produced within steel works and wire drawing establishments. See the 1992 Census of Manufactures, tables 6A-1 and 6A-2 for detailed information.

<sup>7</sup>Product codes 33122 39 and 33122 41 are combined with 33122 37 to avoid disclosing data for individual companies.

<sup>8</sup>Product codes 33124 36 and 33124 38 are combined with 33124 33 to avoid disclosing data for individual companies.

Note: Quantity data converted to metric tons; therefore, detail may not add to total because of rounding.

Table 9. Minimill Shipments of Selected Steel Mill Products: 1995 and 1994

[Quantity in metric tons]

Product code <sup>1</sup>	Product description	1995				1994			
		Number of minimill companies	Industry	Minimills	Percent of minimills	Number of minimill companies	Industry	Minimills	Percent of minimills
33122 11	Carbon steel <sup>2</sup> .....	24	41,902,042	15,241,854	36.4	25	41,124,590	15,228,821	37.0
	Ingots .....	2	201,801	(D)	(D)	2	273,318	(D)	(D)
33122 13, 20	Semifinished products: Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp .....	16	2,904,862	1,092,460	37.6	17	2,786,282	1,085,794	39.0
33122 19	Wire rods .....	4	4,802,393	1,860,636	38.7	4	4,777,019	1,869,208	39.1
33124 13, 14	Finished products: Plates, all lengths .....	4	4,182,550	799,278	19.1	4	4,333,512	1,081,254	25.0
33123 19	Hot-rolled strip .....	3	1,296,254	(D)	(D)	3	1,094,007	(D)	(D)
33124 15	Structural shapes (heavy) <sup>3</sup> : Wide flange .....	3	2,904,656	1,040,745	35.8	3	2,688,716	935,722	34.8
33124 17	Standard heavy shapes .....	6	2,307,614	1,947,706	84.4	6	1,990,961	1,775,737	89.2
33124 18	Sheet piling and bearing piles .....	1	(D)	(D)	(D)	1	(D)	(D)	(D)
33124 22	Bars: Hot-rolled bars (except concrete reinforcing) .....	15	6,136,374	3,472,566	56.6	15	6,331,955	3,633,820	57.4
33124 24	Light structurals (under 3 inches) .....	7	1,474,405	1,092,009	74.1	6	1,202,282	841,529	70.0
33124 26	Concrete reinforcing bars .....	12	4,240,207	2,814,003	66.4	12	4,554,939	2,953,705	64.8
33168 11	Cold-finished bars .....	1	1,368,034	(D)	(D)	1	1,378,011	(D)	(D)
3312C —	Rails, wheels, and track accessories <sup>3</sup> .....	2	679,268	(D)	(D)	2	702,024	(D)	(D)
33170 14	Pipe and tubes: Line pipe, 16 inches outside diameter and under .....	2	1,093,662	(D)	(D)	2	902,463	(D)	(D)
33170 19	Oil country goods .....	2	767,167	(D)	(D)	2	824,244	(D)	(D)
33170 23	Mechanical tubing, seamless ...	1	102,810	(D)	(D)	1	94,347	(D)	(D)
33170 27	Structurals .....	2	1,162,930	(D)	(D)	2	1,238,405	(D)	(D)
33170 29	Miscellaneous, including standard pipe .....	2	1,554,260	(D)	(D)	2	1,436,484	(D)	(D)
33155 00	Wire <sup>4</sup> .....	2	(D)	(D)	(D)	3	(D)	(D)	(D)
3315- 00	Wire products <sup>5</sup> .....	1	1,881,689	(D)	(D)	1	1,818,667	(D)	(D)

D Withheld to avoid disclosing data for individual companies. <sup>†</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Product codes in 33155 series also include products in 33125 series, same applies for 33167 and 33127; 33168 and 33128; and 33170 and 33126.<sup>2</sup>Total data are for selected product codes only.<sup>3</sup>Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.<sup>4</sup>Product code 33155 00 combines product codes 33155 01 through 33155 21.<sup>5</sup>Product code 3315- 00 combines product codes 33152 21, 33159 51, 33156 21, 33159 55, 33151 13, 33151 33, 33151 35, and 33157 71.

Note: Quantity data converted to metric tons; therefore, detail may not add to total because of rounding.



Table 10. Net Shipments, Exports, Imports, and Apparent Consumption of Steel Mill Products: 1995—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' net shipments <sup>2</sup>		Exports of domestic merchandise <sup>1 4</sup>		Imports for consumption <sup>1 5</sup>		Apparent consumption <sup>2 7</sup>	
		Net (quantity) <sup>3</sup>	Total value f.o.b. plant	Quantity	Value at port	Quantity	Value c.i.f. <sup>6</sup>	Quantity	Value
	Total—Con.								
	Alloy steel—Con.								
33122 39	Wire rods . . . . .	<sup>20</sup> 2,778,950	<sup>20</sup> 1,973,284	<sup>20</sup> 159,952	<sup>20</sup> 164,049	<sup>20</sup> 648,072	<sup>20</sup> 441,933	<sup>20</sup> 3,267,070	<sup>20</sup> 2,251,168
33124 38	Structural shapes (3 inches and under) . . . .	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )
	Bars:								
33124 41	Hot rolled bars, including structural shapes under 3 inches . . . . .	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )
33168 31	Cold finished . . . . .	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )	( <sup>20</sup> )
33124 48	Tool steel, high-speed . . . . .	(D)	(D)	1,203	11,263	1,970	13,583	(D)	(D)
33124 49	Tool steel (except high speed) . . . . .	43,703	159,368	3,916	11,348	37,424	64,937	77,211	212,957
33170 —	Pipe and tubes . . . . .	<sup>21</sup> 1,591,073	<sup>21</sup> 2,446,593	<sup>21</sup> 261,110	<sup>21</sup> 431,262	<sup>21</sup> 242,911	<sup>21</sup> 409,981	<sup>21</sup> 1,572,874	<sup>21</sup> 2,425,312
33155 37	Wire, plain and coated . . . . .	55,526	109,959	37,566	43,718	50,613	78,058	68,573	144,299
	Stainless steel . . . . .	1,744,927	7,037,925	97,580	288,936	206,091	560,048	1,853,438	7,309,037
33122 51	Ingots . . . . .	23,792	39,101	7,202	26,667	6,851	12,031	23,441	24,465
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp . . . . .	(D)	460,537	7,418	32,307	115,084	223,304	(D)	651,534
33122 59	Wire rods . . . . .	<sup>22</sup> 63,341	<sup>22</sup> 350,659	<sup>22</sup> 6,472	<sup>22</sup> 27,294	<sup>22</sup> 72,110	<sup>22</sup> 188,729	<sup>22</sup> 128,979	<sup>22</sup> 512,094
33124 61	Bars, hot rolled . . . . .	( <sup>22</sup> )	( <sup>22</sup> )	( <sup>22</sup> )	( <sup>22</sup> )	( <sup>22</sup> )	( <sup>22</sup> )	( <sup>22</sup> )	( <sup>22</sup> )
33124 53	Plates and structurals . . . . .	197,808	669,880	38,678	121,543	122,266	271,475	281,396	819,812
33123 57	Sheet and strip, hot rolled . . . . .	(D)	(D)	16,253	46,767	34,927	67,960	(D)	(D)
33167 57	Sheet and strip, cold rolled . . . . .	1,088,492	2,715,763	65,871	172,474	52,096	164,618	1,074,718	2,707,907
33168 51	Bars, cold finished . . . . .	132,542	648,492	8,985	42,401	46,958	138,741	170,515	744,832
33170 —	Pipe and tubes . . . . .	( <sup>21</sup> )	( <sup>21</sup> )	( <sup>21</sup> )	( <sup>21</sup> )	( <sup>21</sup> )	( <sup>21</sup> )	( <sup>21</sup> )	( <sup>21</sup> )
33155 —	Wire <sup>23</sup> . . . . .	(D)	(D)	3,565	21,433	25,209	119,304	(D)	(D)

D Withheld to avoid disclosing data for individual companies. NA Not available.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Excludes shipments of steel processed on a conversion basis for nonsteel producing companies. See text for data on such operations. Also exclude quantities of steel consumed in steel producing plants in manufacture of fabricated products and as maintenance, repair, and operating supplies (MRO).

<sup>3</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>4</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>5</sup>Apparent consumption is derived by subtracting exports from total manufacturers' shipments plus imports.

<sup>6</sup>Includes quantities of steel consumed in steel producing plants in manufacture of fabricated products and maintenance, repair, and operating supplies (MRO), while excluding receipts. Refer to table 3a for net shipments detail.

<sup>7</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

<sup>8</sup>Data for product codes 33122 13 and 33122 20 are combined.

<sup>9</sup>Data for product codes 33124 13 and 33124 14 are combined.

<sup>10</sup>Data for product codes 33123 11 and 33123 19 are combined.

<sup>11</sup>Data for product codes 33123 17 and 33123 18 are combined.

<sup>12</sup>Data for product codes 33124 15 and 33124 17 are combined.

<sup>13</sup>Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

<sup>14</sup>Data for product codes 33170 14 and 33170 15 are combined.

<sup>15</sup>Data for product codes 33170 21, 33170 22, 33170 23, 33170 24, and 33170 29 are combined.

<sup>16</sup>Product code 33155 — combines data for "Carbon and steel wire." See table 7 for product code detail.

<sup>17</sup>Data for product codes 33156 21 and 33157 71 are combined.

<sup>18</sup>Data for product codes 33122 37 and 33122 41 are combined.

<sup>19</sup>Data for product codes 33124 33, 33124 36, 33123 31, 33167 31, 33123 35, 33123 37, 33123 39, and 33167 35 are combined.

<sup>20</sup>Data for product codes 33122 39, 33124 38, 33124 41, and 33168 31 are combined.

<sup>21</sup>Product code 33170 — combines data for "Alloy steel pipe and tube" with data for "Stainless steel pipe and tube."

<sup>22</sup>Data for product codes 33122 59 and 33124 61 are combined.

<sup>23</sup>Product code 33155 — combines data for "Stainless steel wire." See table 7 for product code detail.

Note: Quantity data converted to metric tons; therefore, detail may not add to total because of rounding.

**HISTORICAL NOTE**

Data on steel mill products have been collected by the Bureau of the Census since 1921. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal

Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Renee Coley, 301-457-4742.

## ALUMINUM INGOT AND MILL PRODUCTS (M33D)

### INTRODUCTION

These data cover companies engaged in the production, in the continental United States, of aluminum ingot and/or mill products. Master alloys are included. Receipts of imported aluminum products are also included. Companies engaged in tolling operations are also surveyed.

The statistics were collected by mail on Bureau of the Census monthly Form M33D, Aluminum Producers and Importers Report (Receipt, Shipments, and Stocks). The panel for this survey consists of all known producers of aluminum ingot and mill products shipping 10,000 pounds or more of aluminum ingot and mill products per month, approximately 250 companies. Based on an earlier study, small producers shipping less than 10,000 pounds per month would not significantly affect the survey results.

### SUMMARY OF FINDINGS

Net shipments of aluminum ingot and mill products totaled 18,422 million pounds in 1995, a 9-percent decrease from the 20,295 million pounds in 1994. The aluminum ingot net shipments for 1995 totaled 4,014 million pounds, a 28-percent decrease from the corresponding 1994 net shipments of 5,549 million pounds. Net shipments of aluminum mill products in 1995 amounted to 14,407 million pounds, a 2-percent decrease from the 14,746 million pounds reported in 1994.

### EXPLANATION OF TERMS

**Gross shipments.** Represents the quantity of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

**Receipts.** Represents metal physically received, both from imports and from domestic sources. Metal received under toll arrangements, even though title or ownership of the metal may remain with the shipper, is also included. Scrap receipts are not included.

**Inventories.** Includes all forms of scrap, ingot, metal in process, and finished products listed in this report. All metal physically in plant inventories at the end of the month, whether or not title or ownership of the metal may have been transferred, including toll arrangements.

**Ingot inventory.** All metal that is in the form of extrusion billets or other ingot and molten metal, primary and secondary.

**Scrap inventory.** Purchased and toll-treated aluminum-base scrap and sweated pig in all forms, as well as home or runaround scrap. Also includes remelt scrap ingot (RSI).

**All other inventory.** Includes all mill products that are in a finished state or are in the process of being finished.

**Integrated producers.** Companies in the United States that produce primary aluminum ingot (from alumina) and may also produce mill products.

**Nonintegrated producers.** Companies that produce mill products in the United States and that are not affiliated with a domestic primary ingot producer.

**Smelters.** Companies whose aluminum facilities are exclusively devoted to producing specification ingot from scrap.

**Ingot (billet), extrusion.** A solid or hollow cast form, usually cylindrical, suitable for extruding.

**Other ingot and molten metal, primary and secondary.** Molten aluminum or a solid form (other than extrusion ingot) suitable for remelting or fabricating, produced either from alumina or from scrap; excludes RSI, which is considered scrap until remelted and cast into specification ingot.

**Foil.** A flat rolled product, rectangular in cross-section, and less than 0.006 inch.

**Sheet.** A rolled product, flat or coiled, rectangular in cross-section, and 0.006 inch in thickness but under 0.250 inches in thickness.

**Plate.** A flat rolled product, rectangular in cross-section, and 0.250 inch or greater in thickness.

**Wire.** A solid wrought product that is long in relation to cross-section, which is square, round, rectangular, hexagonal, or octagonal in shape and whose diameter or greatest perpendicular distance between parallel faces (except for flattened wire) is less than 0.375 inch.

**Drawing stock (redraw rod) (continuous cast or rolled).** A solid round product that is long in relation to cross-section, 0.375 inch or greater in diameter, produced by continuous casting followed by size-rolling or by rolling from D.C. cast ingot, suitable for drawing into wire.

**Rod and bar (rolled and/or extruded).** A solid round, square, rectangular, hexagon, or octagonal-shaped product that is long in relation to cross-section, 0.375 inch or greater in diameter or in at least one perpendicular distance between parallel faces, produced by continuous casting or rolling or by extruding; other than drawing stock and D.C. cast ingot.

**Pipe and tube (extruded and drawn).** A hollow wrought product with a uniform wall thickness (except as affected by corner radii) that is long in relation to its cross-section, round, square, rectangular, hexagonal, octagonal, or elliptical in shape, produced either by hot extruding and/or brought to final dimensions by cold drawing through a die.

**Extruded shapes.** A product produced by extruding, that is long in relation to its cross-sectional dimension and has a cross-section other than that of rod and bar or pipe and tube.

**Cable, ACSR, and aluminum (bare).** Aluminum stranded conductor reinforced by a core of steel (ACSR); or any other bare stranded aluminum conductor.

**Powder, atomized.** Powder produced by blowing or aspirating molten metal through an orifice.

**Other flake, powder, and paste.** Includes the following products:

**Powder.** An aggregate of discrete particles of aluminum, substantially all of which are finer than 1,000 microns (minus 18 mesh).

**Paste.** A blend of powder or flake with a thinner or plasticizer.

**Powder, flaked.** Powder consisting of flat or scale-like particles of a thickness that is small compared with other dimensions, and is produced by milling in the presence of a lubricant.

**Forgings (excluding impact extrusions).** A product worked to a predetermined shape by one or more processes such as hammering, upsetting, pressing, and rolling.

**Impacts (excluding collapsible tubes and cans).** A product formed in a confining die from a metal slug, usually cold, by a rapid simple stroke application of force through a punch, causing the metal to flow around the punch, and/or through an opening in the punch or die.

Table 11. Net Shipments and Inventories of Aluminum Ingot and Mill Products: 1991 to 1995

[Thousands of pounds]

Month and year	Net shipments of aluminum			Month-end aluminum inventories <sup>1</sup>
	Ingot and mill products	Mill products	Ingot	
<b>1995</b>				
<b>Total</b> .....	<b>18,422,202</b>	<b>14,407,244</b>	<b>4,014,958</b>	<b>(X)</b>
January .....	1,631,932	1,267,603	364,329	4,710,004
February .....	1,472,470	1,208,446	264,024	4,845,214
March .....	1,703,778	1,359,261	344,517	4,691,420
April .....	1,593,642	1,255,322	338,320	4,742,901
May .....	1,605,274	1,299,540	305,734	4,745,141
June .....	1,576,473	1,282,922	293,551	4,639,413
July .....	1,368,199	1,124,163	244,036	4,690,568
August .....	1,493,208	1,202,246	290,962	4,593,765
September .....	1,533,405	1,183,046	350,359	4,403,357
October .....	1,570,902	1,166,429	404,473	4,366,321
November .....	1,469,094	1,055,049	414,045	4,346,017
December .....	1,403,825	1,003,217	400,608	4,403,357
<b>1994</b>				
<b>Total</b> .....	<b>20,295,037</b>	<b>14,746,132</b>	<b>5,548,905</b>	<b>(X)</b>
January .....	1,503,217	1,038,526	464,691	4,645,564
February .....	1,538,961	1,069,139	469,822	4,758,224
March .....	1,915,886	1,276,144	639,742	4,777,812
April .....	1,601,412	1,199,614	401,798	4,784,130
May .....	1,809,517	1,265,231	544,286	4,790,458
June .....	1,678,562	1,289,880	388,682	4,724,660
July .....	1,595,686	1,212,407	383,279	4,659,283
August .....	1,836,923	1,339,329	497,594	4,636,821
September .....	1,641,955	1,291,609	350,346	4,605,396
October .....	1,665,757	1,295,976	369,781	4,540,001
November .....	1,778,268	1,248,654	529,614	4,551,208
December .....	1,728,893	1,219,623	509,270	4,572,328
1993, total .....	16,294,499	12,726,636	3,567,863	4,372,022
1992, total .....	16,080,899	12,385,972	3,694,927	4,320,853
1991, total .....	15,298,496	11,667,108	3,631,388	3,912,585

X Not applicable.

<sup>1</sup>Use December inventory data for annual total inventory.



Table 12. Shipments and Receipts of Aluminum Ingot and Mill Products by Type of Producer: 1995

[Thousands of pounds]

Product description	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	1995			Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
				January	February	March			
			Total	January	February	March			
Aluminum ingot and mill products	28,317,349	9,003,695	18,422,202	2,619,804	863,077	1,631,932	2,358,284	797,161	1,472,470
Integrated	15,207,120	3,701,560	10,804,427	1,367,588	392,288	896,443	1,241,666	344,983	825,362
Smelters	2,202,149	167,074	2,031,038	199,413	15,822	182,679	185,820	14,707	171,081
All other	10,908,080	5,135,061	5,586,737	1,052,803	454,967	552,810	930,798	437,471	476,027
Imports (ingot only)	4,354,421	-	4,354,421	474,989	-	474,989	373,675	-	373,675
Nonintegrated	6,553,659	5,135,061	1,232,316	577,814	454,967	77,821	557,123	437,471	102,352
Mill products	15,723,667	1,316,423	14,407,244	1,391,094	123,491	1,267,603	1,322,209	113,763	1,208,446
By type of producer:									
Integrated	10,638,491	566,128	10,072,363	940,700	46,985	893,715	880,847	39,217	841,630
Nonintegrated	5,085,176	750,295	4,334,881	450,394	76,506	373,888	441,362	74,546	366,816
Ingot	12,593,682	7,687,272	4,014,958	1,228,710	739,586	364,329	1,036,075	683,398	264,024
By type of producer:									
Integrated	4,568,629	3,135,432	732,064	426,888	345,303	2,728	360,819	305,766	(16,268)
Smelters <sup>3</sup>	2,202,149	167,074	2,031,038	199,413	15,822	182,679	185,820	14,707	171,081
All other	5,822,904	4,384,766	1,251,856	602,409	378,461	178,922	489,436	362,925	109,211
Imports <sup>4</sup>	4,354,421	-	4,354,421	474,989	-	474,989	373,675	-	373,675
Nonintegrated	1,468,483	4,384,766	(3,102,565)	127,420	378,461	(296,067)	115,761	362,925	(264,464)
By type of ingot:									
Extrusion ingot	2,857,186	2,321,680	547,018	270,448	222,952	47,496	246,760	215,776	30,984
Integrated	(D)	(D)	1,190,346	(D)	(D)	117,385	(D)	(D)	104,827
Smelter <sup>3</sup>	(D)	(D)	208,528	(D)	(D)	19,778	(D)	(D)	18,088
All other	(D)	(D)	(851,856)	(D)	(D)	(89,667)	(D)	(D)	(91,931)
Imports <sup>4</sup>	489,275	-	489,275	40,211	-	40,211	36,994	-	36,994
Nonintegrated	(D)	(D)	(1,341,131)	(D)	(D)	(129,878)	(D)	(D)	(128,925)
Other ingot (primary and secondary)	9,736,496	6,281,233	3,467,940	958,262	641,429	316,833	789,315	556,275	233,040
Integrated	(D)	(D)	(458,282)	(D)	(D)	(114,657)	(D)	(D)	(121,095)
Smelters <sup>3</sup>	(D)	(D)	1,822,510	(D)	(D)	162,901	(D)	(D)	152,993
All other	(D)	(D)	2,103,712	(D)	(D)	268,589	(D)	(D)	201,142
Imports <sup>4</sup>	3,865,146	-	3,865,146	434,778	-	434,778	336,681	-	336,681
Nonintegrated	(D)	(D)	(1,761,434)	(D)	(D)	(166,189)	(D)	(D)	(135,539)
			March	April	May				
Aluminum ingot and mill products	2,671,046	879,608	1,703,778	2,483,564	821,826	1,593,642	2,507,999	824,227	1,605,274
Integrated	1,403,746	372,470	950,523	1,278,800	364,689	864,226	1,340,932	372,124	903,173
Smelters	204,508	16,357	188,119	172,520	12,708	159,780	190,902	13,766	177,104
All other	1,062,792	490,781	565,136	1,032,244	444,429	569,636	976,165	438,337	524,997
Imports (ingot only)	454,281	-	454,281	481,379	-	481,379	408,936	-	408,936
Nonintegrated	608,511	490,781	110,855	550,865	444,429	88,257	567,229	438,337	116,061
Mill products	1,471,570	112,309	1,359,261	1,364,508	109,186	1,255,322	1,425,193	125,653	1,299,540
By type of producer:									
Integrated	994,120	47,088	947,032	925,101	49,871	875,230	980,566	60,490	920,076
Nonintegrated	477,450	65,221	412,229	439,407	59,315	380,092	444,627	65,163	379,464
Ingot	1,199,476	767,299	344,517	1,119,056	712,640	338,320	1,082,806	698,574	305,734
By type of producer:									
Integrated	409,626	325,382	3,491	353,699	314,818	(11,004)	360,366	311,634	(16,903)
Smelters <sup>3</sup>	204,508	16,357	188,119	172,520	12,708	159,780	190,902	13,766	177,104
All other	585,342	425,560	152,907	592,837	385,114	189,544	531,538	373,174	145,533
Imports <sup>4</sup>	454,281	-	454,281	481,379	-	481,379	408,936	-	408,936
Nonintegrated	131,061	425,560	(301,374)	111,458	385,114	(291,835)	122,602	373,174	(263,403)
By type of ingot:									
Extrusion ingot	277,897	235,113	54,296	244,193	226,486	17,707	231,727	193,712	38,015
Integrated	(D)	(D)	121,740	(D)	(D)	105,134	(D)	(D)	95,882
Smelters <sup>3</sup>	(D)	(D)	21,347	(D)	(D)	16,292	(D)	(D)	16,594
All other	(D)	(D)	(88,791)	(D)	(D)	(103,719)	(D)	(D)	(74,461)
Imports <sup>4</sup>	40,292	-	40,292	44,762	-	44,762	40,001	-	40,001
Nonintegrated	(D)	(D)	(129,083)	(D)	(D)	(148,481)	(D)	(D)	(114,462)
Other ingot (primary and secondary)	921,579	631,358	290,221	874,863	554,250	320,613	851,079	583,360	267,719
Integrated	(D)	(D)	(118,249)	(D)	(D)	(116,138)	(D)	(D)	(112,785)
Smelters <sup>3</sup>	(D)	(D)	166,772	(D)	(D)	143,488	(D)	(D)	160,510
All other	(D)	(D)	241,698	(D)	(D)	293,263	(D)	(D)	219,994
Imports <sup>4</sup>	413,989	-	413,989	436,617	-	436,617	368,935	-	368,935
Nonintegrated	(D)	(D)	(172,291)	(D)	(D)	(143,354)	(D)	(D)	(148,941)

See footnotes at end of table.

Table 12. Shipments and Receipts of Aluminum Ingot and Mill Products by Type of Producer: 1995 —Con.

[Thousands of pounds]

Product description	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
	June			July			August		
Aluminum ingot and mill products.....	2,442,449	801,508	1,576,473	2,125,738	696,172	1,368,199	2,284,126	713,742	1,493,208
Integrated .....	1,305,291	342,230	915,873	1,183,183	303,904	830,198	1,255,307	280,816	911,556
Smelters .....	180,132	13,760	164,904	151,281	11,816	139,390	191,926	14,430	176,494
All other .....	957,026	445,518	495,696	791,274	380,452	398,611	836,893	418,496	405,158
Imports (ingot only) ..	384,883	-	384,883	301,932	-	301,932	297,440	-	297,440
Nonintegrated .....	572,143	445,518	110,813	489,342	380,452	96,679	539,453	418,496	107,718
Mill products .....	1,397,403	114,481	1,282,922	1,230,690	106,527	1,124,163	1,309,798	107,552	1,202,246
By type of producer:									
Integrated .....	950,389	53,925	896,464	849,821	53,936	795,885	892,525	45,869	846,656
Nonintegrated .....	447,014	60,556	386,458	380,869	52,591	328,278	417,273	61,683	355,590
Ingot .....	1,045,046	687,027	293,551	895,048	589,645	244,036	974,328	606,190	290,962
By type of producer:									
Integrated .....	354,902	288,305	19,409	333,362	249,968	34,313	362,782	234,947	64,900
Smelters <sup>3</sup> .....	180,132	13,760	164,904	151,281	11,816	139,390	191,926	14,430	176,494
All other .....	510,012	384,962	109,238	410,405	327,861	70,333	419,620	356,813	49,568
Imports <sup>4</sup> .....	384,883	-	384,883	301,932	-	301,932	297,440	-	297,440
Nonintegrated .....	125,129	384,962	(275,645)	108,473	327,861	(231,599)	122,180	356,813	(247,872)
By type of ingot:									
Extrusion ingot .....	229,435	202,617	26,818	200,475	166,743	33,732	217,318	177,574	39,744
Integrated .....	(D)	(D)	96,873	(D)	(D)	84,175	(D)	(D)	91,362
Smelters <sup>3</sup> .....	(D)	(D)	17,326	(D)	(D)	14,282	(D)	(D)	18,813
All other .....	(D)	(D)	(87,381)	(D)	(D)	(64,725)	(D)	(D)	(70,431)
Imports <sup>4</sup> .....	32,032	-	32,032	33,653	-	33,653	30,631	-	30,631
Nonintegrated .....	(D)	(D)	(119,413)	(D)	(D)	(98,378)	(D)	(D)	(101,062)
Other ingot (primary and secondary) .....	815,611	548,878	266,733	694,573	484,269	210,304	757,010	505,792	251,218
Integrated .....	(D)	(D)	(77,464)	(D)	(D)	(49,862)	(D)	(D)	(26,462)
Smelters <sup>3</sup> .....	(D)	(D)	147,578	(D)	(D)	125,108	(D)	(D)	157,681
All other .....	(D)	(D)	196,619	(D)	(D)	135,058	(D)	(D)	119,999
Imports <sup>4</sup> .....	352,851	-	352,851	268,279	-	268,279	266,809	-	266,809
Nonintegrated .....	(D)	(D)	(156,232)	(D)	(D)	(133,221)	(D)	(D)	(146,810)
	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
	September			October					
Aluminum ingot and mill products.....	2,265,998	672,227	1,533,405	2,289,106	657,690	1,570,902			
Integrated .....	1,263,440	239,591	975,562	1,260,012	238,071	973,654			
Smelters .....	190,475	13,174	177,269	188,794	12,974	175,788			
All other .....	812,083	419,462	380,574	840,300	406,645	421,460			
Imports (ingot only) ..	259,865	-	259,865	307,308	-	307,308			
Nonintegrated .....	552,218	419,462	120,709	532,992	406,645	114,152			
Mill products .....	1,283,911	100,865	1,183,046	1,264,324	97,895	1,166,429			
By type of producer:									
Integrated .....	854,405	39,666	814,739	853,006	39,666	813,340			
Nonintegrated .....	429,506	61,199	368,307	411,318	58,229	353,089			
Ingot .....	982,087	571,362	350,359	1,024,782	559,795	404,473			
By type of producer:									
Integrated .....	409,035	199,925	160,823	407,006	198,405	160,314			
Smelters <sup>3</sup> .....	190,475	13,174	177,269	188,794	12,974	175,788			
All other .....	382,577	358,263	12,267	428,982	348,416	68,371			
Imports <sup>4</sup> .....	259,865	-	259,865	307,308	-	307,308			
Nonintegrated .....	122,712	358,263	(247,598)	121,674	348,416	(238,937)			
By type of ingot:									
Extrusion ingot .....	224,023	185,643	38,380	233,288	174,368	58,920			
Integrated .....	(D)	(D)	92,126	(D)	(D)	91,870			
Smelters <sup>3</sup> .....	(D)	(D)	17,366	(D)	(D)	16,851			
All other .....	(D)	(D)	(71,112)	(D)	(D)	(49,801)			
Imports <sup>4</sup> .....	33,599	-	33,599	45,682	-	45,682			
Nonintegrated .....	(D)	(D)	(104,711)	(D)	(D)	(95,483)			
Other ingot (primary and secondary) .....	758,064	446,085	311,979	791,494	445,941	345,553			
Integrated .....	(D)	(D)	68,697	(D)	(D)	68,444			
Smelters <sup>3</sup> .....	(D)	(D)	159,903	(D)	(D)	158,937			
All other .....	(D)	(D)	83,379	(D)	(D)	118,172			
Imports <sup>4</sup> .....	226,266	-	226,266	261,626	-	261,626			
Nonintegrated .....	(D)	(D)	(142,887)	(D)	(D)	(143,454)			

See footnotes at end of table.

Table 12. Shipments and Receipts of Aluminum Ingot and Mill Products by Type of Producer: 1995—Con.

[Thousands of pounds]

Product description	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
	November			December		
Aluminum ingot and mill products.....	2,175,665	642,793	1,469,094	2,093,570	633,664	1,403,825
Integrated.....	1,172,922	232,696	892,683	1,134,233	217,698	865,174
Smelters.....	183,914	13,897	169,978	162,464	13,663	148,452
All other.....	818,829	396,200	406,433	796,873	402,303	390,199
Imports (ingot only) ..	310,245	-	310,245	299,488	-	299,488
Nonintegrated.....	508,584	396,200	96,188	497,385	402,303	90,711
Mill products.....	1,156,045	100,996	1,055,049	1,106,922	103,705	1,003,217
By type of producer:						
Integrated.....	772,970	37,925	735,045	744,041	51,490	692,551
Nonintegrated.....	383,075	63,071	320,004	362,881	52,215	310,666
Ingot.....	1,019,620	541,797	414,045	986,648	529,959	400,608
By type of producer:						
Integrated.....	399,952	194,771	157,638	390,192	166,208	172,623
Smelters <sup>3</sup> .....	183,914	13,897	169,978	162,464	13,663	148,452
All other.....	435,754	333,129	86,429	433,992	350,088	79,533
Imports.....	310,245	-	310,245	299,488	-	299,488
Nonintegrated.....	125,509	333,129	(223,816)	134,504	350,088	(219,955)
By type of ingot:						
Extrusion ingot.....	232,967	159,330	73,637	248,655	161,366	87,289
Integrated.....	(D)	(D)	95,886	(D)	(D)	93,086
Smelters <sup>3</sup> .....	(D)	(D)	17,321	(D)	(D)	14,470
All other.....	(D)	(D)	(39,570)	(D)	(D)	(20,267)
Imports <sup>4</sup> .....	47,229	-	47,229	64,189	-	64,189
Nonintegrated.....	(D)	(D)	(86,799)	(D)	(D)	(84,456)
Other ingot (primary and secondary).....	786,653	446,245	340,408	737,993	437,351	313,319
Integrated.....	(D)	(D)	61,752	(D)	(D)	79,537
Smelters <sup>3</sup> .....	(D)	(D)	152,657	(D)	(D)	133,982
All other.....	(D)	(D)	125,999	(D)	(D)	99,800
Imports <sup>4</sup> .....	263,016	-	263,016	235,299	-	235,299
Nonintegrated.....	(D)	(D)	(137,017)	(D)	(D)	(135,499)

- Represents zero. D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Domestic receipts excludes scrap. Monthly scrap receipts data collected in thousands of pounds are as follows: January, 496,410; February, 470,218; March, 529,998; April, 493,009; May, 501,195; June, 511,483; July, 503,569; August, 560,477; September, 528,199; October, 538,171; November, 487,684; and December, 440,515.

<sup>2</sup>Net shipments are derived by subtracting domestic receipts from gross shipments.

<sup>3</sup>Number of secondary smelter operators shipping ingot is 21.

<sup>4</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. For 1995, import numbers for ingot are: extrusion—7601.20.9045 and 7604.21.0000; other primary—7601.10.3000, 7601.20.3000, 7601.10.6000, 7601.20.9030, 7601.20.9060, 7601.20.6000, and 7601.20.9090. Imports are reported in kilograms and have been converted to pounds.

Table 13. Shipments and Receipts of Aluminum Ingot and Mill Products by Type of Producer: 1994

[Thousands of pounds]

Product description	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
	Total			January			February		
Aluminum ingot and mill products.....	30,141,539	8,800,837	20,295,037	2,219,023	634,723	1,503,217	2,262,777	642,967	1,538,961
Integrated.....	14,779,720	2,500,243	11,465,672	1,033,629	171,415	796,191	1,079,718	175,594	840,369
Smelters.....	2,295,166	319,706	1,961,356	173,234	23,540	148,657	183,827	25,428	157,167
All other.....	13,066,653	5,980,888	6,868,009	1,012,160	439,768	558,369	999,232	441,945	541,425
Imports (ingot only) ..	5,630,316	-	5,630,316	443,355	-	443,355	422,367	-	422,367
Nonintegrated.....	7,436,337	5,980,888	1,237,693	568,805	439,768	115,014	576,865	441,945	119,058
Mill products.....	16,258,871	1,512,739	14,746,132	1,155,911	117,385	1,038,526	1,178,968	109,829	1,069,139
By type of producer:									
Integrated.....	10,796,973	487,779	10,309,194	738,643	38,019	700,624	759,579	35,073	724,506
Nonintegrated.....	5,461,898	1,024,960	4,436,938	417,268	79,366	337,902	419,389	74,756	344,633
Ingot.....	13,882,668	7,288,098	5,548,905	1,063,112	517,338	464,691	1,083,809	533,138	469,822
By type of producer:									
Integrated.....	3,982,747	2,012,464	1,156,478	294,986	133,396	95,567	320,139	140,521	115,863
Smelters <sup>3</sup> .....	2,295,166	319,706	1,961,356	173,234	23,540	148,657	183,827	25,428	157,167
All other.....	7,604,755	4,955,928	2,431,071	594,892	360,402	220,467	579,843	367,189	196,792
Imports <sup>4</sup> .....	5,630,316	-	5,630,316	443,355	-	443,355	422,367	-	422,367
Nonintegrated.....	1,974,439	4,955,928	(3,199,245)	151,537	360,402	(222,888)	157,476	367,189	(225,575)
By type of ingot:									
Extrusion ingot.....	2,863,298	2,484,210	379,088	209,023	192,004	17,019	217,265	180,581	36,684
Integrated.....	(D)	(D)	1,166,166	(D)	(D)	81,852	(D)	(D)	83,636
Smelter <sup>3</sup> .....	(D)	(D)	260,140	(D)	(D)	15,557	(D)	(D)	18,356
All other.....	(D)	(D)	(1,047,218)	(D)	(D)	(80,390)	(D)	(D)	(65,308)
Imports <sup>4</sup> .....	429,932	-	429,932	30,852	-	30,852	37,137	-	37,137
Nonintegrated.....	(D)	(D)	(1,477,150)	(D)	(D)	(111,242)	(D)	(D)	(102,445)
Other ingot (primary and secondary).....	11,019,370	5,849,553	5,169,817	854,089	406,417	447,672	866,544	433,406	433,138
Integrated.....	(D)	(D)	(9,688)	(D)	(D)	13,715	(D)	(D)	32,227
Smelters <sup>3</sup> .....	(D)	(D)	1,701,216	(D)	(D)	133,100	(D)	(D)	138,811
All other.....	(D)	(D)	3,478,289	(D)	(D)	300,857	(D)	(D)	262,100
Imports <sup>4</sup> .....	5,200,384	-	5,200,384	412,503	-	412,503	385,230	-	385,230
Nonintegrated.....	(D)	(D)	(1,722,095)	(D)	(D)	(111,646)	(D)	(D)	(123,130)
	March			April			May		
Aluminum ingot and mill products.....	2,755,934	748,603	1,915,886	2,390,994	711,819	1,601,412	2,611,832	716,470	1,809,517
Integrated.....	1,275,114	207,404	996,121	1,132,034	188,513	886,158	1,208,570	195,246	947,655
Smelters.....	195,671	29,248	164,642	175,115	27,494	145,379	184,583	28,231	154,795
All other.....	1,285,149	511,951	755,123	1,083,845	495,812	569,875	1,218,679	492,993	707,067
Imports (ingot only) ..	627,677	-	627,677	459,082	-	459,082	575,719	-	575,719
Nonintegrated.....	657,472	511,951	127,446	624,763	495,812	110,793	642,960	492,993	131,348
Mill products.....	1,404,736	128,592	1,276,144	1,320,400	120,786	1,199,614	1,388,406	123,175	1,265,231
By type of producer:									
Integrated.....	922,525	47,818	874,707	848,906	40,383	808,523	899,839	34,714	865,125
Nonintegrated.....	482,211	80,774	401,437	471,494	80,403	391,091	488,567	88,461	400,106
Ingot.....	1,351,198	620,011	639,742	1,070,594	591,033	401,798	1,223,426	593,295	544,286
By type of producer:									
Integrated.....	352,589	159,586	121,414	283,128	148,130	77,635	308,731	160,532	82,530
Smelters <sup>3</sup> .....	195,671	29,248	164,642	175,115	27,494	145,379	184,583	28,231	154,795
All other.....	802,938	431,177	353,686	612,351	415,409	178,784	730,112	404,532	306,961
Imports <sup>4</sup> .....	627,677	-	627,677	459,082	-	459,082	575,719	-	575,719
Nonintegrated.....	175,261	431,177	(273,991)	153,269	415,409	(280,298)	154,393	404,532	(268,758)
By type of ingot:									
Extrusion ingot.....	243,354	201,764	41,590	218,807	185,122	33,685	231,931	188,674	43,257
Integrated.....	(D)	(D)	93,602	(D)	(D)	83,280	(D)	(D)	95,480
Smelters <sup>3</sup> .....	(D)	(D)	22,062	(D)	(D)	19,304	(D)	(D)	21,519
All other.....	(D)	(D)	(74,074)	(D)	(D)	(68,899)	(D)	(D)	(73,742)
Imports <sup>4</sup> .....	37,608	-	37,608	34,670	-	34,670	33,045	-	33,045
Nonintegrated.....	(D)	(D)	(111,682)	(D)	(D)	(103,569)	(D)	(D)	(106,787)
Other ingot (primary and secondary).....	1,107,844	509,692	598,152	851,787	483,674	368,113	991,495	490,466	501,029
Integrated.....	(D)	(D)	27,812	(D)	(D)	(5,645)	(D)	(D)	(12,950)
Smelters <sup>3</sup> .....	(D)	(D)	142,580	(D)	(D)	126,075	(D)	(D)	133,276
All other.....	(D)	(D)	427,760	(D)	(D)	247,683	(D)	(D)	380,703
Imports <sup>4</sup> .....	590,069	-	590,069	424,412	-	424,412	542,674	-	542,674
Nonintegrated.....	(D)	(D)	(162,309)	(D)	(D)	(176,729)	(D)	(D)	(161,971)

See footnotes at end of table.

Table 13. Shipments and Receipts of Aluminum Ingot and Mill Products by Type of Producer: 1994 —Con.

[Thousands of pounds]

Product description	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
	June			July			August		
Aluminum ingot and mill products.....	2,549,161	790,702	1,678,562	2,404,722	725,970	1,595,686	2,693,415	759,416	1,836,923
Integrated.....	1,276,486	213,693	1,003,489	1,232,403	214,879	951,995	1,363,678	237,175	1,048,691
Smelters.....	192,775	29,803	162,089	158,124	26,979	130,037	210,436	27,519	182,257
All other.....	1,079,900	547,206	512,984	1,014,195	484,112	513,654	1,119,301	494,722	605,975
Imports (ingot only) ..	401,789	-	401,789	449,199	-	449,199	475,228	-	475,228
Nonintegrated.....	678,111	547,206	111,195	564,996	484,112	64,455	644,073	494,722	130,747
Mill products.....	1,428,810	138,930	1,289,880	1,340,998	128,591	1,212,407	1,468,799	129,470	1,339,329
By type producer:									
Integrated.....	921,507	45,579	875,928	924,522	41,966	882,556	997,532	39,376	958,156
Nonintegrated.....	507,303	93,351	413,952	416,476	86,625	329,851	471,267	90,094	381,173
Ingot.....	1,120,351	651,772	388,682	1,063,724	597,379	383,279	1,224,616	629,946	497,594
By type of producer:									
Integrated.....	354,979	168,114	127,561	307,881	172,913	69,439	366,146	197,799	90,535
Smelters <sup>3</sup> .....	192,775	29,803	162,089	158,124	26,979	130,037	210,436	27,519	182,257
All other.....	572,597	453,855	99,032	597,719	397,487	183,803	648,034	404,628	224,802
Imports <sup>4</sup> .....	401,789	-	401,789	449,199	-	449,199	475,228	-	475,228
Nonintegrated.....	170,808	453,855	(302,757)	148,520	397,487	(265,396)	172,806	404,628	(250,426)
By type of ingot:									
Extrusion ingot.....	253,491	229,315	24,176	248,739	209,575	39,164	247,495	207,663	39,832
Integrated.....	(D)	(D)	95,263	(D)	(D)	104,369	(D)	(D)	102,556
Smelters <sup>3</sup> .....	(D)	(D)	21,431	(D)	(D)	20,977	(D)	(D)	25,759
All other.....	(D)	(D)	(92,518)	(D)	(D)	(86,182)	(D)	(D)	(88,483)
Imports <sup>4</sup> .....	43,563	-	43,563	35,152	-	35,152	41,513	-	41,513
Nonintegrated.....	(D)	(D)	(136,081)	(D)	(D)	(121,334)	(D)	(D)	(129,996)
Other ingot (primary and secondary).....	866,860	502,354	364,506	814,985	470,870	344,115	977,121	519,359	457,762
Integrated.....	(D)	(D)	32,298	(D)	(D)	(34,930)	(D)	(D)	(12,021)
Smelters <sup>3</sup> .....	(D)	(D)	140,658	(D)	(D)	109,060	(D)	(D)	156,498
All other.....	(D)	(D)	191,550	(D)	(D)	269,985	(D)	(D)	313,285
Imports <sup>4</sup> .....	358,226	-	358,226	414,047	-	414,047	433,715	-	433,715
Nonintegrated.....	(D)	(D)	(166,676)	(D)	(D)	(144,062)	(D)	(D)	(120,430)
	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>
	September			October					
Aluminum ingot and mill products.....	2,535,827	791,566	1,641,955	2,533,464	773,025	1,665,757			
Integrated.....	1,342,575	231,424	1,030,397	1,283,806	215,959	995,564			
Smelters.....	205,250	23,027	181,427	201,523	28,885	171,981			
All other.....	988,002	537,115	430,131	1,048,135	528,181	498,212			
Imports (ingot only) ..	342,237	-	342,237	407,866	-	407,866			
Nonintegrated.....	645,765	537,115	87,894	640,269	528,181	90,346			
Mill products.....	1,439,916	148,307	1,291,609	1,435,317	139,341	1,295,976			
By type of producer:									
Integrated.....	971,983	50,044	921,939	958,468	43,630	914,838			
Nonintegrated.....	467,933	98,263	369,670	476,849	95,711	381,138			
Ingot.....	1,095,911	643,259	350,346	1,098,147	633,684	369,781			
By type of producer:									
Integrated.....	370,592	181,380	108,458	325,338	172,329	80,726			
Smelters <sup>3</sup> .....	205,250	23,027	181,427	201,523	28,885	171,981			
All other.....	520,069	438,852	60,461	571,286	432,470	117,074			
Imports <sup>4</sup> .....	342,237	-	342,237	407,866	-	407,866			
Nonintegrated.....	177,832	438,852	(281,776)	163,420	432,470	(290,792)			
By type of ingot:									
Extrusion ingot.....	261,568	232,440	29,128	247,818	218,899	28,919			
Integrated.....	(D)	(D)	109,357	(D)	(D)	101,290			
Smelters <sup>3</sup> .....	(D)	(D)	23,084	(D)	(D)	25,632			
All other.....	(D)	(D)	(103,313)	(D)	(D)	(98,003)			
Imports <sup>4</sup> .....	37,780	-	37,780	34,325	-	34,325			
Nonintegrated.....	(D)	(D)	(141,093)	(D)	(D)	(132,328)			
Other ingot (primary and secondary).....	834,343	513,125	321,218	850,329	509,467	340,862			
Integrated.....	(D)	(D)	(899)	(D)	(D)	(20,564)			
Smelters <sup>3</sup> .....	(D)	(D)	158,343	(D)	(D)	146,349			
All other.....	(D)	(D)	163,774	(D)	(D)	215,077			
Imports <sup>4</sup> .....	304,457	-	304,457	373,541	-	373,541			
Nonintegrated.....	(D)	(D)	(140,683)	(D)	(D)	(158,464)			

See footnotes at end of table.

Table 13. Shipments and Receipts of Aluminum Ingot and Mill Products by Type of Producer: 1994—Con.

[Thousands of pounds]

Product description	Gross shipments	Domestic receipts <sup>1</sup>	Net shipments <sup>2</sup>	November		December	
				Gross shipments	Domestic receipts <sup>1</sup>	Gross shipments	Domestic receipts <sup>1</sup>
Aluminum ingot and mill products.....	2,603,696	735,446	1,778,268	2,580,694	770,130	1,728,893	
Integrated .....	1,253,326	219,836	964,180	1,298,381	229,105	1,004,862	
Smelters .....	208,383	23,158	184,786	206,245	26,394	178,139	
All other.....	1,141,987	492,452	629,302	1,076,068	514,631	545,892	
Imports (ingot only) ..	533,069	-	533,069	492,728	-	492,728	
Nonintegrated.....	608,918	492,452	96,233	583,340	514,631	53,164	
Mill products .....	1,365,587	116,933	1,248,654	1,331,023	111,400	1,219,623	
By type of producer:							
Integrated .....	927,965	41,608	886,357	925,504	29,569	895,935	
Nonintegrated.....	437,622	75,325	362,297	405,519	81,831	323,688	
Ingot.....	1,238,109	618,513	529,614	1,249,671	658,730	509,270	
By type of producer:							
Integrated .....	325,361	178,228	77,823	372,877	199,536	108,927	
Smelters <sup>3</sup> .....	208,383	23,158	184,786	206,245	26,394	178,139	
All other.....	704,365	417,127	267,005	670,549	432,800	222,204	
Imports <sup>4</sup> .....	533,069	-	533,069	492,728	-	492,728	
Nonintegrated.....	171,296	417,127	(266,064)	177,821	432,800	(270,524)	
By type of ingot:							
Extrusion ingot.....	251,051	215,509	35,542	232,756	222,664	10,092	
Integrated .....	(D)	(D)	110,076	(D)	(D)	105,405	
Smelters <sup>3</sup> .....	(D)	(D)	24,979	(D)	(D)	21,480	
All other.....	(D)	(D)	(99,513)	(D)	(D)	(116,793)	
Imports <sup>4</sup> .....	37,980	-	37,980	26,307	-	26,307	
Nonintegrated.....	(D)	(D)	(137,493)	(D)	(D)	(143,100)	
Other ingot (primary and secondary) .....	987,058	492,986	494,072	1,016,915	517,737	499,178	
Integrated .....	(D)	(D)	(32,253)	(D)	(D)	3,522	
Smelters <sup>3</sup> .....	(D)	(D)	159,807	(D)	(D)	156,659	
All other.....	(D)	(D)	366,518	(D)	(D)	338,997	
Imports <sup>4</sup> .....	495,089	-	495,089	466,421	-	466,421	
Nonintegrated.....	(D)	(D)	(128,571)	(D)	(D)	(127,424)	

- Represents zero. D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Domestic receipts excludes scrap. Monthly scrap receipts data collected in thousands of pounds are as follows: January, 283,348; February, 292,198; March, 337,015; April, 316,747; May, 329,280; June, 369,690; July, 374,432; August, 386,405; September, 342,964; October, 403,269; November, 450,646; and December, 445,005.

<sup>2</sup>Net shipments are derived by subtracting domestic receipts from gross shipments.

<sup>3</sup>Number of secondary smelter operators shipping ingot is 24.

<sup>4</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. For 1994, import numbers for ingot are: extrusion—7601.20.9045 and 7604.21.0000; other primary—7601.20.3000, 7601.20.3000, 7601.10.6000, 7601.20.9030, 7601.20.9060, 7601.20.6000, and 7601.20.9090. Imports are reported in kilograms and have been converted to pounds.

Table 14. Inventories of Aluminum Ingot, Mill Products, and Scrap by Type of Producer: 1995 and 1994

[Thousands of pounds]

Type of inventory	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
<b>1995</b>												
<b>Total . . . . .</b>	<b>4,710,004</b>	<b>4,845,214</b>	<b>4,691,420</b>	<b>4,742,901</b>	<b>4,745,141</b>	<b>4,639,413</b>	<b>4,690,568</b>	<b>4,593,765</b>	<b>4,494,440</b>	<b>4,366,321</b>	<b>4,346,017</b>	<b>4,403,357</b>
Integrated . . . . .	3,316,507	3,486,713	3,341,628	3,405,943	3,427,034	3,333,089	3,427,039	3,332,638	3,234,888	3,106,043	3,057,449	3,048,302
Nonintegrated . . . . .	1,166,314	1,134,821	1,130,086	1,117,926	1,113,664	1,106,325	1,059,695	1,071,406	1,061,588	1,061,171	1,086,258	1,132,007
Smelters . . . . .	227,183	223,680	219,706	219,032	204,443	199,999	203,834	189,721	197,964	199,107	202,310	223,048
Ingot . . . . .	1,851,780	1,962,728	1,825,146	1,840,113	1,873,735	1,864,879	1,881,133	1,819,615	1,761,734	1,593,998	1,637,121	1,699,014
Integrated <sup>1</sup> . . . . .	1,388,761	1,505,371	1,361,718	1,381,030	1,425,392	1,412,031	1,441,366	1,374,874	1,308,681	1,154,692	1,180,607	1,224,355
Nonintegrated <sup>1</sup> . . . . .	362,360	354,553	361,372	349,739	350,450	354,727	343,955	355,688	356,562	344,779	355,196	363,825
Smelters <sup>1</sup> . . . . .	100,659	102,804	102,056	109,344	97,893	98,121	95,812	89,053	96,491	94,527	101,318	110,834
Scrap . . . . .	822,300	815,687	791,007	767,185	736,013	705,995	694,278	712,791	713,842	704,223	669,911	677,004
Integrated <sup>1</sup> . . . . .	408,241	422,251	417,412	406,998	387,117	359,483	371,704	388,585	413,281	393,692	373,331	352,777
Nonintegrated <sup>1</sup> . . . . .	287,535	272,560	255,945	250,499	242,346	244,634	214,552	223,538	199,088	205,951	195,588	212,013
Smelters <sup>1</sup> . . . . .	126,524	120,876	117,650	109,688	106,550	101,878	108,022	100,668	101,473	104,580	100,992	112,214
All other . . . . .	2,035,924	2,066,799	2,075,267	2,135,603	2,135,393	2,068,539	2,115,157	2,061,359	2,018,864	2,068,100	2,038,985	2,027,339
Integrated <sup>1</sup> . . . . .	1,519,505	1,559,091	1,562,498	1,617,915	1,614,525	1,561,575	1,613,969	1,569,179	1,512,926	1,557,659	1,503,511	1,471,170
Nonintegrated <sup>1</sup> . . . . .	<sup>2</sup> 516,419	<sup>2</sup> 507,708	<sup>2</sup> 512,769	<sup>2</sup> 517,688	<sup>2</sup> 520,868	<sup>2</sup> 506,964	<sup>2</sup> 501,188	<sup>2</sup> 492,180	<sup>2</sup> 505,938	<sup>2</sup> 510,441	<sup>2</sup> 535,474	<sup>2</sup> 556,169
Smelters <sup>1</sup> . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
<b>1994</b>												
<b>Total . . . . .</b>	<b>4,645,564</b>	<b>4,758,224</b>	<b>4,777,812</b>	<b>4,784,130</b>	<b>4,790,458</b>	<b>4,724,660</b>	<b>4,659,283</b>	<b>4,636,821</b>	<b>4,605,396</b>	<b>4,540,001</b>	<b>4,551,208</b>	<b>4,572,328</b>
Integrated . . . . .	3,167,428	3,288,190	3,304,595	3,339,997	3,405,014	3,380,200	3,412,313	3,360,975	3,307,650	3,248,118	3,229,153	3,288,091
Nonintegrated . . . . .	1,305,283	1,299,675	1,294,179	1,282,635	1,278,943	1,292,163	1,171,790	1,158,715	1,168,791	1,153,058	1,188,962	1,210,410
Smelters . . . . .	172,853	170,359	179,038	183,619	187,214	189,334	204,677	211,764	197,725	200,669	210,405	237,333
Ingot . . . . .	1,828,672	1,857,892	1,845,637	1,814,265	1,873,123	1,846,087	1,838,730	1,791,421	1,729,580	1,667,957	1,677,450	1,741,552
Integrated <sup>1</sup> . . . . .	1,350,283	1,397,785	1,376,628	1,339,997	1,405,014	1,380,200	1,412,313	1,360,975	1,307,650	1,248,118	1,229,153	1,288,091
Nonintegrated <sup>1</sup> . . . . .	394,621	381,286	389,610	393,083	386,689	387,756	338,529	342,178	346,207	339,624	360,796	361,544
Smelters <sup>1</sup> . . . . .	83,768	78,821	79,399	81,185	81,420	78,131	87,888	88,268	75,723	80,215	87,501	91,917
Scrap . . . . .	767,043	757,797	791,932	794,237	769,392	833,041	845,839	858,227	879,928	887,214	886,610	875,043
Integrated <sup>1</sup> . . . . .	348,741	356,373	380,789	388,881	355,014	384,153	411,763	425,829	440,222	453,085	442,692	400,355
Nonintegrated <sup>1</sup> . . . . .	329,217	309,886	311,504	302,922	308,584	337,685	317,287	425,829	317,704	313,675	321,014	329,272
Smelters <sup>1</sup> . . . . .	89,085	91,538	99,639	102,434	105,794	111,203	116,789	123,496	122,002	120,454	122,904	145,416
All other . . . . .	2,049,849	2,142,535	2,140,243	2,175,628	2,147,943	2,045,532	1,974,714	1,987,173	1,995,888	1,984,830	1,987,148	1,955,733
Integrated <sup>1</sup> . . . . .	1,468,404	1,534,032	1,547,178	1,588,998	1,564,273	1,478,810	1,458,740	1,479,538	1,491,008	1,485,071	1,479,996	1,436,139
Nonintegrated <sup>1</sup> . . . . .	<sup>2</sup> 581,445	<sup>2</sup> 608,503	<sup>2</sup> 593,065	<sup>2</sup> 586,630	<sup>2</sup> 583,670	<sup>2</sup> 566,722	<sup>2</sup> 515,974	<sup>2</sup> 507,635	<sup>2</sup> 504,880	<sup>2</sup> 499,759	<sup>2</sup> 507,152	<sup>2</sup> 519,594
Smelters <sup>1</sup> . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup>Number of companies reporting aluminum inventory data for December 1995 only are: Ingot integrated 13; Ingot nonintegrated 126; Ingot smelters 26; Scrap integrated 13; Scrap nonintegrated 134; Scrap smelters 22; Other integrated 11; Other nonintegrated 147; Other smelters 8.

<sup>2</sup>"All other smelters" are combined with "All other nonintegrated smelters" to avoid disclosing data for individual companies.

Table 15. Gross Shipments of Aluminum Mill Products by Type of Producer and Month: 1995

[Thousands of pounds]

Product description	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated
	Total			January			February		
<b>Total</b> .....	<b>15,723,667</b>	<b>10,638,491</b>	<b>5,085,176</b>	<b>1,391,094</b>	<b>940,700</b>	<b>450,394</b>	<b>1,322,209</b>	<b>880,847</b>	<b>441,362</b>
Sheet and plate and foil .....	10,807,903	8,759,246	2,048,657	951,369	770,024	181,345	892,137	720,568	171,569
Drawing stock, wire, and cable .....	1,159,235	724,264	434,971	108,636	68,305	40,331	103,709	63,926	39,783
Rod and bare wire .....	552,322	377,583	174,739	48,942	34,815	14,127	47,881	32,014	15,867
Cable and insulated wire .....	606,913	346,681	260,232	59,694	33,490	26,204	55,828	31,912	23,916
Rod, bar, pipe, tube, and shapes ...	3,396,583	953,824	2,442,759	299,179	86,230	212,949	294,503	79,740	214,763
All other <sup>1</sup> .....	359,946	201,157	158,789	31,910	16,141	15,769	31,860	16,613	15,247
	March			April			May		
<b>Total</b> .....	<b>1,471,570</b>	<b>994,120</b>	<b>477,450</b>	<b>1,364,508</b>	<b>925,101</b>	<b>439,407</b>	<b>1,425,193</b>	<b>980,566</b>	<b>444,627</b>
Sheet and plate and foil .....	994,381	812,610	181,771	947,869	768,596	179,273	999,382	814,198	185,184
Drawing stock, wire, and cable .....	113,314	71,726	41,588	101,886	62,107	39,779	101,451	65,238	36,213
Rod and bare wire .....	56,134	39,006	17,128	48,151	34,254	13,897	51,226	35,543	15,683
Cable and insulated wire .....	57,180	32,720	24,460	53,735	27,853	25,882	50,225	29,695	20,530
Rod, bar, pipe, tube, and shapes ...	329,668	91,544	238,124	285,540	78,601	206,939	293,554	83,115	210,439
All other <sup>1</sup> .....	34,207	18,240	15,967	29,213	15,797	13,416	30,806	18,015	12,791
	June			July			August		
<b>Total</b> .....	<b>1,397,403</b>	<b>950,389</b>	<b>447,014</b>	<b>1,230,690</b>	<b>849,821</b>	<b>380,869</b>	<b>1,309,798</b>	<b>892,525</b>	<b>417,273</b>
Sheet and plate and foil .....	971,485	791,660	179,825	866,745	711,850	154,895	901,503	735,649	165,854
Drawing stock, wire, and cable .....	93,956	57,854	36,102	84,110	51,428	32,682	94,180	58,432	35,748
Rod and bare wire .....	45,897	28,558	17,339	39,042	25,475	13,567	45,449	28,239	17,210
Cable and insulated wire .....	48,059	29,296	18,763	45,068	25,953	19,115	48,731	30,193	18,538
Rod, bar, pipe, tube, and shapes ...	300,714	83,591	217,123	253,879	71,794	182,085	283,070	79,818	203,252
All other <sup>1</sup> .....	31,248	17,284	13,964	25,956	14,749	11,207	31,045	18,626	12,419
	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated
	September			October					
<b>Total</b> .....	<b>1,283,911</b>	<b>854,405</b>	<b>429,506</b>	<b>1,264,324</b>	<b>853,006</b>	<b>411,318</b>			
Sheet and plate and foil .....	862,695	696,046	166,649	861,746	696,046	165,700			
Drawing stock, wire, and cable .....	98,269	61,561	36,708	97,694	61,561	36,133			
Rod and bare wire .....	45,687	31,952	13,735	44,946	31,952	12,994			
Cable and insulated wire .....	52,582	29,609	22,973	52,748	29,609	23,139			
Rod, bar, pipe, tube, and shapes ...	293,430	79,830	213,600	275,713	78,431	197,282			
All other <sup>1</sup> .....	29,517	16,968	12,549	29,171	16,968	12,203			
	November			December					
<b>Total</b> .....	<b>1,156,045</b>	<b>772,970</b>	<b>383,075</b>	<b>1,106,922</b>	<b>744,041</b>	<b>362,881</b>			
Sheet and plate and foil .....	791,091	629,249	161,842	767,500	612,750	154,750			
Drawing stock, wire, and cable .....	87,107	55,141	31,966	74,923	46,985	27,938			
Rod and bare wire .....	42,011	30,297	11,714	36,956	25,478	11,478			
Cable and insulated wire .....	45,096	24,844	20,252	37,967	21,507	16,460			
Rod, bar, pipe, tube, and shapes ...	249,770	72,271	177,499	237,563	68,859	168,704			
All other <sup>1</sup> .....	28,077	16,309	11,768	26,936	15,447	11,489			

<sup>1</sup>Data for shipments of "All other" include "Powder and paste" and "Forgings and impacts."



Table 16. **Gross Shipments of Aluminum Mill Products by Type of Producer and Month: 1994**

[Thousands of pounds]

Product description	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated
	Total			January			February		
<b>Total</b> .....	<b>16,258,871</b>	<b>10,796,973</b>	<b>5,461,898</b>	<b>1,155,911</b>	<b>738,643</b>	<b>417,268</b>	<b>1,178,968</b>	<b>759,579</b>	<b>419,389</b>
Sheet and plate and foil.....	11,418,043	8,903,067	2,514,976	787,527	597,832	189,695	806,022	613,480	192,542
Drawing stock, wire, and cable .....	1,101,483	760,462	341,021	83,002	54,533	28,469	86,564	58,993	27,571
Rod and bare wire .....	486,812	406,472	80,340	36,569	30,853	5,716	37,859	32,159	5,700
Cable and insulated wire.....	614,671	353,990	260,681	46,433	23,680	22,753	48,705	26,834	21,871
Rod, bar, pipe, tube, and shapes ...	3,378,637	943,683	2,434,954	257,835	71,904	185,931	259,309	73,169	186,140
All other <sup>1</sup> .....	360,708	189,761	170,947	27,547	14,374	13,173	27,073	13,937	13,136
	March			April			May		
<b>Total</b> .....	<b>1,404,736</b>	<b>922,525</b>	<b>482,211</b>	<b>1,320,400</b>	<b>848,906</b>	<b>471,494</b>	<b>1,388,406</b>	<b>899,839</b>	<b>488,567</b>
Sheet and plate and foil.....	975,413	753,131	222,282	916,952	692,985	223,967	978,183	737,998	240,185
Drawing stock, wire, and cable .....	101,438	72,242	29,196	94,228	62,038	32,190	90,586	63,567	27,019
Rod and bare wire .....	49,812	42,447	7,365	40,701	34,277	6,424	41,234	34,061	7,173
Cable and insulated wire.....	51,626	29,795	21,831	53,527	27,761	25,766	49,352	29,506	19,846
Rod, bar, pipe, tube, and shapes ...	295,915	81,541	214,374	276,675	77,550	199,125	287,347	82,017	205,330
All other <sup>1</sup> .....	31,970	15,611	16,359	32,545	16,333	16,212	32,290	16,257	16,033
	June			July			August		
<b>Total</b> .....	<b>1,428,810</b>	<b>921,507</b>	<b>507,303</b>	<b>1,340,998</b>	<b>924,522</b>	<b>416,476</b>	<b>1,468,799</b>	<b>997,532</b>	<b>471,267</b>
Sheet and plate and foil.....	996,267	757,605	238,662	944,187	755,314	188,873	1,031,440	813,390	218,050
Drawing stock, wire, and cable .....	99,024	67,198	31,826	87,384	60,986	26,398	99,618	69,022	30,596
Rod and bare wire .....	41,806	34,867	6,939	37,876	31,156	6,720	42,985	35,822	7,163
Cable and insulated wire.....	57,218	32,331	24,887	49,508	29,830	19,678	56,633	33,200	23,433
Rod, bar, pipe, tube, and shapes ...	301,096	80,530	220,566	281,181	94,018	187,163	305,318	97,358	207,960
All other <sup>1</sup> .....	32,423	16,174	16,249	28,246	14,204	14,042	32,423	17,762	14,661
	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated	Total	Integrated	Noninte- grated
	September			October					
<b>Total</b> .....	<b>1,439,916</b>	<b>971,983</b>	<b>467,933</b>	<b>1,435,317</b>	<b>958,468</b>	<b>476,849</b>			
Sheet and plate and foil.....	1,024,216		812,640	211,576	1,013,891		803,537		210,354
Drawing stock, wire, and cable .....	97,490		67,305	30,185	94,051		65,706		28,345
Rod and bare wire .....	41,998		34,429	7,569	40,767		33,723		7,044
Cable and insulated wire.....	55,492		32,876	22,616	53,284		31,983		21,301
Rod, bar, pipe, tube, and shapes ...	287,824		75,268	212,556	296,307		72,689		223,618
All other <sup>1</sup> .....	30,386		16,770	13,616	31,068		16,536		14,532
	November			December					
<b>Total</b> .....	<b>1,365,587</b>	<b>927,965</b>	<b>437,622</b>	<b>1,331,023</b>	<b>925,504</b>	<b>405,519</b>			
Sheet and plate and foil.....	973,002		780,537	192,465	970,943		784,618		186,325
Drawing stock, wire, and cable .....	87,595		60,560	27,035	80,503		58,312		22,191
Rod and bare wire .....	37,723		31,301	6,422	37,482		31,377		6,105
Cable and insulated wire.....	49,872		29,259	20,613	43,021		26,935		16,086
Rod, bar, pipe, tube, and shapes ...	277,884		71,434	206,450	251,946		66,205		185,741
All other <sup>1</sup> .....	27,106		15,434	11,672	27,631		16,369		11,262

<sup>1</sup>Data for shipments of "All other" include "Powder and paste" and "Forgings and impacts."

Table 17. Shipments and Receipts of Aluminum Mill Products: 1995 and 1994

[Thousands of pounds]

Product code	Product description	Number of companies	Gross shipments	Domestic receipts	Net shipments <sup>1</sup>
<b>1995</b>					
	Aluminum mill products.....	(NA)	15,723,667	1,316,423	14,407,244
	Sheet, plate, and foil.....	(NA)	10,807,903	801,942	10,005,961
	Sheet and plate.....	(NA)	9,745,709	801,942	8,943,767
	Sheet.....	(NA)	9,407,190	801,942	8,605,248
33532 22	Nonheat-treatable.....	22	9,183,537	<sup>2</sup> 801,942	8,381,595
33532 24	Heat-treatable.....	11	223,653	( <sup>2</sup> )	223,653
	Plate.....	(NA)	338,519	-	338,519
33531 15	Nonheat-treatable.....	6	107,374	-	107,374
33531 13	Heat-treatable.....	4	231,145	-	231,145
33533 00	Foil.....	13	1,062,194	-	1,062,194
	Rod, wire, and cable.....	(NA)	1,159,235	382,325	776,910
	Rod and bare wire.....	(NA)	552,322	382,325	169,997
33552 20	Drawing stock (redraw rod).....	7	440,557	<sup>3</sup> 382,325	58,232
33501 31	Bare wire.....	12	111,765	( <sup>3</sup> )	111,765
	Cable and insulated wire.....	(NA)	606,913	( <sup>3</sup> )	606,913
33501 63	ACSR and aluminum cable, bare.....	5	218,158	( <sup>3</sup> )	218,158
33570 99	Wire and cable, insulated or covered.....	12	388,755	( <sup>3</sup> )	388,755
	Rod, bar, pipe, tube, and shapes.....	(NA)	3,396,583	132,156	3,264,427
	Rod and bar (rolled and extruded).....	(NA)	431,121	132,156	298,965
33500 20	Alloys other than 2,000 and 7,000 series.....	17	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
33541 18	Alloys in 2,000 and 7,000 series.....	4	<sup>4</sup> 431,121	<sup>4</sup> 5132,156	<sup>4</sup> 298,965
	Pipe and tube (extruded and drawn).....	(NA)	317,648	( <sup>5</sup> )	317,648
33542 63	Alloys other than 2,000 and 7,000 series.....	24	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
33542 61	Alloys in 2,000 and 7,000 series.....	7	<sup>4</sup> 317,648	( <sup>5</sup> )	<sup>4</sup> 317,648
	Extruded shapes.....	(NA)	2,647,814	-	2,647,814
33541 25	Alloys other than 2,000 and 7,000 series.....	92	2,584,307	-	2,584,307
33541 28	Alloys in 2,000 and 7,000 series.....	11	63,507	-	63,507
	All other.....	(NA)	359,946	-	359,946
	Powder and paste.....	(NA)	132,498	-	132,498
33991 13	Atomized.....	7	74,653	-	74,653
33991 16	Other flake, powder and paste.....	8	57,845	-	57,845
	Forgings and impacts.....	(NA)	227,448	-	227,448
34635 21	Forgings.....	23	171,146	-	171,146
34635 41	Impacts.....	8	56,302	-	56,302
<b>1994</b>					
	Aluminum mill products.....	(NA)	16,258,871	1,512,739	14,746,132
	Sheet, plate, and foil.....	(NA)	11,418,043	806,452	10,611,591
	Sheet and plate.....	(NA)	10,362,372	806,452	9,555,920
	Sheet.....	(NA)	10,058,901	806,452	9,252,449
33532 22	Nonheat-treatable.....	21	9,817,875	<sup>2</sup> 806,452	9,011,423
33532 24	Heat-treatable.....	12	241,026	( <sup>2</sup> )	241,026
	Plate.....	(NA)	303,471	-	303,471
33531 15	Nonheat-treatable.....	6	110,114	-	110,114
33531 13	Heat-treatable.....	4	193,357	-	193,357
33533 00	Foil.....	13	1,055,671	-	1,055,671
	Rod, wire, and cable.....	(NA)	1,101,483	448,648	652,835
	Rod and bare wire.....	(NA)	486,812	448,648	38,164
33552 20	Drawing stock (redraw rod).....	6	364,367	<sup>3</sup> 448,648	(84,281)
33501 31	Bare wire.....	14	122,445	( <sup>3</sup> )	122,445
	Cable and insulated wire.....	(NA)	614,671	( <sup>3</sup> )	614,671
33501 63	ACSR and aluminum cable, bare.....	5	225,101	( <sup>3</sup> )	225,101
33570 99	Wire and cable, insulated or covered.....	12	389,570	( <sup>3</sup> )	389,570
	Rod, bar, pipe, tube, and shapes.....	(NA)	3,378,637	257,639	3,120,998
	Rod and bar (rolled and extruded).....	(NA)	346,469	257,639	88,830
33500 20	Alloys other than 2,000 and 7,000 series.....	16	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
33541 18	Alloys in 2,000 and 7,000 series.....	5	<sup>4</sup> 346,469	<sup>4</sup> 5257,639	<sup>4</sup> 88,830
	Pipe and tube (extruded and drawn).....	(NA)	300,326	( <sup>5</sup> )	300,326
33542 63	Alloys other than 2,000 and 7,000 series.....	24	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
33542 61	Alloys in 2,000 and 7,000 series.....	5	<sup>4</sup> 300,326	( <sup>5</sup> )	<sup>4</sup> 300,326
	Extruded shapes.....	(NA)	2,731,842	-	2,731,842
33541 25	Alloys other than 2,000 and 7,000 series.....	91	2,661,205	-	2,661,205
33541 28	Alloys in 2,000 and 7,000 series.....	10	70,637	-	70,637
	All other.....	(NA)	360,708	-	360,708
	Powder and paste.....	(NA)	145,106	-	145,106
33991 13	Atomized.....	6	73,791	-	73,791
33991 16	Other flake, powder and paste.....	9	71,315	-	71,315
	Forgings and impacts.....	(NA)	215,602	-	215,602
34635 21	Forgings.....	20	160,349	-	160,349
34635 41	Impacts.....	9	55,253	-	55,253

- Represents zero. NA Not available.

<sup>1</sup>See table 12, footnote 2.<sup>2</sup>Receipts for "Heat-treatable sheet" are combined with "Nonheat-treatable sheet" to avoid disclosing data for individual companies.<sup>3</sup>Receipts for "Cable and insulated wire" and "Bare wire" are included with "Drawing stocks" to avoid disclosing data for individual companies.<sup>4</sup>"Alloys other than 2,000 and 7,000 series" are combined with "Alloys in 2,000 and 7,000 series" to avoid disclosing data for individual companies.<sup>5</sup>Receipts for "Alloys in 2,000 and 7,000 series" are included in "Alloys other than 2,000 and 7,000 series" to avoid disclosing data for individual companies. Receipts for "Powder and paste" are included in "Alloys other than 2,000 and 7,000 series" to avoid disclosing data for individual companies.

Note: Domestic receipts data include import receipts data.

Table 18. Net Shipments of Aluminum Mill Products by Month: 1995 and 1994

[Thousands of pounds]

Product description	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1995</b>													
Aluminum mill products . . . . .	14,407,244	1,267,603	1,208,446	1,359,261	1,255,322	1,299,540	1,282,922	1,124,163	1,202,246	1,183,046	1,166,429	1,055,049	1,003,217
Total domestic receipts . . . . .	1,316,423	123,491	113,763	112,309	109,186	125,653	114,481	106,527	107,552	100,865	97,895	100,996	103,705
Sheet, plate, and foil . . . . .	10,005,961	884,418	831,864	927,629	878,677	914,169	896,280	794,357	832,057	807,322	808,071	735,574	695,543
Sheet, plate, and foil, domestic receipts . . . . .	801,942	66,951	60,273	66,752	69,192	85,213	75,205	72,388	69,446	55,373	53,675	55,517	71,957
Sheet and plate . . . . .	8,943,767	792,725	744,445	829,999	788,901	820,487	801,995	713,837	743,251	720,822	723,079	649,348	614,878
Sheet . . . . .	8,605,248	764,832	714,826	800,735	760,770	788,136	771,504	688,847	715,581	692,463	694,720	623,562	589,272
Nonheat-treatable . . . . .	8,381,595	747,457	699,133	782,470	742,738	768,681	752,520	672,858	694,175	671,942	674,364	604,124	571,133
Heat-treatable . . . . .	223,653	17,375	15,693	18,265	18,032	19,455	18,984	15,989	21,406	20,521	20,356	19,438	18,139
Plate . . . . .	338,519	27,893	29,619	29,264	28,131	32,351	30,491	24,990	27,670	28,359	28,359	25,786	25,606
Nonheat-treatable . . . . .	107,374	9,354	10,978	9,112	9,007	11,256	10,974	7,675	8,811	7,831	7,831	7,843	6,702
Heat-treatable . . . . .	231,145	18,539	18,641	20,152	19,124	21,095	19,517	17,315	18,859	20,528	20,528	17,943	18,904
Foil . . . . .	1,062,194	91,693	87,419	97,630	89,776	93,682	94,285	80,520	88,806	86,500	84,992	86,226	80,665
Rod, wire, and cable . . . . .	776,910	68,866	70,916	78,327	69,925	70,883	63,647	57,441	66,060	63,866	62,832	51,289	52,858
Rod and bare wire . . . . .	169,997	9,172	15,088	21,147	16,190	20,658	15,588	12,373	17,329	11,284	10,084	6,193	14,891
Drawing stock (redraw rod) . . . . .	58,232	(459)	6,137	11,365	7,141	10,850	6,021	4,642	7,927	891	245	(3,387)	6,859
Drawing stock (redraw rod), domestic receipts . . . . .	382,325	39,770	32,793	34,987	31,961	30,568	30,309	26,669	28,120	34,403	34,862	35,818	22,065
Bare wire . . . . .	111,765	9,631	8,951	9,782	9,049	9,808	9,567	7,731	9,402	10,393	9,839	9,580	8,032
Cable and insulated wire . . . . .	606,913	59,694	55,828	57,180	53,735	50,225	48,059	45,068	48,731	52,582	52,748	45,096	37,967
ACSR and aluminum cable, bare . . . . .	218,158	24,859	24,071	21,932	19,224	18,674	18,028	15,396	15,634	16,465	16,465	14,967	12,443
Wire and cable, insulated or covered . . . . .	388,755	34,835	31,757	35,248	34,511	31,551	30,031	29,672	33,097	36,117	36,283	30,129	25,524
Rod, bar, pipe, tube, and shapes . . . . .	3,264,427	282,409	273,806	319,098	277,507	283,682	291,747	246,409	273,084	282,341	266,355	240,109	227,880
Rod, bar, pipe, tube, and shapes, domestic receipts . . . . .	132,156	16,770	20,697	10,570	8,033	9,872	8,967	7,470	9,986	11,089	9,358	9,661	9,683
Rod and bar (rolled and extruded) . . . . .	298,965	17,815	12,448	30,658	27,243	28,793	26,733	24,070	27,659	27,802	29,248	24,661	21,835
Pipe and tube (extruded and drawn) . . . . .	317,648	27,825	26,718	28,857	26,100	27,091	27,840	23,415	27,196	29,327	27,694	23,837	21,748
Extruded shapes . . . . .	2,647,814	236,769	234,640	259,583	224,164	227,798	237,174	198,924	218,229	225,212	209,413	191,611	184,297
Alloys other than 2,000 and 7,000 series . . . . .	2,584,307	231,804	230,042	253,888	219,329	222,193	231,618	194,064	212,731	219,707	203,752	185,890	179,289
Alloys in 2,000 and 7,000 series . . . . .	63,507	4,965	4,598	5,695	4,835	5,605	5,556	4,860	5,498	5,505	5,661	5,721	5,008
All other . . . . .	359,946	31,910	31,860	34,207	29,213	30,806	31,248	25,956	31,045	29,517	29,171	28,077	26,936
Powder and paste . . . . .	132,498	12,616	12,382	13,138	11,598	10,176	10,839	9,857	10,630	9,938	9,938	10,250	11,136
Atomized . . . . .	74,653	6,405	6,466	6,259	5,427	6,174	6,466	5,925	6,650	5,890	5,890	5,979	7,122
Other flake, powder, and paste . . . . .	57,845	6,211	5,916	6,879	6,171	4,002	4,373	3,932	3,980	4,048	4,048	4,271	4,014
Forgings and impacts . . . . .	227,448	19,294	19,478	21,069	17,615	20,630	20,409	16,099	20,415	19,579	19,233	17,827	15,800
Forgings . . . . .	171,146	14,122	14,463	15,574	13,285	15,557	15,388	11,769	15,331	15,021	14,868	13,646	12,122
Impacts . . . . .	56,302	5,172	5,015	5,495	4,330	5,073	5,021	4,330	5,084	4,558	4,365	4,181	3,678
Scrap receipts <sup>1</sup> . . . . .	6,060,928	496,410	470,218	529,998	493,009	501,195	511,483	503,569	560,477	528,199	538,171	487,684	440,515
<b>1994</b>													
Aluminum mill products . . . . .	14,746,132	1,038,526	1,069,139	1,276,144	1,199,614	1,265,231	1,289,880	1,212,407	1,339,329	1,291,609	1,295,976	1,248,654	1,219,623
Total domestic receipts . . . . .	1,512,739	117,385	109,829	128,592	120,786	123,175	138,930	128,591	129,470	148,307	139,341	116,933	111,400
Sheet, plate, and foil . . . . .	10,611,591	730,104	752,316	912,309	860,240	912,295	921,028	873,968	964,234	940,517	934,411	906,174	903,995
Sheet, plate, and foil, domestic receipts . . . . .	806,452	57,423	53,706	63,104	56,712	65,888	75,239	70,219	67,206	83,699	79,480	66,828	66,948

See footnotes at end of table.

Table 18. Net Shipments of Aluminum Mill Products by Month: 1995 and 1994—Con.

[Thousands of pounds]

Product description	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1994—Con.</b>													
Sheet, plate, and foil—Con.													
Sheet and plate . . . . .	9,555,920	651,358	675,549	818,982	772,911	823,157	828,656	790,382	868,973	847,552	840,896	816,179	821,325
Sheet . . . . .	9,252,449	629,000	653,428	789,873	748,742	799,411	802,527	765,626	841,479	821,210	814,859	790,298	795,996
Nonheat-treatable . . . . .	9,011,423	612,105	636,875	767,839	728,723	783,183	784,213	746,858	818,016	795,892	790,222	770,358	777,139
Heat-treatable . . . . .	241,026	16,895	16,553	22,034	20,019	16,228	18,314	18,768	23,463	25,318	24,637	19,940	18,857
Plate . . . . .	303,471	22,358	22,121	29,109	24,169	23,746	26,129	24,756	27,494	26,342	26,037	25,881	25,329
Nonheat-treatable . . . . .	110,114	7,068	6,580	9,421	9,401	7,928	9,284	9,509	10,867	10,126	10,104	10,781	9,045
Heat-treatable . . . . .	193,357	15,290	15,541	19,688	14,768	15,818	16,845	15,247	16,627	16,216	15,933	15,100	16,284
Foil . . . . .	1,055,671	78,746	76,767	93,327	87,329	89,138	92,372	83,586	95,261	92,965	93,515	89,995	82,670
Rod, wire, and cable . . . . .	652,835	45,749	52,090	57,271	52,912	52,506	55,714	51,488	57,531	54,588	59,863	57,471	55,652
Rod and bare wire . . . . .	38,164	(684)	3,385	5,645	(615)	3,154	(1,504)	1,980	898	(904)	6,579	7,599	12,631
Drawing stock (redraw rod) . . . . .	(84,281)	(9,882)	(5,607)	(5,734)	(10,679)	(7,279)	(11,903)	(7,849)	(10,069)	(12,188)	(3,939)	(2,067)	2,915
Drawing stock (redraw rod), domestic receipts . . . . .	448,648	37,253	34,474	44,167	41,316	38,080	43,310	35,896	42,087	42,902	34,188	30,124	24,851
Bare wire . . . . .	122,445	9,198	8,992	11,379	10,064	10,433	10,399	9,829	10,967	11,284	10,518	9,666	9,716
Cable and insulated wire . . . . .	614,671	46,433	48,705	51,626	53,527	49,352	57,218	49,508	56,633	55,492	53,284	49,872	43,021
ACSR and aluminum cable, bare . . . . .	225,101	14,622	18,060	17,969	18,756	17,572	21,922	18,663	23,239	22,095	19,467	17,852	14,884
Wire and cable, insulated or covered . . . . .	389,570	31,811	30,645	33,657	34,771	31,780	35,296	30,845	33,394	33,397	33,817	32,020	28,137
Rod, bar, pipe, tube, and shapes . . . . .	3,120,998	235,126	237,660	274,594	253,917	268,140	280,715	258,705	285,141	266,118	270,634	257,903	232,345
Rod and bar (rolled and extruded) . . . . .	257,639	22,709	21,649	21,321	22,758	19,207	20,381	22,476	20,177	21,706	25,673	19,981	19,601
Alloys other than 2,000 and 7,000 series . . . . .	88,830	4,428	3,338	9,356	4,751	9,589	8,861	9,976	16,220	6,216	2,809	6,965	6,321
Alloys in 2,000 and 7,000 series . . . . .	300,326	22,560	23,528	25,475	25,159	25,658	25,912	24,971	29,204	24,452	26,805	24,703	21,899
Pipe and tube (extruded and drawn) . . . . .	2,731,842	208,138	210,794	239,763	224,007	232,893	245,942	223,758	239,717	235,450	241,020	226,235	204,125
Alloys other than 2,000 and 7,000 series . . . . .	2,661,205	203,247	205,578	234,109	218,025	226,825	239,644	218,409	232,963	229,906	234,093	219,786	198,620
Alloys in 2,000 and 7,000 series . . . . .	70,637	4,891	5,216	5,654	5,982	6,068	6,298	5,349	6,754	5,544	6,927	6,449	5,505
All other . . . . .	360,708	27,547	27,073	31,970	32,545	32,290	32,423	28,246	32,423	30,386	31,068	27,106	27,631
Powder and paste . . . . .	145,106	10,336	9,474	12,312	13,884	13,910	14,004	12,513	13,349	12,755	12,189	9,586	10,794
Atomized . . . . .	73,791	5,035	4,355	5,063	6,669	6,784	5,780	6,122	6,975	7,209	6,833	5,658	7,308
Other flake, powder and paste . . . . .	71,315	5,301	5,119	7,249	7,215	7,126	8,224	6,391	6,374	5,546	5,356	3,928	3,486
Forgings and impacts . . . . .	215,602	17,211	17,599	19,658	18,661	18,380	18,419	15,733	19,074	17,631	18,879	17,520	16,837
Forgings . . . . .	160,349	12,868	12,966	14,234	13,646	13,347	13,737	11,103	14,499	13,468	13,819	13,641	13,021
Impacts . . . . .	55,253	4,343	4,633	5,424	5,015	5,033	4,682	4,630	4,575	4,163	5,060	3,879	3,816
Scrap receipts <sup>1</sup> . . . . .	4,330,999	283,348	292,198	337,015	316,747	329,280	369,690	374,432	386,405	342,964	403,269	450,646	445,005

<sup>1</sup>Data not included in net shipments information.

See footnotes at the end of table 17.

**HISTORICAL NOTE**

Data on aluminum ingot and mill products have been collected by the Bureau of the Census since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**FUNDING**

The M33D survey is conducted under the sponsorship of the Aluminum Association.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Mary W. Ellickson, 301-457-4736.

## NONFERROUS CASTINGS (MA33E)

### INTRODUCTION

These data cover producers of nonferrous castings, whether for commercial sale or for use by the producing company.

The statistics were collected by mail on Bureau of the Census annual Form MA33E, Nonferrous Castings. The survey panel was first mailed for survey year 1994. It now consists of about 795 producers of nonferrous castings selected from approximately 2,500 establishments identified in the 1992 Census of Manufactures.

### SUMMARY OF FINDINGS

During 1995, the total shipments of nonferrous castings were 4,979 million pounds. This represented a 4-percent increase from the 1994 total shipments of 4,772 million pounds. Shipments of aluminum castings in 1995 totaled 3,182 million pounds, showing an 11-percent increase from the 1994 total of 2,878 million pounds. Shipments of copper castings totaled 909 million pounds in 1995, a 16-percent decrease from the 1994 total of 1,085 million pounds. The shipments of magnesium castings in 1995 totaled 60 million pounds, representing a 1-percent decrease from the 1994 total of 61 million pounds. Shipments of zinc castings increased 7 percent during 1995 to 476 million pounds, compared with the 1994 total of 447 million pounds. Shipments of lead castings during 1995 totaled 351 million pounds, representing a 17-percent increase, compared with the 1994 total of 301 million pounds.

### EXPLANATION OF TERMS

**Shipments for sale.** Represents commercial sales only (castings shipped to the trade). Intracompany sales are not included in this category. Value figures represent only these shipments.

**Shipments for own use.** Represents castings shipped for use by the reporting company or by a subsidiary, parent, or other affiliated company. Castings produced and consumed at the same location in the production of finished products are also included.

**Sand casting.** Castings produced by pouring molten metal into a sand mold and allowing it to solidify.

**Permanent mold casting.** Castings produced by introducing molten metal by gravity, or low pressure, into a mold constructed of durable material, usually iron or steel, and allowing it to solidify.

**Semipermanent casting.** Mold castings are made using an expendable core, such as sand.

**Die casting.** Castings produced by introducing molten metal under high pressure into a metal mold or die and allowing it to solidify.

**Centrifugal casting.** Castings produced by pouring molten metal into a spinning mold. Centrifugal force acts to distribute the metal uniformly around the interior of the mold.

**Continuous casting.** Castings produced by introducing molten metal by gravity into a watercooled graphite die from which the solidified form is continuously drawn.

Table 19. Producers' Shipments of Nonferrous Castings: 1995 and 1994

[Thousands of pounds]

Year	By type of customer			By metal				
	Total	For sale	For own use	Aluminum and aluminum-base alloy	Copper and copper-base alloy	Magnesium and magnesium-base alloy	Zinc and zinc-base alloy	Lead and lead-base alloy die
1995.....	4,978,989	3,095,233	1,883,756	3,182,129	909,132	60,072	476,992	350,664
1994.....	'4,772,408	'2,786,972	'1,985,436	'2,878,294	1,084,942	60,517	447,389	'301,266

'Revised by 5 percent or more from previously published data.

Table 20. Quantity and Value of Shipments of Nonferrous Castings by Type and Method of Castings: 1995 and 1994

[Quantity in thousands of pounds. Value in thousands of dollars]

Product code	Product description	1995			1994			Standard error of estimate (percent) for column —			
		Number of companies	Quantity	Value	Number of companies	Quantity	Value	A	B	C	D
			A	B		C	D				
	Nonferrous castings .....	(NA)	4,978,989	7,155,539	(NA)	'4,772,408	'6,518,680	(NA)	(NA)	(NA)	(NA)
	For sale .....	(NA)	3,095,233	(NA)	(NA)	'2,786,972	(NA)	(NA)	(NA)	(NA)	(NA)
	For own use .....	(NA)	1,883,756	(NA)	(NA)	'1,985,436	(NA)	(NA)	(NA)	(NA)	(NA)
	Aluminum and aluminum-base alloy .....	473	3,182,129	4,906,419	956	'2,878,294	'4,045,559	(NA)	5.0	(NA)	(NA)
	For sale .....	425	2,158,874	(NA)	869	'1,809,462	(NA)	7.0	(NA)	(NA)	(NA)
	For own use .....	87	1,023,255	(NA)	163	'1,068,832	(NA)	0.8	(NA)	(NA)	(NA)
33650 11	Sand .....	261	455,782	(NA)	580	444,889	(NA)	(NA)	(NA)	(NA)	(NA)
	For sale .....	240	395,320	(NA)	533	383,801	(NA)	1.9	(NA)	(NA)	(NA)
	For own use .....	39	60,462	(NA)	91	'61,088	(NA)	1.1	(NA)	(NA)	(NA)
33650 31	Permanent and semipermanent mold <sup>1</sup> .....	111	974,894	(NA)	195	919,121	(NA)	(NA)	(NA)	(NA)	(NA)
33630 11	Die .....	170	1,382,030	(NA)	252	1,228,501	(NA)	(NA)	(NA)	(NA)	(NA)
	For sale .....	148	833,999	(NA)	223	651,295	(NA)	16.6	(NA)	(NA)	(NA)
	For own use .....	33	548,031	(NA)	45	577,206	(NA)	1.3	(NA)	(NA)	(NA)
33650 61	All other <sup>1</sup> .....	50	369,423	(NA)	139	'285,783	(NA)	(NA)	(NA)	(NA)	(NA)
	Copper and copper-base alloy .....	252	909,132	1,223,238	558	1,084,942	'1,365,227	(NA)	1.6	(NA)	(NA)
	For sale .....	219	519,277	(NA)	490	555,527	(NA)	0.9	(NA)	(NA)	(NA)
	For own use .....	69	389,855	(NA)	126	'529,415	(NA)	35.5	(NA)	(NA)	(NA)
33660 26	Sand .....	192	335,173	(NA)	402	'373,130	(NA)	(NA)	(NA)	(NA)	(NA)
	For sale .....	164	187,973	(NA)	353	'221,568	(NA)	1.6	(NA)	(NA)	(NA)
	For own use .....	53	147,200	(NA)	87	'151,562	(NA)	1.0	(NA)	(NA)	(NA)
33660 31	Permanent and semipermanent mold <sup>1</sup> .....	26	43,456	(NA)	37	51,450	(NA)	(NA)	(NA)	(NA)	(NA)
33640 11	Die <sup>1</sup> .....	20	7,442	(NA)	26	8,259	(NA)	(NA)	(NA)	(NA)	(NA)
33660 41	Centrifugal <sup>1</sup> .....	21	173,596	(NA)	30	154,300	(NA)	(NA)	(NA)	(NA)	(NA)
33660 61	All other <sup>1</sup> .....	44	349,465	(NA)	150	497,803	(NA)	(NA)	(NA)	(NA)	(NA)
	Magnesium and magnesium-base alloy .....	43	60,072	240,273	67	60,517	287,650	(NA)	1.2	(NA)	(NA)
	For sale .....	39	60,072	(NA)	59	60,517	(NA)	(NA)	(NA)	(NA)	(NA)
	For own use .....	5	( <sup>1</sup> )	(NA)	8	( <sup>1</sup> )	(NA)	(NA)	(NA)	(NA)	(NA)
33690 15	Sand <sup>1</sup> .....	24	<sup>2</sup> 22,110	(NA)	40	<sup>2</sup> 19,589	(NA)	(NA)	(NA)	(NA)	(NA)
33640 31	Die <sup>1</sup> .....	14	37,962	(NA)	20	40,928	(NA)	(NA)	(NA)	(NA)	(NA)
33690 25	All other .....	7	( <sup>2</sup> )	(NA)	8	( <sup>2</sup> )	(NA)	(NA)	(NA)	(NA)	(NA)
	Zinc and zinc-base alloy .....	216	476,992	770,283	317	447,389	808,966	(NA)	1.8	(NA)	(NA)
	For sale .....	188	344,945	(NA)	283	345,958	(NA)	1.4	(NA)	(NA)	(NA)
	For own use .....	41	132,047	(NA)	53	101,431	(NA)	28.1	(NA)	(NA)	(NA)
33640 21	Die <sup>1</sup> .....	183	452,386	(NA)	262	417,507	(NA)	(NA)	(NA)	(NA)	(NA)
33690 11	All other <sup>1</sup> .....	37	24,606	(NA)	65	29,882	(NA)	(NA)	(NA)	(NA)	(NA)
33640 41	Lead and lead-base alloy die <sup>1</sup> .....	19	350,664	15,326	33	'301,266	'11,278	(NA)	12.4	(NA)	(NA)

NA Not available. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Castings "For sale" and "For own use" are combined to avoid disclosing data for individual companies.

<sup>2</sup>"All other magnesium and magnesium-base alloy castings" are combined with "Sand magnesium and magnesium-base alloy castings" to avoid disclosing data for individual companies.

Note: Comparable data for Schedule B export numbers and HTUSA import numbers are not available.

**HISTORICAL NOTE**

Data on nonferrous castings have been collected by the Bureau of the Census since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal

Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Mary W. Ellickson, 301-457-4736.

## INVENTORIES OF STEEL PRODUCING MILLS (M33J)

### INTRODUCTION

These data cover producers and steel service centers. Important nonmanufacturing activities, such as construction and mining, are not included.

The statistics are based on a survey of manufacturers and represent total U.S. inventories of steel mill shapes and forms. Estimates are included for companies whose reports were not received in time for tabulation.

Data for producers are based on information collected by mail on Bureau of the Census monthly Form M33J, Net Shipments and Inventories of Steel Mill Shapes and Forms (Producers Report), from companies that produce over 90 percent of total steel output. Estimates have been derived to represent 100-percent coverage of steel producers. These estimates are benchmarked annually to Current Industrial Reports Series MA33B, *Steel Mill Products*, the last being 1994.

### SUMMARY OF FINDINGS

Total inventories of steel mill shapes and forms held by steel producers, and steel service centers (warehouses) decreased from 20.5 million short tons at the end of December 31, 1994, to 19.5 million short tons in 1995.

Inventories held by steel service centers decreased from 7.3 million short tons to 6.5 million short tons in 1995, and inventories held by steel producers decreased from 13.2 to 13.0 million short tons for 1995.

### EXPLANATION OF TERMS

**Steel mill shapes and forms.** Steel mill shapes and forms include ingot, semifinished shapes such as billets and wire rods, bar and bar shapes, sheet, strip plate, tinplate, terneplate, blackplate, wire, structural shapes, and piling.

Rough and machined castings and forgings, powder, and all fabricated steel products or components, such as purchased stampings, are excluded.

Table 21. **Inventories of Steel Mill Shapes and Forms Held by Steel Service Centers, Steel Producers, and Related Statistics: 1995 and 1994**

[Million short tons]

Product description	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>1995</b>												
<b>Total inventories . . . .</b>	<b>21.1</b>	<b>21.3</b>	<b>21.3</b>	<b>21.8</b>	<b>21.7</b>	<b>21.4</b>	<b>21.6</b>	<b>20.4</b>	<b>20.8</b>	<b>19.8</b>	<b>19.6</b>	<b>19.5</b>
Steel service centers: <sup>1</sup>												
Inventories, end of month <sup>1</sup> . . . . .	7.4	7.4	7.7	7.8	7.9	7.9	7.9	7.3	7.5	7.2	6.9	6.5
Producing mills:												
Inventories, end of month . . . . .	13.7	13.9	13.6	14.0	13.8	13.5	13.7	13.1	17.3	12.6	12.7	13.0
Steel in process . . . . .	7.8	7.8	7.6	7.7	7.6	7.4	7.6	7.1	7.2	6.8	6.9	7.1
Finished steel . . . . .	5.9	6.1	6.0	6.3	6.2	6.1	6.1	6.0	6.1	5.8	5.8	5.9
<b>1994</b>												
<b>Total inventories . . . .</b>	<b>20.5</b>	<b>21.0</b>	<b>20.7</b>	<b>21.3</b>	<b>21.7</b>	<b>21.2</b>	<b>22.0</b>	<b>20.8</b>	<b>20.4</b>	<b>20.8</b>	<b>20.5</b>	<b>20.5</b>
Steel service centers: <sup>1</sup>												
Inventories, end of month <sup>1</sup> . . . . .	6.3	6.4	6.5	6.6	6.6	6.7	6.9	7.0	7.0	7.1	7.1	7.3
Producing mills:												
Inventories, end of month . . . . .	14.2	14.6	14.2	14.7	15.1	14.5	15.1	13.8	13.4	13.7	13.4	13.2
Steel in process . . . . .	8.1	8.4	8.2	8.5	8.7	8.2	8.7	7.9	7.6	7.7	7.5	7.5
Finished steel . . . . .	6.1	6.2	6.0	6.2	6.4	6.3	6.4	5.9	5.8	6.0	5.9	5.7

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Source: Steel Service Center Institute.



Table 22. Net Shipments and Imports of Steel Mill Shapes: 1995 and 1994

[Thousands of short tons]

Month and year	Manufacturers' net shipments <sup>1</sup>	Imports for consumption <sup>2</sup>
<b>1995</b>		
<b>Total.....</b>	<b>97,658</b>	<b>21,354</b>
December.....	7,494	1,413
November.....	8,103	1,467
October.....	8,636	1,364
September.....	8,177	1,377
August.....	8,519	1,557
July.....	7,294	1,696
June.....	8,321	1,804
May.....	8,439	1,876
April.....	7,794	2,180
March.....	8,953	2,083
February.....	7,799	1,919
January.....	8,129	2,618
<b>1994</b>		
<b>Total.....</b>	<b>94,128</b>	<b>26,914</b>
December.....	8,316	2,174
November.....	8,042	2,556
October.....	7,962	2,628
September.....	8,221	2,219
August.....	8,448	2,309
July.....	7,284	2,474
June.....	7,941	2,043
May.....	8,027	2,283
April.....	7,809	2,016
March.....	7,886	2,203
February.....	7,142	1,987
January.....	7,050	2,022

<sup>1</sup>Source: American Iron and Steel Institute (AISI).<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. Import tonnage is derived from following HTSUSA import numbers: 7206.10.0000 — 7306.90.5000.

Table 23. **Comparison of Manufacturers' Net Shipments With Apparent Consumption of Steel Mill Shapes by Selected Years: 1990 to 1994**

[Thousands of short tons]

Product description	1994	1993	1992	1991	1990
Manufacturers' net shipments .....	97,220	91,372	82,895	78,255	84,931
Exports <sup>1</sup> .....	3,527	3,653	3,863	4,121	3,845
Imports <sup>2</sup> .....	26,675	17,898	16,045	15,001	16,678
Apparent consumption <sup>3</sup> .....	120,368	105,617	95,077	89,135	97,764

<sup>1</sup>Source: Current Industrial Report MA33B, *Steel Mill Products*. Net shipments figures are somewhat understated because of method used to calculate these data. These figures are derived by subtracting total domestic receipts of all mill shapes at producing mills from total quantity of shipments, plus steel consumed in producing plants. Prior to 1980, import receipts were also used in net shipments calculation. Beginning in 1980, import receipts of steel mill products for further processing were collected separately and were no longer used in net shipments calculation.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. Import tonnage is derived from following 1994 HTSUSA numbers: 7206.10.0000—7306.90.5000.

<sup>3</sup>Apparent consumption is derived by subtracting exports from total of net shipments plus imports.

## HISTORICAL NOTE

Data on inventories of steel mills shapes have been collected by the Bureau of the Census since 1962. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Ann Truffa, 301-457-4846.

## INSULATED WIRE AND CABLE (MA33L)

### INTRODUCTION

These data cover companies engaged in manufacturing insulated wire and cable and/or fabricating appliance wire, cord, or flexible cordage from purchased insulated wire.

The statistics were collected by mail on Bureau of the Census annual Form MA33L, Insulated Wire and Cable. The survey panel includes all known insulators of wire and cable, as well as the largest producers of appliance wire, cord, and flexible cord sets from purchased insulated wire as measured by the dollar value of shipments from the 1992 Census of Manufactures. No estimate is included for the smaller fabricators. The total number of companies is approximately 223.

### SUMMARY OF FINDINGS

In 1995, the total value of manufacturers' shipments of insulated wire and cable increased by 10 percent to \$14,309 million, from the 1994 level of \$12,989. Electronic wire and cable increased by 11 percent to \$2,656 million, from the 1994 level of \$2,398 million. Telephone and telegraph wire and cable increased by 4 percent to \$1,762, from the 1994 level of \$1,694 million. In 1995, power wire and cable increased by 12 percent to \$1,752, from the 1994 level of \$1,560 million. Control wire and signal wire and cable decreased 4 percent to \$247 million, compared with the preceding year's figure of \$256 million. Building wire and cable increased by 19 percent to \$2,720 million, from the 1994 level of \$2,285 million. In 1995, apparatus wire and cordage decreased by 4 percent to \$794 million, compared with \$926 million in 1994. Other insulated wire and cable increased by 2 percent to \$640 million, compared with \$625 million in 1994. Magnet wire also increased by 15 percent in 1995 to \$1,494 million, from the 1994 level of \$1,303 million. Insulated optical fiber cable increased by 16 percent to \$1,421 million, from \$1,228 million in 1994. Optical fiber increased by 15 percent to \$823 million, compared with the \$713 million in 1994.

### EXPLANATION OF TERMS

**Gross weight.** Includes insulating materials but excludes packaging materials.

**AWG.** American wire gauge.

**Dual rated products.** All dual rated products are classified according to their highest ratings.

**Multi-insulated cables.** All multi-insulated cables are classified according to their primary insulation, i.e., the layer of material designed to do the electrical insulating, usually the first layer of material applied over the conductor.

**Insulated wire and cable.** All insulated wire and cable for transmitting electrical energy, signals, or communications. Excludes bare and tinned wire and cable and Aluminum Cable Steel Reinforced (ACSR).

**Magnet wire (including insulating magnet strip conductor).** All insulated wire of the type generally used in the winding of coils, including Litz wire and including insulating magnet sheet, strip, and foil. The thermal classification for bondable wires are determined by the underlying insulation. Also, the combination (film fabrics) product is classified based on the insulation on the top side.

**Electronic wire and cable.** All single and multiconductor wire and cable used for transmission, reception, or reproduction of electrical frequencies (16 gauge and smaller). Excludes telephone cable. See "Apparatus Wire and Cable" for larger gauges.

**Telephone wire and cable.** All wire and cables used in the telephone industry to transmit, receive, and monitor communications signals. Excludes coaxial and other electronic wire and cable.

**Power wire and cable.** All insulated wire and cable used for the transmission and distribution of electrical energy. Excludes communications, aircraft, and marine types.

**Control wire and signal wire and cable.** All insulated wire and cable used to transmit signals to control and actuate relays, valves, servo-mechanisms, and related devices, including traffic control cable and fire alarm cable. Excludes elevator hatch and traveling cable.

**Building wire and cable.** All wire and cable (600 volts or less) having UL labels, used within structures for light and power.

**Apparatus wire and cable.** Insulated wire and cable used in connecting electrical apparatus to a power source, and appliance wiring material (14 AWG and larger) used for internal wiring. See "Electronic Wire and Cable" for appliance wiring material smaller than 14 AWG.

**Other insulated wire and cable.** Includes bulk automotive battery and ignition wire, elevator hatch and traveling cable, airframe, shipboard, and ground support cable.

Table 24. Summary of Shipments of Insulated Wire and Cable: 1995 and 1994

[Value in thousands of dollars]

Product code	Product description	1995	1994
	Insulated wire and cable .....	14,309,388	12,988,998
3357A —	Electronic wire and cable .....	2,655,863	2,397,923
3357B —	Telephone and telegraph wire and cable .....	1,762,355	1,694,343
33578 —	Power wire and cable .....	1,636,444	1,439,676
33578 6—	Portable power cable .....	116,043	120,178
3357C —	Control wire and signal wire and cable .....	246,700	256,111
3357D —	Building wire and cable .....	2,719,705	2,284,956
33576 —	Apparatus wire and cable .....	794,328	926,059
3357E —	Other insulated wire and cable .....	640,687	625,134
33577 —	Magnet wire .....	1,493,720	1,303,443
33579 —	Insulated optical fiber cable .....	1,420,632	1,227,690
32318 —	Optical fiber cable <sup>1</sup> .....	822,911	713,485

<sup>1</sup>Data for "Optical fiber cable" are not included in the total for "Insulated wire and cable."

Table 25. Shipments of Insulated Wire and Cable: 1995 and 1994

[Copper content in thousands of pounds. Value in thousands of dollars]

Product	Product description	Shipments, including interplant transfers <sup>1</sup>					
		1995			1994		
		Number of companies	Copper content <sup>2</sup>	Value	Number of companies	Copper content <sup>2</sup>	Value
3357— pt.	Insulated wire (except magnet wire and optical wire) .	(NA)	2,549,034	10,572,125	(NA)	2,623,445	9,744,380
3357A —	Electronic wire and cable .....	98	244,422	2,655,863	102	227,689	2,397,923
	Coaxial cable, armored or unarmored:						
3357A 10	Rigid .....	7	3,259	44,104	7	<sup>b</sup> 2,542	<sup>a</sup> 128,587
3357A 12	Semirigid .....	15	14,910	411,447	15	11,471	<sup>c</sup> 345,611
	Flexible:						
3357A 13	135 C and over .....	17	<sup>b</sup> 3,531	<sup>a</sup> 55,651	19	4,172	63,347
3357A 14	Under 135 C .....	34	28,495	387,127	32	26,356	328,305
3357A 16	CATV/broadcast coaxial cable .....	8	<sup>(3)</sup>	<sup>(3)</sup>	8	<sup>(3)</sup>	<sup>(3)</sup>
3357A 22	Antenna lead-in wire .....	7	<sup>3</sup> 10,739	<sup>3</sup> 421,310	8	<sup>3</sup> 12,090	<sup>3</sup> 427,216
	Hookup wire (single conductor, shielded, and nonshielded):						
3357A 23	135 C and over temperature rating .....	30	14,177	200,002	30	11,748	162,751
3357A 25	Under 135 C temperature rating .....	45	33,302	153,686	48	30,371	148,658
	Multiconductor electronic wire and cable (shielded and nonshielded):						
3357A 30	Flat and ribbon cable .....	25	11,225	<sup>b</sup> 96,793	25	12,495	91,365
	Other multiconductor electronic wire and cable:						
	Shielded:						
3357A 31	135 C and over temperature rating .....	20	36,603	<sup>a</sup> 234,472	21	37,486	230,739
3357A 33	Under 135 C temperature rating .....	39	<sup>a</sup> 46,920	<sup>a</sup> 316,147	42	<sup>a</sup> 43,711	<sup>r</sup> 288,196
	Nonshielded:						
3357A 35	135 C and over temperature rating .....	12	<sup>b</sup> 9,147	<sup>b</sup> 89,723	13	<sup>r</sup> 6,671	<sup>r</sup> 63,530
3357A 37	Under 135 C temperature rating .....	32	<sup>a</sup> 32,114	245,401	34	<sup>a</sup> 28,576	219,618
3357B —	Telephone and telegraph wire and cable .....	32	420,575	1,762,355	33	456,955	1,694,343
3357B 41	Jumper and distributing frame wire .....	6	<sup>(4)</sup>	<sup>(4)</sup>	7	<sup>(4)</sup>	<sup>(4)</sup>
3357B 43	Station wire and cable .....	17	<sup>4</sup> 22,714	<sup>4</sup> 156,191	16	<sup>4</sup> 21,004	<sup>4</sup> 113,703
3357B 73	Telephone cord sets and cordage .....	7	1,176	45,462	8	2,229	67,228
3357B 52	Inside wiring cable .....	20	62,951	336,574	21	55,134	258,726
3357B 55	Drop and bridle and duct wire .....	5	<sup>(5)</sup>	<sup>(5)</sup>	6	<sup>(5)</sup>	<sup>(5)</sup>
3357B 68	Rural and urban distribution wire and cable .....	3	<sup>5</sup> 34,906	<sup>5</sup> 176,139	3	<sup>5</sup> 29,702	<sup>5</sup> 162,053
3357B 73	Polyethylene covered exchange area and toll cable (PIC and PULP insulated) .....	8	262,987	887,855	7	309,342	947,924
3357B 90	Other telephone and telegraph wire and cable .....	6	35,841	160,134	6	<sup>a</sup> 39,544	144,709

See footnotes at end of table.

Table 25. Shipments of Insulated Wire and Cable: 1995 and 1994—Con.

[Copper content in thousands of pounds. Value in thousands of dollars]

Product	Product description	Shipments, including interplant transfers <sup>1</sup>					
		1995			1994		
		Number of companies	Copper content <sup>2</sup>	Value	Number of companies	Copper content <sup>2</sup>	Value
33578 —	Power wire and cable.....	27	287,782	1,636,444	30	280,944	<sup>r</sup> 1,439,676
33578 07	Paper insulated cable (all voltages, all types).....	4	<sup>(e)</sup>	<sup>(e)</sup>	4	<sup>(e)</sup>	<sup>(e)</sup>
	Plastics and rubber insulated:						
	600 volts or less:						
33578 08	Portable welding cable.....	8	17,335	52,120	8	16,493	40,019
33578 17	Underground distribution cable (UD, URD).....	10	<sup>b</sup> 9,341	284,558	9	<sup>b</sup> 7,162	<sup>r</sup> 274,036
33578 19	Thermoplastics insulated power cable.....	13	<sup>a</sup> 26,024	<sup>a</sup> 61,891	13	15,943	43,079
	Thermoset insulated:						
33578 20	Armored, rubber and cross-linked.....	9	6,956	24,436	9	8,177	22,975
33578 21	Unarmored, rubber.....	8	37,608	136,316	7	34,915	117,354
33578 22	Unarmored, cross-linked.....	11	<sup>a</sup> 13,822	<sup>a</sup> 44,279	11	18,469	55,810
33578 23	Rubber (R, RH, RHH, RHW, USE, etc.).....	2	<sup>(f)</sup>	<sup>(f)</sup>	4	<sup>(f)</sup>	<sup>(f)</sup>
33578 25	Weatherproof cable.....	3	<sup>(f)</sup>	<sup>(f)</sup>	4	<sup>(f)</sup>	<sup>(f)</sup>
	Service drop cable:						
33578 27	Thermoset insulated.....	4	<sup>(f)</sup>	<sup>(f)</sup>	4	<sup>(f)</sup>	<sup>(f)</sup>
33578 28	Thermoplastics insulated.....	4	<sup>r</sup> 18,734	<sup>r</sup> 131,013	3	<sup>r</sup> 17,433	<sup>r</sup> 126,486
	Over 600 volts:						
33578 37	Underground distribution cable (UD, URD), all insulations (jacketed and unjacketed).....	6	<sup>a</sup> 52,399	<sup>a</sup> 371,928	5	53,270	361,046
33578 39	Thermoplastics insulated power cable, excluding underground.....	5	5,684	36,167	5	<sup>c</sup> 5,848	<sup>b</sup> 25,225
	Thermoset insulated power cable, excluding underground:						
	Over 600 volts to 15 kV:						
33578 41	Armored, rubber and cross-linked.....	10	13,634	57,526	9	14,361	59,478
33578 42	Unarmored, rubber.....	8	48,787	193,134	8	48,814	176,292
33578 43	Unarmored, cross-linked.....	10	17,790	157,738	11	17,208	48,200
33578 44	Over 15 kV (rubber and cross-linked).....	4	2,768	24,424	4	3,350	25,507
33578 50	Other power wire and cable.....	5	<sup>e</sup> 16,900	<sup>e</sup> 60,914	6	<sup>e</sup> 19,501	<sup>e</sup> 64,169
33578 6—	Portable power cable.....	8	31,240	116,043	9	30,460	120,178
33578 61	2 kV or less.....	8	21,375	87,849	9	<sup>b</sup> 19,790	<sup>b</sup> 79,977
	Over 2 kV:						
33578 62	Portable cross-linked jacketed cable (mine shovel cable).....	4	<sup>a</sup> 9,865	<sup>a</sup> 28,194	5	<sup>a</sup> 10,670	<sup>a</sup> 40,201
33578 63	Portable noncross-linked jacketed cable.....	2	<sup>(e)</sup>	<sup>(e)</sup>	3	<sup>(e)</sup>	<sup>(e)</sup>
3357C —	Control wire and signal wire.....	32	39,587	246,700	32	44,292	<sup>r</sup> 256,111
3357C 11	Signal wire and cable.....	21	<sup>a</sup> 18,180	<sup>b</sup> 151,825	19	16,900	<sup>r</sup> 140,138
	Control wire and cable, excluding elevator cable:						
3357C 14	Thermoset insulated.....	10	6,843	41,471	12	<sup>a</sup> 8,372	<sup>a</sup> 46,841
3357C 17	Thermoplastics insulated.....	17	14,564	53,404	18	<sup>a</sup> 19,020	<sup>a</sup> 69,132
3357D —	Building wire and cable.....	25	1,148,986	2,719,705	26	1,135,921	2,284,956
	Building wire and cable having underwriters' labels:						
	Thermoset insulated:						
3357D 37	Cross-linked polyethylene (XHHW).....	15	48,067	118,529	16	49,185	<sup>r</sup> 110,329
3357D 38	Cross-linked polyethylene (USE).....	9	15,911	54,677	9	16,123	<sup>r</sup> 53,903
	Thermoplastics insulated:						
3357D 40	Flame-retardant nylon (THHN, THWN).....	19	655,198	1,532,397	17	641,430	1,142,454
3357D 49	Moisture and heat resistant (TW, THW).....	9	2,244	5,124	10	2,438	4,863
3357D 51	Service entrance cable (SER, SEU, ASE).....	7	7,754	95,844	8	8,786	<sup>r</sup> 96,086
	Nonmetallic branch-circuit and underground feeder:						
3357D 54	Type NM-B.....	8	316,281	647,933	8	320,816	622,601
3357D 55	Type UF and NMC (corrosion resistant).....	10	40,413	81,575	10	<sup>r</sup> 40,891	87,898
3357D 57	Metallic armored cable (all AC types).....	7	43,446	138,609	7	<sup>c</sup> 39,465	121,539
3357D 58	Other building wire and cable.....	7	19,672	45,017	9	<sup>a</sup> 16,787	<sup>a</sup> 45,283

See footnotes at end of table.

Table 25. Shipments of Insulated Wire and Cable: 1995 and 1994—Con.

[Copper content in thousands of pounds. Value in thousands of dollars]

Product	Product description	Shipments, including interplant transfers <sup>1</sup>					
		1995			1994		
		Number of companies	Copper content <sup>2</sup>	Value	Number of companies	Copper content <sup>2</sup>	Value
33576 —	Apparatus wire and cordage <sup>9</sup> .....	49	186,661	794,328	53	237,284	<sup>r</sup> 926,059
	Flexible cordage:						
33576 13	Thermoset insulated.....	9	5,683	27,333	11	<sup>r</sup> 13,721	69,912
33576 15	Thermoplastics, including thermoplastics elastomers.....	21	<sup>b</sup> 28,889	<sup>b</sup> 60,033	19	35,236	71,744
33576 42	Extension cord sets.....	10	<sup>b</sup> 28,168	<sup>b</sup> 111,781	12	44,960	<sup>r</sup> 185,787
33576 43	Fixed power supply cords.....	17	21,131	162,128	18	20,079	150,780
33576 44	Detachable power supply cords.....	7	<sup>(10)</sup>	<sup>(10)</sup>	8	<sup>(10)</sup>	<sup>(10)</sup>
33576 47	Retractable power cords and other.....	9	<sup>10</sup> 10,625	<sup>10</sup> 84,368	8	<sup>10</sup> 10,900	<sup>10</sup> 84,448
	Apparatus wire:						
33576 21	Appliance fixture wire.....	22	39,703	140,602	23	58,541	172,666
	Appliance wiring material 14 gauge and larger, including motor lead and transformer lead wire:						
33576 23	Thermoset insulated.....	5	8,505	56,299	6	<sup>c</sup> 7,766	<sup>b</sup> 49,079
33576 24	Thermoplastics insulated.....	15	20,101	55,643	15	<sup>a</sup> 22,496	<sup>a</sup> 64,390
33576 28	Submersible pump cable.....	6	<sup>b</sup> 6,385	<sup>b</sup> 17,244	8	<sup>b</sup> 10,176	<sup>b</sup> 17,040
33576 29	Other apparatus wire and cable, including tool wire.....	19	<sup>a</sup> 17,471	<sup>a</sup> 78,897	19	<sup>b</sup> 13,409	<sup>b</sup> 60,213
3357E —	Other insulated wire and cable.....	51	189,781	640,687	49	209,900	625,134
	Automotive:						
3357E 72	Bulk automotive primary wire.....	13	138,709	331,791	14	142,438	286,140
3357E 74	Bulk battery cable.....	7	13,051	27,345	7	<sup>r</sup> 12,627	26,238
3357E 76	Bulk ignition wire.....	7	3,524	56,204	7	<sup>r</sup> 3,608	<sup>r</sup> 55,910
3357E 78	Other automotive wire and cable.....	9	<sup>b</sup> 10,533	<sup>a</sup> 65,611	8	<sup>r</sup> 9,960	<sup>r</sup> 53,375
	Airframe, shipboard and ground support cable, excluding coaxial cable and ignition cable:						
3357E 79	Airframe and missile, including ground support cable.....	12	<sup>a</sup> 5,546	<sup>b</sup> 41,086	14	<sup>a</sup> 4,905	32,222
3357E 81	Shipboard cable.....	7	2,719	24,897	7	<sup>b</sup> 3,401	<sup>b</sup> 27,529
3357E 98	Other insulated or covered wire and cable, n.e.c. ...	21	15,699	93,753	26	32,961	143,720

NA Not available. n.e.c. Not elsewhere classified. pt. Part. <sup>r</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Interplant transfers for 1995 totaled \$208,990, and for 1994 totaled \$252,315. See table 29 for additional details.<sup>2</sup>Aluminum content for 1995 totaled 299,348 thousand pounds and for 1994 totaled 388,918 thousand pounds. See table 26 for additional details.<sup>3</sup>Product codes 3357A 16 and 3357A 22 are combined to avoid disclosing data for individual companies.<sup>4</sup>Product codes 3357B 41 and 3357B 43 are combined to avoid disclosing data for individual companies.<sup>5</sup>Product codes 3357B 55 and 3357B 68 are combined to avoid disclosing data for individual companies.<sup>6</sup>Product codes 33578 07 and 33578 50 are combined to avoid disclosing data for individual companies.<sup>7</sup>Product codes 33578 23, 33578 25, and 33578 27 are combined with product code 33578 28 to avoid disclosing data for individual companies.<sup>8</sup>Product codes 33578 62 and 33578 63 are combined to avoid disclosing data for individual companies.<sup>9</sup>Data includes the following: (a) all known establishments that insulate wire and cable and then fabricate into finished products (SIC product code 33576), and (b) establishments from product code 36996 that manufacture wire, cord, and flexible cord sets from purchased insulated wire.<sup>10</sup>Product codes 33576 44 and 33576 47 are combined to avoid disclosing data for individual companies.Note: Data presented in this table are for copper insulated wire and cable. See table 26 for aluminum content information. Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item is estimated. <sup>b</sup>26 to 50 percent of this item is estimated. <sup>c</sup>51 percent or more of this item is estimated.

Table 26. Aluminum Content of Selected Insulated Wire and Cable: 1995 and 1994

[Thousands of pounds. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Number of companies	Gross weight	Value	Number of companies	Gross weight	Value
3357— pt.	Insulated wire (except magnet wire) .....	(X)	342,696	2,877,259	(X)	377,157	'2,902,997
3357A —	Electronic wire and cable .....	5	( <sup>1</sup> )	( <sup>1</sup> )	5	( <sup>1</sup> )	( <sup>1</sup> )
33578 —	Power wire and cable .....	9	<sup>1</sup> 285,868	<sup>1</sup> 1,714,881	14	<sup>1</sup> 322,743	<sup>1</sup> '1,598,951
33578 17	Underground distribution cable, all insulations—600 volts or less .....	5	128,893	258,665	4	139,945	'251,095
33578 27	Service drop cable, thermoset insulated .....	3	33,596	71,625	3	37,988	'64,500
33578 28	Service drop cable, thermoplastics insulated .....	2	( <sup>2</sup> )	( <sup>2</sup> )	3	( <sup>2</sup> )	( <sup>2</sup> )
33578 37	Underground distribution cable, all insulations—over 600 volts .....	6	<sup>2</sup> 57,303	<sup>2</sup> 403,784	5	<sup>2</sup> '61,991	<sup>2</sup> '388,311
33578 42	Thermoset insulated power cable, unarmored, rubber—over 600 volts to 15 kV .....	4	( <sup>3</sup> )	( <sup>3</sup> )	4	( <sup>3</sup> )	( <sup>3</sup> )
33578 43	Thermoset insulated power cable, unarmored, cross-linked—over 600 volts to 15 kV .....	3	<sup>3</sup> 4,041	<sup>3</sup> 166,373	4	<sup>3</sup> 4,267	<sup>3</sup> '151,109
3357D —	Building wire and cable .....	5	<sup>4</sup> 56,828	<sup>4</sup> 1,162,378	8	<sup>4</sup> '54,414	<sup>4</sup> '1,304,046
3357D 38	Thermoset insulated, cross-linked polyethylene (USE) ..	4	9,406	41,485	3	9,874	'39,605
3357E —	Other insulated wire and cable .....	2	( <sup>4</sup> )	( <sup>4</sup> )	3	( <sup>4</sup> )	( <sup>4</sup> )

pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Product codes 3357A and 33578 are combined to avoid disclosing data for individual companies.

<sup>2</sup>Product codes 33578 28 and 33578 37 are combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 33578 42 and 33578 43 are combined to avoid disclosing data for individual companies.

<sup>4</sup>Product codes 3357D and 3357E are combined to avoid disclosing data for individual companies.

Table 27. Copper Shipments of Magnet Wire, Including Interplant Transfers: 1995 and 1994

[Copper gross weight in thousands of pounds. Value in thousands of dollars]

Product code	Product description	Shipments, including interplant transfers <sup>1</sup>					
		1995			1994		
		Number of companies	Gross weight <sup>1</sup>	Value	Number of companies	Gross weight <sup>1</sup>	Value
33577 —	Magnet wire .....	(NA)	686,652	1,352,160	(NA)	672,205	1,172,819
33577 1—	Class 105 .....	(NA)	52,229	85,448	(NA)	'54,717	'74,291
33577 11	7 AWG and larger round (also all square and rectangle) .....	6	9,605	16,277	6	9,351	12,695
33577 13	8 to 21 AWG inclusive .....	6	29,871	40,084	7	'31,139	'37,180
33577 15	22 to 32 AWG inclusive .....	6	11,310	24,237	7	'13,046	'20,564
33577 18	33 to 44 AWG inclusive .....	6	1,443	4,850	7	'1,181	'3,852
33577 2—	Classes 130 and 155 .....	(NA)	140,889	332,628	(NA)	'146,409	'315,361
33577 20	7 AWG and larger round (also all square and rectangle) .....	3	( <sup>2</sup> )	( <sup>2</sup> )	-	-	-
33577 22	8 to 21 AWG inclusive .....	10	<sup>2</sup> 35,120	<sup>2</sup> 75,942	11	'31,001	'52,423
33577 24	22 to 32 AWG inclusive .....	15	82,618	177,624	14	'92,568	'196,077
33577 28	33 to 44 AWG inclusive .....	12	23,151	79,062	11	22,840	66,861
33577 4—	Class 180 and higher .....	(NA)	420,820	751,844	(NA)	407,981	655,174
33577 40	7 AWG and larger round (also all square and rectangle) .....	8	39,331	89,905	8	39,042	77,726
33577 42	8 to 21 AWG inclusive .....	12	262,441	416,519	13	249,627	360,721
33577 44	22 to 32 AWG inclusive .....	13	112,280	217,547	14	112,578	199,068
33577 48	33 to 44 AWG inclusive .....	9	6,768	27,873	9	'6,734	'17,659
33577 80	Miscellaneous film coated, n.e.c. ....	3	23,098	37,932	4	'25,723	'41,405
33577 pt.	Nonfilm coated (fibrous and tape) .....	(NA)	49,616	144,308	(NA)	37,375	'86,588
33577 81, 83	Class 130 and below .....	5	17,130	41,418	5	'12,359	'26,746
33577 85, 87	Class 155 and above .....	7	( <sup>3</sup> )	( <sup>3</sup> )	7	( <sup>3</sup> )	( <sup>3</sup> )
33577 88	Miscellaneous nonfilm coated, n.e.c. ....	4	<sup>3</sup> 32,486	<sup>3</sup> 102,890	2	<sup>3</sup> 25,016	<sup>3</sup> '59,842

- Represents zero. NA Not available. n.e.c. Not elsewhere classified. pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Interplant transfers for 1995 totaled 89,714 thousands of pounds of copper and for 1994 totaled 128,319 thousands of pounds of copper.

<sup>2</sup>Product codes 33577 20 and 33577 22 are combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 33577 85, 33577 87, and 33577 88 are combined to avoid disclosing data for individual companies.

Table 28. Aluminum Shipments of Magnet Wire, Including Interplant Transfers: 1995 and 1994

[Aluminum gross weight in thousands of pounds. Value in thousands of dollars]

Product code	Product description	Shipments, including interplant transfers <sup>1</sup>					
		1995			1994		
		Number of companies	Gross weight	Value	Number of companies	Gross weight	Value
33577 —	Magnet wire .....	11	55,190	142,460	12	<sup>1</sup> 55,502	130,624
3577 pt.	Film coated .....	8	49,921	132,149	9	<sup>1</sup> 50,410	121,720
3577 1—	Class 105 .....	4	( <sup>2</sup> )	( <sup>2</sup> )	6	( <sup>2</sup> )	( <sup>2</sup> )
3577 2—	Classes 130 and 155 .....	7	<sup>2</sup> 21,004	<sup>2</sup> 51,869	5	<sup>2</sup> <sup>1</sup> 21,110	<sup>2</sup> <sup>1</sup> 47,948
3577 4—	Class 180 and higher .....	7	28,917	80,280	6	<sup>1</sup> 29,300	<sup>1</sup> 73,772
3577 pt.	Other types of magnet wire (nonfilm coated; insulated magnet sheet, strip, and foil; and film coated, 45 AWG and finer) .....	4	5,269	10,311	5	<sup>1</sup> 5,092	<sup>1</sup> 8,904

pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Interplant transfers for 1995 totaled 15,716 thousand pounds of aluminum and for 1994 totaled 19,119 thousand pounds of aluminum.<sup>2</sup>Product codes 3577 1— and 3577 2— are combined to avoid disclosing data for individual companies.

Table 29. Value of Interplant Transfers of Selected Insulated Wire and Cable: 1995 and 1994

[Thousands of dollars]

Product code	Product description	1995		1994	
		Number of companies	Value	Number of companies	Value
3357 pt.	Insulated wire (except magnet wire) .....	10	208,990	17	<sup>1</sup> 252,315
3357A —	Electronic wire and cable .....	5	55,218	6	<sup>1</sup> 70,734
3357B —	Telephone and telegraph wire and cable .....	2	( <sup>1</sup> )	3	( <sup>1</sup> )
33578 —	Power wire and cable .....	2	( <sup>1</sup> )	3	( <sup>1</sup> )
3357C —	Control wire and signal wire and cable .....	-	-	2	( <sup>1</sup> )
3357D —	Building wire and cable .....	1	( <sup>1</sup> )	1	( <sup>1</sup> )
33576 —	Apparatus wire and cordage .....	2	<sup>1</sup> 141,072	4	<sup>1</sup> 163,146
3357E —	Other insulated wire and cable .....	4	12,700	5	18,435

- Represents zero. pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Product codes 3357B, 33578, 3357C, and 3357D are combined to avoid disclosing data for individual companies.

Table 30. Value of Shipments of Fiber Optic Cable and Optical Fiber: 1995 and 1994

[Thousands of dollars]

Product code	Product description	1995		1994	
		Number of companies	Value	Number of companies	Value
33579 —	Insulated optical fiber cable .....	37	1,420,632	38	<sup>1</sup> 1,227,690
33579 pt.	Communication applications .....	25	1,379,650	26	<sup>1</sup> 1,195,142
	Single-mode stepped-index:				
33579 12	Dispersion shifted .....	11	( <sup>1</sup> )	9	( <sup>1</sup> )
33579 13	Dispersion unshifted .....	14	<sup>1</sup> 1,206,509	15	<sup>1</sup> 1,060,309
33579 14	Multimode stepped index .....	5	( <sup>2</sup> )	6	( <sup>2</sup> )
33579 15	Multimode graded index .....	19	<sup>2</sup> 173,141	19	<sup>2</sup> <sup>1</sup> 134,833
33579 21	Other applications .....	15	40,982	16	<sup>1</sup> 32,548
	Optical fiber for data and nondata transmission .....	25	822,911	26	713,485
32318 95	Optical fiber used for data transmission .....	16	738,963	17	643,199
32318 97	Optical fiber used for nondata transmission .....	14	83,948	14	<sup>1</sup> 70,286

pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Product codes 33579 12 and 33579 13 are combined to avoid disclosing data for individual companies.<sup>2</sup>Product codes 33579 14 and 33579 15 are combined to avoid disclosing data for individual companies.



Table 31. Shipments, Exports, and Imports for Consumption of Insulated Wire and Cable: 1995 and 1994

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1 2</sup>	Imports for consumption <sup>3 4</sup>
<b>1995</b>				
	Insulated wire and cable .....	14,309,388	2,536,815	1,939,060
3357A —	Electronic wire and cable .....	2,655,863	491,898	165,032
3357B —	Telephone and telegraph wire and cable .....	(5)	(5)	(5)
33578 —	Power wire and cable <sup>5</sup> .....	(5)	(5)	(5)
33578 6—	Portable power cable .....	(5)	(5)	(5)
3357C —	Control wire and signal wire and cable .....	(5)	(5)	(5)
3357D —	Building wire and cable .....	(5)	(5)	(5)
3357E —	Other insulated wire and cable .....	(5)	(5)	(5)
33576 —	Apparatus wire and cordage and flexible cord sets .....	(5)	(5)	(5)
33577 —	Magnet wire .....	<sup>5</sup> 9,409,982	<sup>5</sup> 1,569,439	<sup>5</sup> 1,651,842
33579 —	Insulated optical fiber cable .....	(7)	(7)	(7)
32318 —	Optical fiber cable .....	<sup>7</sup> 2,243,543	<sup>7</sup> 475,478	<sup>7</sup> 122,186
<b>1994</b>				
	Insulated wire and cable .....	12,988,998	2,228,109	1,479,083
3357A —	Electronic wire and cable .....	2,397,923	401,447	138,979
3357B —	Telephone and telegraph wire and cable .....	(5)	(5)	(5)
33578 —	Power wire and cable <sup>5</sup> .....	(5)	(5)	(5)
3357C —	Control wire and signal wire and cable .....	(5)	(5)	(5)
3357D —	Building wire and cable .....	(5)	(5)	(5)
3357E —	Other insulated wire and cable .....	(5)	(5)	(5)
33576 —	Apparatus wire and cordage and flexible cord sets .....	(5)	(5)	(5)
33577 —	Magnet wire .....	<sup>5</sup> 8,649,900	<sup>5</sup> 1,408,525	<sup>5</sup> 1,261,475
33579 —	Insulated optical fiber cable .....	(7)	(7)	(7)
32318 —	Optical fiber cable .....	<sup>7</sup> 1,941,175	<sup>7</sup> 418,137	<sup>7</sup> 78,629

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>2</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value to port of export.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. These data include both import value and duty value.

<sup>4</sup>These import data include other items such as Christmas tree lights, ignition harness sets, and ignition wiring sets.

<sup>5</sup>Product codes 3357B, 33578, 33578 6—, 3357C, 3357D, 3357E, 33576, and 33577 are combined to avoid disclosing data for individual companies.

See tables 26 through 30 for individual product data.

<sup>6</sup>Manufacturers' shipments for "Power wire and cable" include "Mineral and paper insulated cable," while the export data do not.

<sup>7</sup>Product codes 33579 and 32318 are combined to avoid disclosing data for individual companies. See tables 26 through 30 for individual product data.

**HISTORICAL NOTE**

Data on insulated wire have been collected by the Bureau of the Census since 1965. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are

also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Mary W. Ellickson, 301-457-4736.

## Chapter 7. Electronics

### COMPUTERS AND OFFICE AND ACCOUNTING MACHINES (MA35R)

#### INTRODUCTION

These data cover manufacturers of computers and office and accounting machines, except very small firms (generally less than 10 employees) for which 1987 Census of Manufactures data were derived from administrative records of other government agencies. The statistics were collected by mail on Bureau of the Census annual Form MA35R, Computers and Office and Accounting Machines. The survey panel includes all known producers of these products, except the very small firms excluded from the scope of the survey. Approximately 818 companies are included. No estimate is derived for the small firms excluded from the scope of the survey.

#### SUMMARY OF FINDINGS

In 1995, manufacturer's shipments of computers were valued at \$50.3 billion, an increase of 31.5 percent from the 1994 total of \$38.3 billion. Computer storage devices and equipment were valued at \$8.1 billion in 1995, an increase of 38.8 percent from the 1994 total of \$5.6 billion. Loaded computer processor boards and board subassemblies were valued at \$20.6 billion in 1995, an increase of 17.4 percent from the 1994 total of \$17.5 billion. Magnetic and optical recording media were valued at \$5.4 billion in 1995, an increase of 12.8 percent from the 1994 total of \$4.8 billion.

#### EXPLANATION OF TERMS

**Computers.** These automatic data processing units are capable of: (1) performing arithmetic computations, (2) processing data in accordance with a processing program, (3) immediately storing the processing program and the data necessary for execution of the processing program, and (4) executing a processing program without human intervention, on the basis of instructions contained in the program, to automatically modify execution by logical decision during the performance of processing tasks.

**General-purpose computers.** A computer designed to solve a large variety of problems; e.g., a stored program computer that may be adapted to any of a very large class of applications.

**Digital computers.** A computer that processes information represented by combinations of discrete or discontinuous data, compared with an analog computer for continuous data. More specifically, it is a device for performing sequences or arithmetic and logical operations. Still more specifically, it is a stored program digital computer capable of performing sequences of internally stored instructions, as opposed to calculators, on which a sequence is impressed manually.

**Analog computers.** A computer that represents variables by physical analogies. Thus, any computer that solves problems by translating physical conditions such as flow, temperature, pressure, angular position, or voltage into related mechanical or electrical equivalent circuits as an analog for the physical phenomenon being investigated. In general, it is a computer that uses an analog for each variable and produces analogs as output. Thus, an analog computer measures continuously; whereas, a digital computer counts discretely.

**Hybrid computers.** A computer designed with both digital and analog characteristics, combining the advantages of analog as well as digital computers, when working as a system. Hybrid computers are used extensively in simulation process control systems where it is necessary to have a close representation with the physical world. The hybrid system provides better precision than can be attained with analog computers and greater speed than is possible with digital computers, plus the ability to accept input data in either form.

**Special-purpose computers.** A special-purpose computer is a general-purpose computer programmed and/or configured to operate upon a restricted class of problems.

**Peripheral equipment for computers.** In a data processing system, any equipment, distinct from the processing unit, that may provide the system with outside communication or additional facilities. Includes input/output typewriters and displays sold as part of a large office system. Included are:

*Input/output equipment.* Terminals include those units that, in addition to their capabilities of displaying data or accepting data input, are capable of performing other functions

such as stamping approvals for bank account withdrawals, time stamping, and issuing receipts. A unit is included if it meets all of the following conditions:

1. It is connectable to the processing unit either directly or through one or more other units;
2. It is specifically designed as part of such a system. (It must in particular, unless it is a power supply unit, be able to accept or deliver data in a form (code or signals) that can be used by the system.)

*Computer storage devices.* Storage in addition to the main storage of a computer; e.g., magnetic tapes, disks, or magnetic drums. Auxiliary storage usually holds much larger amounts of information than the main storage, and the information is accessible less rapidly. Computer terminals. A point at which information can enter or leave a computer communication network. An input/output device to send or receive data in an environment associated with the job to be performed, capable of transmitting entries to and obtaining output from the computer system of which it is a part.

*Cash registers.* Stand-alone electronic devices, including adding device with cash drawer and excluding terminals that have interactive communication capabilities. Firmware based, fixed or parameterized function devices developed primarily for cash control, with limited transaction or merchandise information as a byproduct.

*Fund transfer devices.* Devices facilitating the handling of various financial transactions involving the consumer and financial institutions. Typically, these devices provide services such as account status inquiries, transfers of funds to and from various accounts, withdrawals, deposits, and payments.

*Point-of-sale devices.* Devices facilitating the handling of various retail transactions involving the sale, exchange, or return of merchandise or service.

**Accounting machines.** A keyboard actuated machine that prepares accounting records. A machine that may read data from external storage media such as cards or tapes, and automatically produces accounting records or tabulations, usually on continuous forms.

**Calculating machines.** Devices requiring manual means for entering numerical data for performance of arithmetic operations. These machines, by nature, require frequent operator intervention. A calculator uses separate, fixed storage areas for its programs and for the storage of data. These machines cannot execute programs that modify themselves during their execution. There are two major classifications of these machines: printing calculating machines print one or more of the significant elements of computation; nonprinting calculating machines display one

or more of the significant elements of computations. Includes both three- and four-operation printing calculators. Three-operation printing calculators are those incorporating short-cut multiplication and/or fully "automatic multiplication" and division.

**Duplicating machines.** A machine in which an ink image on a master is transferred onto a copy paper.

**Postage franking machines.** Machines that print a design in place of the postage stamp. The machine has a non-reversible totalling device that adds up the total value of the postage printed. In addition, the machine can often be used for other printing on the envelope; e.g., advertising slogans.

**Dictating, transcribing, and recording machines and systems.** Machines that are designed as office machines for conference recording, combination dictating, and telephone recording used to produce a written record, but excluding home-type wire and tape recorders. A single recording unit with a number of dictating stations should be counted as one unit or system. A system consists of a recorder and a transcribing unit with more than one dictating station.

**Standard typewriters.** Machines, electric or nonelectric, designed solely for preparation of documents with letter printlike characters and symbols that are operated manually by consecutive depressing of keyboard keys. A typewriter contains a four-row keyboard, including alpha and numeric as well as special symbols. It may or may not include special attachments to be used in the preparation of addresses or other stencils, braille typing for the blind, and similar materials. In addition, it may or may not include special carriages, pin-feed platens, and other devices used to increase the speed of the typing on continuous forms. Machines that include accounting registers are excluded.

**Bar code.** An array of rectangular bars and spaces arranged in a predetermined pattern, following unambiguous rules in a specific way, to represent elements of data that are referred to as characters.

**Code reader or scanner.** A device that examines a spatial pattern, one part after another, and generates analog or digital signals corresponding to the pattern. The major components of a bar code scanner are an illumination source, a photodetector device, and a microcomputer. A focused light beam is moved across the symbol (bar code), the reflected light is received by the photodetector, which in turn generates a voltage (analog signal) that is proportional to the amount of light reflected by the signal. The signal from the photodetector is conditioned by preprocessor circuitry before being presented to the microcomputer for analysis.

**Decoder.** An electronic package that receives the signals from the scanner, and then performs the algorithm to interpret the signals into meaningful data and provides the interface to other devices.

**Optical character recognition (OCR).** Relies on a sensor to differentiate between light-reflecting background and printed data that do not reflect light. Output from the sensor is fed to a set of recognition logics, and then forwarded to the computer.

**Magnetic strip.** Records, or encodes, information onto a material, using low or high energy electromagnetic charges. These charges or signals can then be read by a decoder that translates them into numbers and characters for identification by a computer.

**Radio frequency.** A system based on the ability of an identification tag (transponder) to receive radio frequency signals and output a code to a reader.

**Voice recognition.** A computer recognizes words in a preprogrammed vocabulary. The operator speaks the words into a microphone, and the word or phrase is recognized by the machine and converted into electronic impulses for the micro or host computer.

**Machine vision.** Devices used for optical noncontact sensing to receive and interpret automatically an image of a real scene, to obtain information, and/or to control machines or processes.

**Image processor.** Selects and interprets data to determine an object's position, location, shape, and size.

Table 1. Value of Shipments of Computers and Office and Accounting Machines: 1988 to 1995

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988
3571—	Electronic computers <sup>1</sup> . . . . .	50,300.8	38,260.7	29,659.1	28,571.2	26,274.1	25,630.1	25,076.9	23,787.4
35713	Large-scale processing equipment <sup>1</sup> . . . . .	4,985.4	4,458.5	4,104.4	5,267.1	(NA)	(NA)	(NA)	(NA)
35714	Medium-scale and small-scale processing equipment <sup>1</sup> . . . . .	2,136.4	1,815.5	2,442.3	3,347.3	(NA)	(NA)	(NA)	(NA)
35715	Personal computers and workstations <sup>1</sup> . . . . .	36,225.1	24,298.0	18,888.8	17,059.6	(NA)	(NA)	(NA)	(NA)
35716	Portable computers <sup>1</sup> . . . . .	5,789.2	5,028.3	2,575.6	1,644.2	(NA)	(NA)	(NA)	(NA)
35717	Other general-purpose digital processing units <sup>1</sup> . . . . .	385.1	958.8	946.2	493.5	(NA)	(NA)	(NA)	(NA)
35718	Other computers, typically specialized for an application, including array, database, and image processors, computer chassis, and other analog, hybrid, or special-purpose computers <sup>1</sup> . . . . .	779.6	701.6	701.8	759.4	(NA)	(NA)	(NA)	(NA)
36798	Loaded computer processor boards and board subassemblies <sup>2</sup> . . . . .	20,555.7	17,514.8	15,087.1	13,745.8	12,590.4	2,247.2	2,854.3	4,339.0
35721	Computer storage devices and equipment . . . . .	8,072.4	5,555.6	5,730.7	6,282.4	5,609.7	7,488.2	7,215.3	7,548.4
35722	Parts for computer storage devices and subassemblies . . . . .	2,208.4	1,951.9	1,496.4	1,357.1	780.4	955.2	686.5	831.2
35751	Computer terminals . . . . .	1,086.3	1,243.5	1,531.3	1,707.9	1,729.5	2,066.7	2,759.2	2,672.6
35752	Parts for computer terminals . . . . .	(D)	(D)	275.9	192.1	417.0	362.9	208.3	233.6
35771	Computer peripheral equipment, n.e.c. . . . .	12,624.2	11,943.6	9,810.2	8,505.6	7,763.6	7,696.6	8,271.1	7,385.0
35772	Parts for input/output equipment. . . . .	2,248.4	2,498.7	2,554.3	3,053.2	4,186.9	3,705.5	3,647.1	4,345.3
35784	Calculating and accounting machines <sup>3</sup> . . . . .	1,234.0	1,261.5	1,454.2	967.5	973.5	(D)	(D)	(D)
35789	Parts for calculating, coin, or currency handling, and accounting machines <sup>4</sup> . . . . .	88.1	86.7	77.7	73.4	97.4	133.3	155.9	70.1
35792	Automatic typing and word processing machines. . . . .	(D)	(D)	342.9	465.2	417.1	342.5	533.1	566.7
35793	Duplicating machines . . . . .	(D)	68.4	(D)	(D)	(D)	(D)	159.9	152.8
35795	Mailing, letter-handling, and addressing machines . . . . .	1,106.3	967.5	1,267.8	1,152.4	1,124.8	976.9	767.3	811.7
35799	Check handling, electric stapling and dictating machines, typewriters and all other office machines, n.e.c. . . . .	824.0	664	(D)	(D)	517.6	545.9	712.5	674.8
3579A	Parts for office machines, n.e.c. . . . .	407.5	359.6	344.7	263.3	199.2	451.6	414.2	575.7
36950	Magnetic and optical recording media . . . . .	5,389.1	4,777.1	4,483.3	4,336.8	3,894.4	3,695.4	3,672.8	3,149.7

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. <sup>†</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Prior to 1992, product code separation for computers is not available.

<sup>2</sup>These data are collected on two Current Industrial Report forms, MA35R, *Computer and Office and Accounting Machines*, and MA36Q, *Semiconductors, Printed Circuit Boards, and Other Electronic Components*.

<sup>3</sup>Product codes 35781 and 35782 were combined into product code 35784 in 1991.

<sup>4</sup>Product code 35783 was changed to product code 35789 in 1991.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3571- —	Electronic computers (automatic data processors) .....	207	20,524,626	50,300,844	16,697,020	38,260,691
	General-purpose digital units by type .....	151	20,380,172	49,521,282	16,536,421	37,559,114
35713 00	Large-scale processing equipment (64 megabytes in MINIMUM main memory configuration) .....	32	58,113	4,985,418	48,991	4,458,519
35714 00	Medium-scale and small-scale processing equipment (up to 64 megabytes in MINIMUM main memory configuration), excluding personal computers or workstations .....	40	212,630	2,136,390	253,147	<sup>r</sup> 2,815,525
35715 00	Personal computers and workstations, excluding portables .....	89	15,685,620	36,225,099	<sup>r</sup> 13,205,967	24,297,992
35716 00	Portable computers (typically with attached display; e.g., laptops, notebooks, and palmtops) .....	35	4,104,056	5,789,237	<sup>r</sup> 2,812,483	<sup>r</sup> 5,028,259
35717 00	Other general-purpose digital processing units .....	20	319,753	385,138	215,833	<sup>r</sup> 958,819
35718 00	Other computers, typically specialized for an application, including array, database, and image processors, computer chassis, and other analog, hybrid or special-purpose computers, excluding supercomputers, LAN servers, and engineering workstations .....	67	<sup>b</sup> 151,177	<sup>b</sup> 779,562	<sup>a</sup> 160,599	<sup>a</sup> 701,577
36798 —	Printed circuit assemblies (loaded boards, subassemblies, and modules) <sup>1</sup> .....	648	(X)	20,555,695	(X)	17,514,845
	Loaded computer processor boards and board subassemblies:					
36798 51	Computer and peripheral printed board assemblies <sup>2</sup> .....	244	(X)	10,346,635	(X)	(NA)
36798 53	Communications printed board assemblies <sup>2</sup> .....	211	(X)	1,744,105	(X)	(NA)
36798 55	Industrial process control board assemblies <sup>2</sup> .....	140	(X)	239,776	(X)	(NA)
36798 57	Instrumentation printed board assemblies (except industrial) <sup>2</sup> .....	148	(X)	2,637,508	(X)	(NA)
36798 59	Search and detection printed board assemblies <sup>2</sup> .....	31	(X)	22,700	(X)	(NA)
36798 61	Consumer electronics printed board assemblies <sup>2</sup> .....	91	(X)	310,117	(X)	(NA)
36798 90	Other electronics, printed board assemblies including equipment and point of sales <sup>2</sup> .....	182	(X)	5,254,854	(X)	(NA)
35721 —	Computer storage devices and equipment .....	92	(X)	8,072,398	(X)	<sup>r</sup> 5,555,580
	Rigid magnetic disk drives:					
35721 35	Less than 2-1/2 inches .....	2	(D)	(D)	(D)	(D)
35721 37	2-1/2 inches up to but not including 3-1/2 inches .....	5	(D)	(D)	(D)	(D)
35721 39	3-1/2 inches up to but not including 5-1/4 inches .....	23	2,826,208	2,723,244	2,222,711	1,577,903
35721 41	5-1/4 inches and greater .....	19	91,618	247,792	<sup>r</sup> 275,008	<sup>r</sup> 505,249
35721 45	Disk subsystems and disk arrays for multiuser computer systems .....	26	221,701	1,487,711	128,207	756,134
35721 47	Flexible magnetic disk drives .....	11	1,030,255	315,459	1,046,371	40,378
	Optical disk drives, including CD-ROM and magneto-optical equipment:					
	CD-ROM:					
35721 51	"Juke-box" capable of handling multiple disks .....	11	2,960	41,269	2,769	43,848
35721 53	Single-disk equipment .....	7	281,911	45,070	448,970	58,204
35721 55	WORM (write once, read many times) .....	5	(D)	(D)	(D)	(D)
35721 57	Rewritable .....	11	68,073	107,060	22,426	45,250
35721 59	Optical subsystems for multiuser computer systems .....	8	26,837	207,156	<sup>b</sup> 56,054	<sup>b</sup> 199,560
	Auxiliary storage, not disk or tape-based, for multiuser computer systems:					
35721 61	Encased or enclosed in a housing, enclosure, or cabinet .....	10	(D)	(D)	(D)	(D)
35721 63	Other .....	2	(D)	(D)	(D)	(D)
35721 65	Other direct-access storage equipment .....	11	274,555	<sup>a</sup> 67,941	410,159	<sup>a</sup> 91,794
	Serial-access storage equipment (e.g., tape drives):					
35721 71	1/2-inch tape drives .....	13	207,559	886,748	154,525	638,574
35721 73	1/4-inch tape drives .....	10	3,329,868	660,385	1,571,534	319,791
35721 75	Helical scan tape drives .....	13	(D)	(D)	(D)	(D)
35721 77	Cassette tape drives .....	6	(D)	(D)	(D)	(D)
35721 79	Other serial-access storage equipment .....	11	<sup>b</sup> 1,682,842	<sup>a</sup> 577,670	1,237,299	433,650
35722 11	Computer storage parts and subassemblies .....	17	(X)	2,208,429	(X)	1,951,857

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35751 —	Computer terminals .....	57	(X)	1,086,307	(X)	1,243,546
35751 80	Remote batch terminals .....	8	<sup>a</sup> 21,908	<sup>a</sup> 37,330	<sup>a</sup> 19,291	<sup>a</sup> 30,318
35751 61	Teleprinters .....	8	87,788	71,093	<sup>a</sup> 110,711	<sup>a</sup> 111,353
	Display terminals, including graphics type, whether or not incorporating a printing mechanism:					
35751 63	X-terminals .....	12	158,280	209,995	177,522	244,946
	Other than X-terminals:					
35751 65	13-inch or less display .....	10	717,450	207,834	223,906	74,778
35751 67	More than 13-inch but less than 19-inch display .....	22	1,084,561	538,659	1,698,600	716,991
35751 69	19-inch or more display .....	11	<sup>b</sup> 9,485	<sup>b</sup> 21,396	<sup>b</sup> 40,462	<sup>b</sup> 60,908
35752 41	Computer terminal parts and subassemblies .....	15	(X)	(D)	(X)	(D)
35771 —	Computer peripheral equipment, n.e.c. ....	259	(X)	12,624,200	(X)	<sup>r</sup> 11,943,595
	Keying equipment:					
35771 33	Keyboards .....	30	80,092,841	767,820	20,521,512	691,716
35771 35	Other keying equipment .....	5	(D)	(D)	(D)	(D)
35771 02	Mouse devices .....	14	(D)	(D)	(D)	(D)
35771 04	Digitizers and light pen tablets .....	8	227,603	<sup>a</sup> 64,753	<sup>b</sup> 283,287	<sup>a</sup> 79,122
35771 06	Other manual input devices (joysticks, trackballs, touchscreens, etc.) .....	8	737,793	56,261	<sup>a</sup> 957,232	<sup>a</sup> 52,675
35771 08	Computer output to microfilm (COM) equipment .....	5	(D)	(D)	<sup>b</sup> 1,947	66,717
35771 12	Media copying and/or conversion equipment .....	7	21,118	53,417	<sup>r</sup> 15,437	33,794
	Optical scanning devices:					
35771 14	Bar code devices .....	31	1,347,281	750,977	1,084,431	<sup>r</sup> 790,185
35771 16	OCR equipment .....	15	<sup>b</sup> 712,781	<sup>a</sup> 218,554	<sup>r</sup> 610,649	<sup>a</sup> <sup>r</sup> 161,046
	Other than bar code or OCR devices:					
35771 18	Flat bed scanners .....	9	538,443	351,693	335,716	210,361
35771 22	Hand-held scanners .....	3	(D)	(D)	16,620	11,869
35771 24	Other .....	19	344,597	<sup>a</sup> 118,823	75,585	190,367
35771 26	Voice recognition equipment .....	8	12,655	19,492	<sup>r</sup> 13,844	<sup>r</sup> 21,595
35771 28	Magnetic strip and ink recognition equipment .....	10	91,781	123,232	92,401	135,643
35771 29	Other document entry equipment .....	2	(D)	(D)	(D)	(D)
	Computer printers:					
	Impact printers:					
35771 74	Line type (typically with a Centronics interface with output measured in lines per minute) .....	15	362,905	311,734	392,515	309,542
35771 72	Serial type (typically with a serial and/or parallel interface with output measured in characters per second) .....	29	713,527	314,369	905,823	1,019,549
	Nonimpact printers:					
35771 40	Laser .....	29	3,516,362	3,475,949	2,156,711	2,942,189
35771 42	Inkjet .....	8	4,369,896	961,336	(NA)	(NA)
35771 45	Other (thermal, ion deposition, etc.) .....	22	1,108,423	778,768	(NA)	(NA)
35771 47	Peripheral sharing devices .....	13	<sup>a</sup> 506,136	135,222	<sup>r</sup> 544,612	<sup>b</sup> <sup>r</sup> 126,676
35771 49	Font cartridges .....	2	(D)	(D)	(D)	(D)
35771 50	Plotters, including electrostatic .....	13	<sup>a</sup> 48,448	<sup>a</sup> 228,266	41,488	263,743
	Monitors, excluding terminals:					
35771 55	Flat panel displays .....	5	(D)	(D)	(D)	(D)
	Other than flat panel displays (e.g., CRT):					
35771 56	Less than 19-inch display .....	26	2,035,710	<sup>b</sup> 1,107,321	<sup>a</sup> 735,753	<sup>b</sup> 397,685
35771 58	19-inch or more display .....	14	371,590	385,527	<sup>a</sup> <sup>r</sup> 239,480	<sup>a</sup> <sup>r</sup> 211,992
35771 62	Monitor screen projection devices (e.g., LCD panels) .....	7	140,505	373,373	124,568	272,045
35771 63	All other input/output devices .....	62	(X)	<sup>b</sup> 698,313	(X)	<sup>a</sup> 670,029
35771 68	Accessories for computer peripherals (e.g., device supports and ergonomic aids) .....	40	(X)	1,135,773	(X)	<sup>a</sup> <sup>r</sup> 332,028
35772 —	Parts and subassemblies for computer peripherals and input/output equipment .....	72	(X)	2,248,444	(X)	2,498,706
35784 —	Calculating and accounting machines .....	45	(X)	1,233,969	(X)	<sup>r</sup> 1,261,482
35784 54	Funds transfer devices .....	7	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
35784 55	Point-of-sale terminals .....	22	<sup>3</sup> 268,932	<sup>3</sup> 997,050	<sup>3</sup> 313,888	<sup>3</sup> 1,018,370
35784 16	Machines for sorting, wrapping, counting, changing, or dispensing coins and/or currency .....	12	345,775	168,456	326,518	<sup>r</sup> 157,980
35784 59	Other coin or currency handling machines, including cash registers, calculators, accounting, bookkeeping and billing machines, and credit card im printers .....	15	(X)	<sup>b</sup> 68,463	(X)	<sup>b</sup> 85,132
35789 —	Parts for calculating, coin or currency handling, and accounting machines .....	15	(X)	<sup>a</sup> 88,060	(X)	<sup>a</sup> 86,706

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35792 —	Automatic typing and word processing machines (all types) . . .	3	(D)	(D)	(D)	(D)
35793 —	Duplicating machines . . . . .	5	(D)	(D)	<sup>a</sup> 6,707	68,395
35795 —	Mailing, letter handling, and addressing machines . . . . .	30	(X)	1,106,278	(X)	967,525
35795 34	Forms handling equipment, including bursters, decollators, and im printers . . . . .	9	471,258	48,369	540,662	49,372
35795 37	Mailing machines, including postage franking machines . . . . .	9 <sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>
35795 43	Letter and envelope handling machines . . . . .	14	59,549	316,555	24,360	229,359
35795 48	All other mailing, letter handling, and addressing machines . . .	13	<sup>4</sup> 441,134	<sup>4</sup> 741,354	<sup>4</sup> 349,335	<sup>4</sup> 688,794
35799 —	All other office machines, n.e.c. . . . .	45	(X)	823,975	(X)	<sup>1</sup> 664,009
35799 31	Check handling machines . . . . .	10	32,968	<sup>b</sup> 224,290	42,795	<sup>b</sup> 196,146
35799 32	Electric stapling machines, office type . . . . .	2	(D)	(D)	213,617	8,986
35799 33	Time recording and time stamp machines . . . . .	11	<sup>a</sup> 204,249	230,474	224,245	81,769
35799 41	Paper cutting machines and apparatus, office type . . . . .	3	715,545	21,868	596,979	20,491
35799 44	Paper shredders . . . . .	2	(D)	(D)	(D)	(D)
35799 45	Perforating or stapling machines, nonelectric . . . . .	5	(D)	(D)	(D)	(D)
35799 95	All other office machines, n.e.c., including pencil sharpeners, typewriters, dictating machines, binding machines, ticket counting machines, and voting machines . . . . .	25	(X)	304,349	(X)	<sup>1</sup> 320,603
3579A —	Parts for office machines, n.e.c. . . . .	33	(X)	407,489	(X)	<sup>1</sup> 359,596
36950 —	Magnetic and optical recording media . . . . .	61	(X)	5,388,308	(X)	4,777,097
	Rigid disks:					
36950 12	Less than 2-1/2 inches . . . . .	-	-	-	(D)	(D)
36950 14	2-1/2 inches up to but not including 3-1/2 inches . . . . .	7	(D)	(D)	1,329,237	73,988
36950 16	3-1/2 inches up to but not including 5-1/4 inches . . . . .	12	19,830,681	977,735	11,133,242	<sup>1</sup> 755,219
36950 18	5-1/4 inches and greater . . . . .	10	7,573,880	169,777	2,426,131	103,220
	Flexible disks:					
36950 22	3-1/2 inches up to but not including 5-1/4 inches . . . . .	14	6,531,351	631,617	955,865	<sup>1</sup> 540,086
36950 24	5-1/4 inches and greater . . . . .	14	1,230,736	109,340	349,454	82,369
36950 09	Optical disks . . . . .	10	(D)	(D)	197,628	298,959
36950 26	Bulk magnetic tape . . . . .	2	(D)	(D)	(D)	(D)
	Packaged magnetic tape:					
36950 11	In reels for computer use . . . . .	3	(D)	(D)	(D)	(D)
36950 13	In cassette and cartridge for computer use . . . . .	17	825,644	<sup>a</sup> 706,270	186,871	<sup>1</sup> 630,425
36950 28	In forms suitable for audio use . . . . .	9	347,695	236,208	356,473	<sup>1</sup> 263,608
36950 21	In video cassette, 8-mm and 1/2-inch . . . . .	13	13,801,005	978,284	8,694,631	<sup>1</sup> 942,785
36950 23	In video cassette, 3/4 (19-mm) and 2-inch (51-mm) . . . . .	3	7,846	61,133	17,398	<sup>1</sup> 70,646
36950 34	Other package magnetic tape . . . . .	2	(D)	(D)	(D)	(D)
36950 39	Other magnetic recording media, including parts . . . . .	17	(X)	766,471	(X)	715,711
	Nonmanufacturing revenue of manufacturing establishments:					
50650 00	Supplies and accessories for use with computers or business machines (resales) . . . . .	58	(X)	986,549	(X)	971,864
99980 49	Research and development, testing, and evaluation of systems and components . . . . .	19	(X)	20,828	(X)	11,118
73721 00	Software sold with computer systems shipped by manufacturers:					
	Operating system software . . . . .	23	(X)	335,064	(X)	50,488
73722 00	Utilities and device managers . . . . .	17	(X)	12,288	(X)	17,995
73723 00	Application software . . . . .	43	(X)	332,513	(X)	<sup>1</sup> 211,680
73724 00	Other software . . . . .	13	(X)	220,594	(X)	151,340
73730 00	Systems integration revenues, including configuration, installation and site preparation, and custom programming . . . . .	27	(X)	250,892	(X)	171,375
73700 00	Other nonmanufacturing revenues associated with computer systems . . . . .	82	(X)	2,028,037	(X)	1,586,005

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified.  
<sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>These data are collected on two Current Industrial Report forms, MA35R, *Computer and Office and Accounting Machines*, and MA36Q, *Semiconductors, Printed Circuit Boards, and Other Electronic Components*.

<sup>2</sup>Detail was revised in 1995. Previous year's data not applicable.

<sup>3</sup>Product codes 35784 54 and 35784 55 are combined to avoid disclosing data for individual companies.

<sup>4</sup>Product codes 35795 37 and 35795 48 are combined to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item is estimated. <sup>b</sup>Over 26 percent of this item is estimated.



Table 3. Shipments, Exports, Imports and Apparent Consumption of Computing and Accounting Machines: 1995

[Quantity in thousands of units. Value in millions of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments (f.o.b. plant)		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3</sup>	
		Quantity	Value	Quantity	Value at port	Quantity	Value
35713 00-35718 00	Computers, digital, analog, hybrid, and other. . . . .	20,524.6	50,300.8	3,932.7	9,201.9	3,895.2	5,035.1
35721 47	Flexible magnetic disk drives. . . . .	1,030.3	315.5	647.0	153.1	29,350.9	858.2
35721 35, 37, 39, 41, 45	Rigid magnetic disk drives, including disk subsystems and disk arrays. . . . .	3,225.2	4,488.7	2,800.5	2,019.9	42,904.3	10,035.4
35721 51, 57, 59, 61, 63, 65, 71, 73, 75, 77, 79	Computer storage devices and equipment, n.e.c. . . . .	6,288.4	3,268.2	1,349.5	1,127.3	25,304.6	3,570.9
35771 40	Laser computer printers . . . . .	3,516.4	3,475.9	(NA)	(NA)	2.9	0.7
35771 42, 45, 72, 74	Computer printers, n.e.c. . . . .	6,554.8	2,366.2	(NA)	(NA)	801.4	201.7
35771 33	Computer keyboards. . . . .	80,092.8	767.8	2,706.0	165.3	28,578.1	445.3
35751 00	Computer terminals . . . . .	(X)	1,086.3	408.4	381.6	421.5	146.3
35771 56, 58	Monitors, CRT-type . . . . .	2,407.3	1,492.8	833.6	403.4	-	-
35771 55, 62	Monitors, n.e.c. . . . .	178.7	389.6	216.8	176.0	2,854.3	1,709.8
35771 14, 16, 18, 22, 24, 28	Optical scanning devices and magnetic strip and ink recognition equipment. . . . .	3,052.1	1,578.0	688.3	432.6	-	-
35771 02, 04, 06, 08, 12, 26, 29, 35, 47, 49, 51, 53, 63	Computer peripheral equipment, n.e.c. . . . .	13,190.1	1,189.7	3,451.4	1,685.9	2,477.1	263.0
35771 68, 35772 —, 35793 —	Parts, subassemblies, and accessories for computer peripheral equipment. . . . .	(X)	8,544.1	(X)	14,647.0	(X)	5,742.8
35793 00	Duplicating machines . . . . .	(D)	(D)	22.6	22.4	19.7	72.7
35784 55	Point-of-sales terminals . . . . .	(D)	(D)	41.2	50.0	1,302.9	249.5
35784 16, 54, 59	Coin or currency handling machines, n.e.c., including cash registers, accounting, bookkeeping, and billing machines, and credit card imprinters. . . . .	377.7	577.2	980.9	180.6	105,235.2	774.2
35792 00	Automatic typing and word processing machines (all types). . . . .	(D)	(D)	2.2	0.7	-	-
35795 00	Mailing, letter handling, and addressing machines . . . . .	(X)	1,106.3	105.7	97.9	365.6	103.3
35799 33	Time recording and time stamping machines. . . . .	204.2	230.5	115.6	14.1	251.5	8.0
35789 —	Office machines, n.e.c. . . . .	12,663.4	593.5	2,755.2	157.9	33,208.0	796.8
35789 00	Parts for calculating, coin, or currency handling, and accounting machines. . . . .	(X)	88.1	(X)	245.3	(X)	254.1
3579A —	Parts for office machines, n.e.c. . . . .	(X)	407.5	(X)	156.4	(X)	158.8
36950 09, 12, 14, 16, 18, 22, 24	Rigid, flexible, and optical disks . . . . .	35,464.7	2,351.3	(NA)	(NA)	(NA)	(NA)
36950 11, 13, 21, 23, 25, 26, 34	Bulk and packaged magnetic tape. . . . .	14,989.6	2,271.3	(NA)	(NA)	(NA)	(NA)
36950 39	Other magnetic recording media, including parts . . . . .	(X)	766.5	(NA)	(NA)	(NA)	(NA)

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified.  
X Not applicable.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

**HISTORICAL NOTE**

Data on computers and office and accounting machines have been collected by the Bureau of the Census since 1953. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are

also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Keith McKenzie, 301-457-4777.

## SWITCHGEAR, SWITCHBOARD APPARATUS, RELAYS, AND INDUSTRIAL CONTROLS (MA36A)

### INTRODUCTION

These data cover manufacturers of switchgear, switchboard apparatus, relays, and industrial controls, except very small firms (generally less than 20 employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies.

The statistics were collected by mail on Bureau of the Census annual Form MA36A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls. The survey panel includes all known producers of these products, except the very small firms excluded from the scope of the survey. Approximately 721 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of switchgear and switchboard apparatus was \$6.0 billion, up 5 percent from the 1994 value of \$5.7 billion. The 1995 shipments include power circuit breakers, valued at \$427.1 million, a

decrease of 23 percent from 1994; low voltage panelboards, valued at \$2.0 billion, an increase of 14 percent from 1994; fuses and fuse equipment, valued at \$423.3 million, an increase of 11 percent from 1994; molded case circuit breakers, valued at \$1.2 billion, an increase of 4 percent from 1994; duct, valued at \$239.4 million, an increase of 5 percent from 1994; and switchgear valued at \$1.7 billion, an increase of 4 percent from 1994. During 1995, the total value of shipments of relays and industrial controls was \$8.6 billion, up 9 percent from the 1994 value of \$7.9 billion. The 1995 shipments include general-purpose relays valued at \$741.7 million, a decrease of 8 percent from 1994; specific-purpose industrial controls, valued at \$3.2 billion, an increase of 16 percent from 1994; general-purpose industrial controls, valued at \$4.2 billion, an increase of 10 percent from 1994; and motor controller accessories valued at \$498.5 million, a decrease of 3 percent from 1994.

### EXPLANATION OF TERMS

For explanation of terms, see "Contact for Data Users" at the end of this subsection.

Table 4. **Value of Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1986 to 1995**

[Millions of unadjusted dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
36132	Power circuit breakers . . . . .	427.1	550.9	520.8	480.8	368.5	387.6	393.4	386.0	372.8	377.9
36133	Low-voltage panelboards . . . . .	1,996.0	1,750.8	1,687.1	1,531.1	1,642.6	1,722.3	1,747.2	1,663.5	1,569.3	1,552.0
36134	Fuses and fuse equipment . . . . .	423.3	382.1	319.9	412.8	409.4	419.3	418.5	390.3	367.6	362.1
36135	Molded case circuit breakers . . . . .	1,175.3	1,132.9	1,009.8	954.7	916.6	959.4	952.4	948.2	879.2	925.6
36136	Duct, 1,000 volts and under . . . . .	239.4	227.9	200.1	189.1	184.2	193.6	187.8	152.2	131.9	140.8
36139	Switchgear (except ducts) . . . . .	1,725.7	1,663.7	1,581.3	1,615.0	1,398.1	1,323.9	1,319.3	1,100.0	1,048.8	1,046.9
36251	Relays, general-purpose . . . . .	741.7	804.0	750.6	781.5	772.0	804.7	834.6	873.2	888.7	876.5
36252	Specific-purpose industrial control . . . . .	3,178.3	2,747.9	2,321.6	1,915.7	1,992.7	2,019.6	1,927.6	1,808.3	1,731.6	1,708.7
36253	General-purpose industrial controls . . . . .	4,195.4	3,840.3	3,326.3	2,778.2	2,878.6	2,911.5	2,970.5	2,655.2	2,402.6	2,252.4
36254	Motor controller accessories and parts for industrial controls . . . . .	498.5	511.6	476.4	447.9	434.1	452.4	502.7	458.5	429.4	442.7

<sup>†</sup>Revised by 5 percent or more from previously published data.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3613—	Switchgear and switchboard apparatus.....	(NA)	(X)	5,986,805	(X)	5,708,383
36132 —	Power circuit breakers, and parts, all voltages .....	30	(X)	427,095	(X)	550,922
36132 16	Power circuit breakers (sold separately) for use in metal-clad switchgear oil and oilless, over 1,000 volts, (number of breakers).....	10		3,697 38,032	2,720	28,265
36132 17	Parts for power circuit breakers for use in metal-clad switchgear.....	6	(X)	( <sup>1</sup> )	(X)	( <sup>1</sup> )
36132 21	Power circuit breakers, free standing, oil and oilless, from 15.5 kV through 800 kV and above (number of breakers).....	8		3,459 166,373	6,308	267,910
36132 22	Parts for power circuit breakers, free standing, oil and oilless, from 15.5 kV through 800 kV and above.....	2	(X)	<sup>1</sup> 6,129	(X)	<sup>1</sup> 10,032
36132 26	Power circuit breakers (sold separately) in individual enclosure and/or for use in low-voltage switchgear, 1,000 volts and below, excluding molded case circuit breakers (number of breakers).....	9	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36132 27	Parts for power circuit breakers in individual enclosures and/or for use in low-voltage switchgear, 1,000 volts and below, excluding molded case circuit breakers .....	5	(X)	2,022	(X)	1,365
36132 31	All other power circuit breakers (sold separately), oil and oilless, network protectors, and automatic circuit reclosers .....	8	<sup>2</sup> 1,786,187	<sup>2</sup> 180,248	<sup>2</sup> 1,207,237	<sup>2</sup> 190,776
36132 32	Parts for all other power circuit breakers, oil and oilless, network protectors, and automatic circuit reclosers .....	10	(X)	34,291	(X)	<sup>5</sup> 52,574
36133 —	Low voltage panelboards, distribution boards, and other switching and interrupting devices, 1,000 volts and below .....	128	(X)	1,995,957	(X)	1,750,820
	Panelboards, including enclosing cabinets:					
36133 11	Fusible, including combination switch fuse .....	48	1,675,675	141,634	1,467,276	141,607
36133 12	Circuit breaker .....	52	931,466	425,407	<sup>1</sup> 833,821	359,070
	Distribution switchboards:					
36133 15	Fusible .....	32	34,839	105,379	30,341	89,401
36133 17	Circuit breaker .....	45	89,204	311,411	<sup>1</sup> 67,944	259,906
36133 19	Other, including theater switchboards .....	9	24,054	10,671	26,932	14,091
	Switches (except switches commonly known as snap, toggle, and rotary switches and switch devices intended primarily to be used with electric motor controls):					
	Knife switches, enclosed:					
36133 21	Heavy duty .....	12	1,744,154	172,825	1,546,964	<sup>1</sup> 140,875
36133 22	General duty .....	8	1,516,609	66,304	1,417,138	53,272
36133 24	Enclosed fusible, service entrance, and branch circuit cutouts .....	9	(S)	19,815	834,273	10,662
36133 26	Circuit breaker type .....	17	9,179,504	294,481	10,381,505	260,457
	Load centers:					
36133 32	Grouped metering panels (combinations of two or more meters and related switching units with overcurrent protection associated with each meter, including accessory components, excluding single socket load combinations) .....	17	487,060	34,805	410,658	26,910
36133 33	Other switches, excluding snap, bolted toggle, push, etc., including open knife switches, motor contact, motor disconnect, meter service equipment other than meter mounting, and test devices.....	25	(X)	206,589	(X)	182,755
36133 98	Other low voltage switchgear apparatus .....	31	(X)	206,636	(X)	<sup>1</sup> 211,814
36134 —	Fuses and fuse equipment, under 2,300 volts (except power distribution cutouts) .....	22	(X)	423,315	(X)	<sup>1</sup> 382,125
36134 31	Nonrenewable plug fuses.....	4	(X)	4,320	(X)	11,444
36134 51	Nonrenewable cartridge fuses .....	11	(X)	188,797	(X)	147,720
36134 71	Renewable plug and cartridge fuses, including renewable links .....	3	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
36134 93	Other fuses and open fuse material, including cutouts, clips, bases, etc.....	18	(X)	<sup>3</sup> 230,198	(X)	<sup>3</sup> 122,961

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3613—	Switchgear and switchboard apparatus—Con.					
36135 —	Molded case circuit breakers, 1,000 volts and under . . . . .	33	136,368,314	1,175,322	125,519,799	1,132,905
	Industrial type, assembled as complete units in supporting and enclosing housing of insulating materials, with or without accessories or attachments:					
36135 14	With ground fault detection capability . . . . .	13	(S) 24,174		<sup>1</sup> 88,864	12,442
36135 16	Without ground fault detection capability . . . . .	17	29,277,540	574,309	<sup>1</sup> 25,264,870	546,394
	Residential or light duty type, primarily for load center application, assembled as complete units in supporting and enclosing housing of insulating materials:					
36135 18	With ground fault detection capability . . . . .	8	985,705	29,184	<sup>1</sup> 946,087	<sup>1</sup> 28,524
36135 19	Without ground fault detection capability . . . . .	9	58,228,182	287,717	<sup>1</sup> 57,589,656	273,086
36135 31	Individually enclosed industrial type, excluding panelboards and busway plugs . . . . .	14	8,173,643	17,430	7,347,350	<sup>1</sup> 18,316
	Other molded case circuit breakers:					
36135 91	Marine and Navy type . . . . .	4	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
36135 92	Aircraft and aerospace . . . . .	6	<sup>4</sup> 1,067,767	<sup>4</sup> 114,567	<sup>4</sup> 965,347	<sup>4</sup> 112,799
36135 93	Automotive . . . . .	2	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
36135 94	Electronic . . . . .	4	<sup>5</sup> 31,379,273	<sup>5</sup> 103,971	<sup>5</sup> 27,755,995	<sup>5</sup> 114,540
36135 95	All other types . . . . .	11	(S) 23,970		5,561,630	26,804
36136 —	Duct, including plug-in units and accessories, 1,000 volts and under, consisting of enclosed sectionalized prefabricated bus bars rated 20 A or more, and associated structures and fittings . . . . .	27	2,299,307	239,402	2,850,298	227,947
36136 11	Busways . . . . .	24	1,646,894	234,778	1,455,323	217,167
36136 31	Trolley-type and lighting distribution duct . . . . .	5	652,413	4,624	1,394,975	10,780
36139 —	Switchgear (except ducts) . . . . .	132	(X)	1,725,714	(X)	1,663,664
36139 07	Automatic and manual control panels (generators, transformers, feed-controls, etc.) . . . . .	70	(X)	296,781	(X)	271,967
36139 09	Metal-clad switchgear (using power circuit breakers, oil and oilless), all voltages above 1,000 volts, up to and including 38 kV, excluding load interrupter switchgear . . . . .	44	(X)	303,081	(X)	320,687
36139 10	Metal-enclosed load interrupter switchgear assemblies, all voltages, including parts . . . . .	41	(X)	129,170	(X)	<sup>1</sup> 106,543
36139 13	Metal-enclosed low-voltage power circuit breaker switchgear assemblies, 1,000 volts and below, including parts and excluding load interrupter switchgear . . . . .	34	(X)	143,326	(X)	155,140
36139 17	Metal-enclosed bus bars when sold separately, above 1,000 volts, including isolated, segregated, nonsegregated, and cable bus bars . . . . .	18	(X)	32,368	(X)	36,035
	Power switching equipment, 2,300 volts and over, including attachments, auxiliaries, bus supports and fittings, and accessories, but excluding power fuses sold separately. Also includes single-phase circuit reclosers:					
36139 41	Outdoor, excluding structures . . . . .	30	(X)	324,883	(X)	308,455
36139 45	Indoor . . . . .	9	(X)	1,873	(X)	2,626
36139 51	Power fuses and fuse links for 2,300 volts and over, ac service, excluding distribution cutouts . . . . .	14	(X)	( <sup>6</sup> )	(X)	( <sup>6</sup> )
36139 81	Power and ground connectors generally used in substation construction . . . . .	6	(X)	<sup>6</sup> 135,268	(X)	<sup>6</sup> 122,583
36139 91	Overhead transmission and distribution connectors (clamps, taps, terminals, and splices) . . . . .	6	(X)	41,141	(X)	40,215
36139 93	Transmission and distribution connectors, n.e.c., including underground deadends, hot line taps, stirrups, and repair sleeves, etc. . . . .	5	(X)	( <sup>7</sup> )	(X)	( <sup>7</sup> )
36139 83	Distribution cutouts . . . . .	9	(X)	103,067	(X)	98,010
36139 98	Other switchgear devices, including regulators and miscellaneous switchboard devices (for sale separately) . . . . .	24	(X)	<sup>7</sup> 214,756	(X)	<sup>7</sup> 201,403

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3625—	Relays and industrial controls .....	(NA)	(X)	8,613,940	(X)	7,903,849
36251 —	General-purpose and other relays .....	116	(X)	741,747	(X)	'804,023
36251 01	Industrial-control relays (all voltages), n.e.c. ....	44	15,639,998	230,352	'21,363,244	'245,392
	General-purpose electromechanical relays:					
	Over 100 MW actuating power and sealed (either hermetically or environmentally):					
36251 03	0 through 2.0 amperes contact rating .....	8	( <sup>8</sup> )	( <sup>8</sup> )	1,176,038	5,423
36251 04	Over 2.0 through 10.0 amperes contact rating .....	15	<sup>8</sup> 2,315,239	<sup>8</sup> 14,823	'2,190,774	'11,571
36251 05	Over 10.0 amperes contact rating .....	7	11,632,708	31,885	11,768,254	30,831
	Over 100 MW actuating power and not sealed:					
36251 02	0 through 10.0 amperes contact rating .....	12	2,801,349	13,684	'3,296,818	'14,840
36251 10	Over 10.0 amperes contact rating .....	12	(S)	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
36251 11	0 through 100 MW actuating power (both sealed and not sealed) .....	2	(S)	<sup>9</sup> 9,554	<sup>9</sup> 4,440,267	<sup>9</sup> 15,566
	Miniature printed circuit mounted electromechanical relays, excluding reed relays (profile height 1/2-inch max.):					
	Sealed (either hermetically or environmentally):					
36251 12	0 through 2.0 amperes contact rating .....	5	2,859,004	3,591	4,838,343	10,476
36251 15	Over 2.0 amperes contact rating .....	4	(D)	(D)	(D)	(D)
36251 20	Not sealed .....	5	(D)	(D)	(D)	(D)
	DIP or SIP footprint:					
36251 19	Sealed (either hermetically or environmentally) .....	2	(D)	(D)	(D)	(D)
	Telephone relays, all types:					
36251 22	Sealed (either hermetically or environmentally) .....	4	648,744	1,038	166,743	644
36251 23	Not sealed .....	5	32,008	471	50,090	438
36251 30	General-purpose solid-state relays, pure solid-state, and hybrid solid state, excluding time delay .....	12	4,243,935	19,502	2,642,462	12,982
	High performance military/aerospace/aircraft relays and contactors (generally pertaining to Mil-R5757, 6106, 19523, 25108, and 39016):					
36251 31	Round and square can multipole airframe relays and contactors (both sealed and not sealed)(all sizes) .....	6	498,165	23,056	651,794	40,533
	Crystal can types (sealed):					
36251 32	Larger than full size .....	5	291,541	19,900	247,146	13,853
36251 33	Full size .....	5	151,661	10,541	140,109	6,096
36251 37	Half size and smaller, including TO-5 package .....	4	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )	( <sup>10</sup> )
36251 52	RF, antenna and coaxial relays (sealed and not sealed), excluding reed relays .....	4	<sup>10</sup> 1,472,493	<sup>10</sup> 44,471	<sup>10</sup> '4,659,984	<sup>10</sup> '77,016
	Reed relays:					
	Dry reed:					
36251 59	Miniature size (glass length less than .85 inch) .....	9	22,818,078	37,235	19,591,877	30,187
36251 61	Standard size .....	7	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )
36251 66	Mercury wetted reed .....	7	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )
36251 69	Stepping switches, stepping and impulse relays .....	4	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )
36251 75	Switchgear and protective relays .....	6	<sup>11</sup> 597,668	<sup>11</sup> 30,863	<sup>11</sup> '614,778	<sup>11</sup> '22,948
	Timing relays (timers):					
36251 79	Solid-state/EMR combination .....	24	1,002,467	31,599	833,138	25,860
36251 81	Solid-state-pure .....	12	241,775	3,276	'355,382	'6,745
36251 82	All other timing relays (timers), including pneumatic, motor driven, electronic, etc. ....	17	951,362	25,025	975,072	'26,504
36251 92	All other general-purpose and special-purpose relays, n.e.c. ....	22	(X)	147,452	(X)	'157,560
36251 96	Parts for general-purpose and special-purpose relays, sold separately .....	8	(X)	23,304	(X)	'26,569
36252 —	Specific-purpose industrial controls .....	246	(X)	3,178,315	(X)	2,747,855
36252 45	U.S. Coast Guard, Navy, and Marine auxiliary controls and accessories .....	23	82,666	126,854	'72,849	140,527
36252 47	Metal mill controls and accessories (all voltages) .....	8	(D)	(D)	(D)	(D)
36252 48	Crane and hoist controls, constant and adjustable voltage, including operators' desks and stations .....	21	51,163	101,339	36,775	85,926

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3625—	Relays and industrial controls—Con.					
36252 —	Specific-purpose industrial controls—Con.					
36252 49	Definite-purpose contactors and starters (600 volts and less) . . . . .	17	10,694,743	153,502	9,440,212	133,909
	Machine tool applications (motion controllers):					
	Stand-alone controls for numerically controlled machine tools:					
36252 51	Computer numerical controls (CNC); positioning (point-to-point) . . . . .	10	(S)	20,158	9,793	16,795
36252 55	Computer numerical controls (CNC); continuous path (contouring) . . . . .	12	31,451	216,771	29,116	175,736
36252 57	Robotic controls . . . . .	(S)	(S)	(S)	(S)	(S)
36252 58	Other stand-alone motion controls . . . . .	13	26,899	61,387	16,509	59,504
36252 60	Subordinate motion controls . . . . .	12	84,259	14,761	85,606	12,043
36252 71	Programmable controller, sold separately . . . . .	65	4,458,256	1,211,098	2,733,422	941,156
36252 76	Other specific- or special-purpose ac and dc controllers, other definite-purpose devices . . . . .	150	(X)	1,194,580	(X)	1,081,348
36253 —	General-purpose industrial controls and power circuit devices . . . . .	271	(X)	4,195,399	(X)	3,840,346
	General purpose controls:					
36253 01	Ac full voltage noncombination magnetic starters (1,000 volts or less) . . . . .	23	1,312,410	169,501	1,249,373	175,778
	Ac full voltage combination magnetic starters (1,000 volts or less):					
36253 03	Combination starters (less pumping panels) . . . . .	20	216,181	85,785	206,537	77,638
36253 05	Pumping panels . . . . .	20	41,759	29,101	41,335	26,828
36253 06	Disconnect switches (600 volts or less) . . . . .	19	2,031,609	58,586	1,825,812	50,523
	Ac full voltage manual controllers, 1,000 volts or less:					
36253 23	Designed and rated to U.S. National Standards (NEMA) . . . . .	12	797,233	44,967	716,224	43,823
36253 25	Designed and rated to International Standards (IEC) . . . . .	7	249,937	4,636	236,815	4,449
	Ac contactors, 1,000 volts or less, excluding controls for packaged adjustable speed drives and synchronous motor controls:					
36253 27	Designed and rated to U.S. National Standards (NEMA) . . . . .	15	380,734	59,345	368,296	53,410
36253 29	Designed and rated to International Standards (IEC) . . . . .	14	1,994,601	74,675	1,867,181	58,794
36253 14	Ac reduced voltage controls, 1,000 volts or less, excluding synchronous motor starters . . . . .	21	79,324	56,008	58,214	41,069
36253 15	Synchronous motor starters, 1,000 volts or less, including both full and reduced voltage . . . . .	7	1,407	1,087	1,893	1,253
36253 16	Motor control centers, 1,000 volts or less . . . . .	36	(X)	419,611	(X)	373,672
36253 18	Starters and contactors for squirrel cage and wound rotor and synchronous and nonsynchronous motors, over 1,000 to 7,200 volts, air break, vacuum, and oil immersed . . . . .	10	65,565	80,659	47,083	72,834
36253 21	Brakes and clutches . . . . .	18	872,058	61,480	730,612	57,874
36253 34	Digital readout system, including dial or plugboard type . . . . .	18	10,026	10,446	15,263	14,426
	Presence sensors and motion measurement devices:					
	Limit switches (positioning sensors):					
36253 32	Electromechanical positioning sensors . . . . .	27	(X)	138,477	(X)	98,867
36253 33	Movement sensors . . . . .	18	(X)	36,074	(X)	24,984
	Solid-state positioning sensors:					
36253 35	Nonoptical proximity sensors . . . . .	16	(X)	72,783	(X)	71,170
36253 36	Optical proximity sensors . . . . .	17	(X)	131,183	(X)	139,905
36253 37	All other pilot circuit devices, excluding relays and limit switches . . . . .	11	(X)	14,630	(X)	21,717
36253 38	Dc power circuit devices (all voltages) . . . . .	13	(X)	58,151	(X)	56,665
36253 39	Other control sensors (all voltages) . . . . .	17	(X)	116,561	(X)	96,616
	Pushbuttons and pushbutton stations, excluding operators' desks and stations:					
36253 42	Pushbuttons, 18 mm and smaller . . . . .	7	(X)	(12)	(X)	3,677
36253 46	Pushbuttons, 19 mm to 29 mm . . . . .	17	(X)	1261,661	(X)	39,369
36253 48	Pushbuttons, 30 mm and larger . . . . .	22	(X)	233,592	(X)	225,153
36253 81	Rheostats and resistors (except for electronic applications) sold separately, n.e.c. . . . .	13	(X)	34,822	(X)	40,195

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3625- —	Relays and industrial controls—Con.					
36253 —	General-purpose industrial controls and power circuit devices—Con.					
	Presence sensors and motion measurement devices—Con.					
	Controls for adjustable speed drives, including electronic and nonelectric and operators' desks and stations:					
36253 83	Controls for ac packaged drives .....	32	365,839	327,640	'270,287	'296,884
36253 84	Controls for dc packaged drives .....	28	558,492	160,286	531,774	136,005
36253 85	Ac drive systems .....	30	89,243	220,446	58,229	188,302
36253 86	Dc drive systems .....	28	753,337	174,588	'776,120	163,760
36253 98	Solid-state motor controllers (all voltages) .....	48	4,684,989	251,995	'3,769,814	'185,936
36253 99	All other general industry devices and systems.....	98	(X)	1,006,623	(X)	'998,770
36254 —	Motor controller accessories and parts for industrial controls .....	124	(X)	498,479	(X)	511,625
36254 91	Motor controller accessories, including those items that are sold separately, but become part of a motor controller. Includes overload relays, auxiliary contacts, heater elements, mechanical interlocks, control transformers, kits to add pushbuttons, selector switches, pilot lights, separate controller enclosure fittings, reset mechanisms, etc., excluding motor circuit switches sold separately.....	36	(X)	145,649	(X)	'168,109
36254 97	Parts for industrial controls .....	108	(X)	352,830	(X)	'343,516

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. 'Revised by 5 percent or more from previously published data. S Does not meet publication standards. X Not applicable.

<sup>1</sup>Product code 36132 17 is included with product code 36132 22 to avoid disclosing data for individual companies.  
<sup>2</sup>Product code 36132 26 is included with product code 36132 31 to avoid disclosing data for individual companies.  
<sup>3</sup>Product code 36134 71 is included with product code 36134 93 to avoid disclosing data for individual companies.  
<sup>4</sup>Product code 36135 91 is included with product code 36135 92 to avoid disclosing data for individual companies.  
<sup>5</sup>Product code 36135 93 is included with product code 36135 94 to avoid disclosing data for individual companies.  
<sup>6</sup>Product code 36139 51 is included with product code 36139 81 to avoid disclosing data for individual companies.  
<sup>7</sup>Product code 36139 93 is included with product code 36139 98 to avoid disclosing data for individual companies.  
<sup>8</sup>For 1995, product code 36251 03 is included with product code 36251 04 to avoid disclosing data for individual companies.  
<sup>9</sup>Product code 36251 10 is included with product code 36251 11 to avoid disclosing data for individual companies.  
<sup>10</sup>Product code 36251 37 is included with product code 36251 52 to avoid disclosing data for individual companies.  
<sup>11</sup>Product codes 36251 61, 36251 66, and 36251 69 are included with product code 36251 75 to avoid disclosing data for individual companies.  
<sup>12</sup>For 1995, product code 36253 42 is included with product code 36253 46 to avoid disclosing data for individual companies.



Table 6. Shipments, Exports, Imports, and Apparent Consumption of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1995

[Value in thousands of dollars]

Product code	Product description	Manufacturer's shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption <sup>2</sup>
<b>1995</b>				
36132 16, 21, 26, 31	Power circuit breakers .....	384,653	117,773	2,779,947
36132 17, 22, 27, 32	Parts for power circuit breakers .....	42,442	(NA)	2,008,304
36133 11, 12, 15, 17, 19	Low voltage panelboards and distribution boards .....	994,502	(NA)	4,183,587
36133 21, 22	Knife switches .....	239,129	(NA)	66,139
36134 00	Fuses and fuse equipment, under 2,300 volts .....	423,315	110,343	2,183,991
36135 00	Molded case circuit breakers, 1,000 volts and under .....	1,175,322	98,674	3,149,743
36136 00	Duct, including plug-in units and accessories .....	239,402	31,117	159,232
36139 07, 09, 10, 13, 17, 41, 45, 83, 98	Switchgear and switchgear assemblies .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36139 51	Power fuses and fuse links, 2,300 volts and over .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36139 81, 91, 93	Power and ground connectors; and transmission and distribution connectors .....	<sup>3</sup> 1,725,714	<sup>3</sup> 32,918	<sup>3</sup> 4,830,795
36251 01-05, 10-12, 15, 20, 30-33, 37, 52, 59, 61, 66, 69, 75, 81-82, 92	Relays .....	633,325	502,849	23,938,819
36252 51, 55	Controls for numerically controlled machine tools .....	236,929	(NA)	3,240,446
36252 71	Programmable controllers .....	1,211,098	(NA)	9,715,424
36253 01, 03, 05, 15	Motor starters .....	285,474	(NA)	1,300,244
36253 16	Motor control centers, 1,000 volts or less .....	419,611	(NA)	901,530
36253 21	Brakes and clutches .....	61,480	19,751	1,792,337
36253 32, 33	Limit switches .....	174,551	(NA)	(NA)
36253 81	Rheostats and resistors .....	34,822	2,053	28,080
<b>1994</b>				
36132 16, 21, 26, 31	Power circuit breakers .....	486,951	108,823	4,080,883
36132 17, 22, 27, 32	Parts for power circuit breakers .....	<sup>1</sup> 63,971	125,807	(NA)
36133 11, 12, 15, 17, 19	Low voltage panelboards and distribution boards .....	864,075	63,657	(NA)
36133 21, 22	Knife switches .....	<sup>1</sup> 194,147	4,810	(NA)
36134 00	Fuses and fuse equipment, under 2,300 volts .....	<sup>1</sup> 382,125	89,965	2,011,649
36135 00	Molded case circuit breakers, 1,000 volts and under .....	1,132,905	86,426	2,893,260
36136 00	Duct, including plug-in units and accessories .....	227,947	27,615	88,469
36139 07, 09, 10, 13, 17, 41, 45, 83, 98	Switchgear and switchgear assemblies .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36139 51	Power fuses and fuse links, 2,300 volts and over .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36139 81, 91, 93	Power and ground connectors; and transmission and distribution connectors .....	<sup>3</sup> <sup>1</sup> 1,663,664	<sup>3</sup> 299,626	<sup>3</sup> 195,594
36251 01-05, 10-12, 15, 20, 30-33, 37, 52, 59, 61, 66, 69, 75, 81-82, 92	Relays .....	<sup>1</sup> 728,523	404,706	23,503,211
36252 51, 55	Controls for numerically controlled machine tools .....	<sup>1</sup> 192,531	27,209	(NA)
36252 71	Programmable controllers .....	941,156	123,737	(NA)
36253 01, 03, 05, 15	Motor starters .....	<sup>1</sup> 281,497	34,803	(NA)
36253 16	Motor control centers, 1,000 volts or less .....	<sup>1</sup> 373,672	33,450	(NA)
36253 21	Brakes and clutches .....	57,874	18,359	1,160,228
36253 32, 33	Limit switches .....	<sup>1</sup> 123,851	8,533	(NA)
36253 81	Rheostats and resistors .....	40,195	2,962	(NA)

NA Not available. <sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Source: Bureau of the Census report, EM 545, *U.S. Exports*<sup>2</sup>Source: Bureau of the Census report, IM 145, *U.S. Imports for Consumption*<sup>3</sup>Product codes 36139 07, 09, 10, 13, 17, 41, 45, 83, 98 and product code 36139 51 are combined with product code 36139 81, 91, 93 to avoid disclosing data for individual companies.

**HISTORICAL NOTE**

Data on switchgear, switchboard apparatus, relays, and industrial controls have been collected by the Bureau of the Census since 1971. Historical data may be obtained from Current Industrial Reports available at your local Federal

Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Wanda Sledd, 301-457-4790.

## FLUORESCENT LAMP BALLASTS (MQ36C)

### INTRODUCTION

These data cover all companies engaged in the manufacture of fluorescent lamp ballasts. The statistics were collected by mail on Bureau of the Census quarterly Form MQ36C, Fluorescent Lamp Ballasts. The survey panel includes all known producers of this product, approximately 12 companies.

### SUMMARY OF FINDINGS

The value of manufacturers' shipments of fluorescent lamp ballasts amounted to \$1 billion in 1995, an increase of 7 percent from shipments of \$941 million in 1994. The quantity of fluorescent lamp ballasts shipped decreased to 105 million units in 1995, from 108 million units in 1994. Corrected power-factor types accounted for 45 percent of the quantity and 43 percent of the value of shipments of all fluorescent lamp ballasts during the year 1995. For 1995, the quantity of shipments for corrected power-factor lamp ballasts decreased 15 percent, while that for uncorrected power-factor ballasts decreased 10 percent compared with 1994; the dollar value of shipments of the former type showed a 10-percent decrease, while the dollar value of the latter type showed a 9-percent decrease. The value of shipments of electronic ballasts increased 30 percent in 1995 to a half a billion dollars from \$391 million in 1994; continuing its upward trend while reducing per unit value. Quantity of electronic ballasts grew 34 percent to 33 million units after being flat at 25 million units in 1993 and 1994.

### EXPLANATION OF TERMS

#### Magnetic Type:

*Corrected power-factor ballasts.* Any ballast with a power factor of 85 percent or above.

*Uncorrected power-factor ballasts.* Any ballast with a power factor less than 85 percent.

#### Electronic Type:

*Uncorrected power factor.* Less than 90 percent power factor.

*Corrected power factor.* 90 percent power factor or above.

**Rapid start.** Includes ballasts of all voltage and frequency ratings for operation of all lamps designed for cathode preheating without the use of starters.

**Preheat start.** Includes ballasts of all voltage and frequency ratings for operation of all lamps of the switch start type, except ballasts with preheat windings.

**Slimline and instant start.** Includes ballasts of all voltage and frequency ratings for operation of all hot cathode lamps that do not utilize preheating of cathodes.

**All other.** Includes ballasts of all voltage and frequency ratings not classified above. Specifically, includes ballasts with preheat windings for fast starting of standard switch start lamps (trigger start, quick start, etc.), ballasts for dc operation, and cold cathode ballasts.

#### Electronic Fluorescent Ballast

Includes ballasts serving preheat or rapid start lamps, including those ballasts operating lamps less than 20 watts up to 40 watts, driving one, two, three or four lamps, and ballasts for 800mA lamps and above, and miscellaneous applications for powering fluorescent lamps not reported elsewhere. Also includes ballasts for single-pin slimline, instant start lamps, including ballasts driving two 96-inch lamps, and all other slimline lamp ballasts.

**Table 7. Quantity and Value of Shipments of Uncorrected and Corrected Power-Factor Type Fluorescent Ballasts: 1984 to 1995**

[Quantity in thousands of ballasts. Value in thousands of dollars]

Year	Total		Uncorrected power-factor type		Corrected power-factor type		Electronic type	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1995.....	105,306	1,002,115	24,764	68,165	47,648	427,062	32,894	506,888
1994.....	108,114	940,746	27,517	75,013	55,991	474,958	24,606	390,775
1993.....	107,428	969,542	28,150	65,820	54,790	457,222	24,488	446,500
1992.....	97,034	812,287	28,363	68,771	55,379	468,940	13,292	274,576
1991.....	88,729	718,317	24,919	61,413	55,467	476,867	8,343	180,037
1990.....	81,364	615,569	22,556	54,403	55,807	491,878	3,001	69,288
1989.....	77,702	521,301	18,011	41,667	58,265	439,818	1,426	39,816
1988.....	75,676	476,375	17,813	40,916	56,799	409,954	1,064	25,505
1987.....	74,948	436,045	19,542	42,814	54,754	378,113	652	15,118
1986.....	69,840	407,906	17,370	38,601	52,039	357,470	431	11,835
1985.....	70,054	398,895	18,456	39,899	51,598	358,996	( <sup>1</sup> )	( <sup>1</sup> )
1984.....	67,519	392,072	18,085	39,265	49,434	352,807	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup>Data for electronic type were not collected separately prior to 1986.

**Table 8. Quantity and Value of Shipments by Type of Ballast: 1995**

[Quantity in thousands of ballasts. Value in thousands of dollars]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
36124 —	Fluorescent lamp ballasts.....	105,306	1,002,115	<sup>1</sup> 28,936	<sup>1</sup> 268,116	28,883	273,858	23,913	237,968	23,574	222,173
	Magnetic type.....	72,412	495,227	<sup>1</sup> 20,769	<sup>1</sup> 137,154	19,558	127,842	15,455	111,133	16,630	119,098
	Uncorrected power-factor type (less than 85 percent power factor).....	24,764	68,165	7,354	19,126	6,239	16,756	5,676	16,465	5,495	15,818
	Preheat start.....	17,374	35,289	<sup>1</sup> 5,125	<sup>1</sup> 9,866	4,393	8,751	4,014	8,496	3,842	8,176
36124 58	Single-ended compact lamps.....	( <sup>1</sup> )	( <sup>1</sup> )	<sup>1</sup> ( <sup>1</sup> )	<sup>1</sup> ( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
36124 62	20 watt and less.....	11,018	18,771	<sup>1</sup> 3,163	<sup>1</sup> 5,252	2,844	4,778	2,537	4,397	2,474	4,344
36124 64	21 watt and over.....	<sup>1</sup> 6,356	<sup>1</sup> 16,518	<sup>1</sup> 1,962	<sup>1</sup> 4,614	1,549	3,973	<sup>1</sup> 1,477	<sup>1</sup> 4,099	<sup>1</sup> 1,368	<sup>1</sup> 3,832
36124 59	All other uncorrected power-factor type, including rapid start.....	7,390	32,876	<sup>1</sup> 2,229	<sup>1</sup> 9,260	1,846	8,005	1,662	7,969	1,653	7,642
	Corrected power-factor type (85 percent power factor or above).....	47,648	427,062	<sup>1</sup> 13,415	<sup>1</sup> 118,028	13,319	111,086	9,779	94,668	11,135	103,280
	Slimline and instant start.....	8,370	101,877	<sup>1</sup> 2,562	<sup>1</sup> 30,058	2,171	24,933	1,685	22,484	1,952	24,402
36124 67	Two-lamp 96T12 and 72T12.....	7,394	91,580	<sup>1</sup> 2,221	<sup>1</sup> 27,188	1,900	22,248	1,506	20,064	1,767	22,080
36124 68	Other slimline and instant start.....	976	10,297	<sup>1</sup> 341	<sup>1</sup> 2,870	271	2,685	179	2,420	185	2,322
	Rapid start.....	36,822	306,936	<sup>1</sup> 10,132	<sup>1</sup> 82,689	10,507	81,445	7,548	68,090	8,635	74,712
36124 69	One-lamp, 40 watt 48T12/RS.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36124 71	Two-lamp, 40 watt 48T12/RS.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36124 75	Two-lamp, 32 watt 48T8/RS.....	<sup>2</sup> 30,808	<sup>2</sup> 204,097	<sup>1</sup> 8,427	<sup>2</sup> 55,182	<sup>2</sup> 8,919	<sup>2</sup> 55,607	<sup>2</sup> 6,354	<sup>2</sup> 45,734	<sup>2</sup> 7,108	<sup>2</sup> 47,574
	All other rapid start.....	6,014	102,839	<sup>1</sup> 1,705	<sup>1</sup> 27,507	1,588	25,838	1,194	22,356	1,527	27,138
36124 72	800 to 1,000 mA.....	3,154	68,393	<sup>1</sup> 907	<sup>1</sup> 18,470	820	17,147	583	14,131	844	18,645
36124 73	1,500 mA.....	248	9,580	<sup>1</sup> 68	<sup>1</sup> 2,558	61	2,261	57	2,361	62	2,400
36124 74	Other rapid start.....	2,612	24,866	<sup>1</sup> 730	<sup>1</sup> 6,479	707	6,430	554	5,864	621	6,093
	Preheat start.....	( <sup>3</sup> )	( <sup>3</sup> )	<sup>1</sup> ( <sup>3</sup> )	<sup>1</sup> ( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36124 77	Single-ended compact lamps.....	( <sup>3</sup> )	( <sup>3</sup> )	<sup>1</sup> ( <sup>3</sup> )	<sup>1</sup> ( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36124 78	Linear and circline lamps.....	( <sup>3</sup> )	( <sup>3</sup> )	<sup>1</sup> ( <sup>3</sup> )	<sup>1</sup> ( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36124 98	All other magnetic corrected power-factor type.....	<sup>3</sup> 2,456	<sup>3</sup> 18,249	<sup>3</sup> 721	<sup>3</sup> 15,281	<sup>3</sup> 641	<sup>3</sup> 4,708	<sup>3</sup> 546	<sup>3</sup> 4,094	<sup>3</sup> 548	<sup>3</sup> 4,166

See footnotes at end of table.

Table 8. Quantity and Value of Shipments by Type of Ballast: 1995

[Quantity in thousands of ballasts. Value in thousands of dollars]

Product code	Product description	Total		First quarter		Second quarter		Third quarter		Fourth quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
36124 —	Fluorescent lamp ballasts—Con. Electronic type .....	32,894	506,888	8,167	130,962	9,325	146,016	8,458	126,835	6,944	103,075
	Uncorrected power-factor type (less than 90 percent power factor):										
36124 91	Single-ended compact lamps .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 92	All other electronic uncorrected power-factor type .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Corrected power-factor type (90 percent power factor or above):										
	Instant start:										
36124 93	One- and two-lamp, 32 watt 48T8 .....	13,259	181,130	3,322	48,014	3,803	53,204	3,304	43,124	2,830	36,788
36124 94	Three- and four-lamp, 32 watt 48T8 .....	10,706	168,063	2,497	41,355	3,092	50,027	2,767	41,973	2,350	34,708
36124 95	Two-lamp, 59 watt 96T8 ..	932	21,112	213	4,920	207	4,799	268	5,968	244	5,425
36124 96	Two-lamp, 75 watt 96T12/IS .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 97	All other instant start .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Rapid start:										
36124 82	All 32 watt 48T8 .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 84	All other T8, 4 foot and less .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 86	Two-lamp, 40 watt 48 T12/RS .....	1,011	16,784	239	3,954	290	4,722	245	4,241	237	3,867
36124 88	800 mA .....	384	9,919	81	2,224	104	2,758	97	2,391	102	2,546
36124 89	All other rapid start .....	392	7,023	105	1,976	107	1,920	109	1,869	71	1,258
36124 99	All other corrected power ..	-	-	-	-	-	-	-	-	-	-

- Represents zero. D Withheld to avoid disclosing data for individual companies. mA Milliamper. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Product codes 36124 58 and 36124 64 were combined to avoid disclosing data for individual companies.

<sup>2</sup>Product codes 36124 69, 36124 71, and 36124 75 were combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 36124 77 and 36124 78 were combined with 36124 98 to avoid disclosing data for individual companies.

Note: For 1995, detailed data for "Fluorescent lamp ballasts" were revised. Therefore, historical comparisons cannot be made. (For 1995 comparability, see "Contact for Data Users" at end of this subsection.)

Table 9. Shipments, Exports, Imports, and Apparent Consumption of Fluorescent Lamp Ballasts: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Imports for consumption <sup>2</sup>	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	C.i.f. and calculated duty
36124 —	Fluorescent lamp ballasts .....	105,306	1,002,115	10,400	72,610	73,707	502,564
	1995 ..						
	1994 ..	108,114	940,746	10,178	66,697	62,702	352,952

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*. Schedule B export number is 8504.10.0000.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. The HTSUSA import number is 8504.10.0000.

**HISTORICAL NOTE**

Data on fluorescent lamp ballasts have been collected by the Bureau of the Census since 1955. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact the Bureau of Census, Customer Services, 301-457-4100.

**FUNDING**

The MQ36C survey is funded, in part, by the Certified Ballasts Manufacturers Association.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Chris Blackburn, 301-457-4817.

## WIRING DEVICES AND SUPPLIES (MA36K)

### INTRODUCTION

These data cover firms engaged in the manufacture of current-carrying wiring devices and noncurrent-carrying devices in the United States. Very small firms (generally fewer than five employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies are excluded. The statistics were collected by mail on Bureau of the Census annual Form MA36K, Wiring Devices and Supplies. The survey panel includes all known manufacturers of wiring devices and supplies, except the very small firms excluded from the scope of the survey. Approximately 398 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, manufacturers' shipment of wiring devices and supplies totaled \$8.6 billion, an increase of 7 percent from \$8.0 billion in 1994. Current-carrying wiring devices accounted for \$4.7 billion, an increase of 6 percent from \$4.4 billion in 1994, while the noncurrent-carrying wiring

devices accounted for \$3.9 billion, an increase of 8 percent, from \$3.6 billion in 1994. The 1995 shipments included lampholders, valued at \$202.5 million, down 4 percent from \$211.3 million in 1994; convenience and power outlets, valued at \$362.4 million, up 6 percent from \$340.8 in 1994; switches, valued at \$1.6 billion, up 7 percent from \$1.5 billion in 1994; metal contacts, valued at \$259.4 million, up 6 percent from \$244.9 million in 1994; wire connectors, valued at \$1.14 billion, up 5 percent from \$1.1 billion in 1994; other current-carrying wiring devices, valued at \$1.1 billion, up 8 percent from \$1.0 billion in 1994; pole line and transmission hardware, valued at \$695.2 million, up 8 percent from \$641.1 million in 1994; electrical conduit and conduit fittings, valued at \$2.0 billion, up 9 percent from \$1.9 billion in 1994; and other noncurrent-carrying wiring devices, valued at \$1.2 billion, up 5 percent from \$1.1 billion in 1994.

### EXPLANATION OF TERMS

**Products covered.** The instruction manual for this survey, which is available on request, provides representative descriptions of products included in most product code classifications.

Table 10. Value of Shipments of Wiring Devices and Supplies by Class of Product: 1986 to 1995

[Millions of current dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
3643	Current-carrying wiring devices.....	4,700.2	4,421.7	4,086.6	4,153.6	3,939.3	3,857.8	4,031.4	3,921.9	3,663.6	3,320.5
36431	Lampholders.....	202.5	211.3	210.4	197.3	214.7	230.0	240.3	226.6	218.4	202.0
36432	Convenience and power outlets, both general- and special-purpose, excluding pin and sleeve type.....	362.4	340.8	313.8	332.0	308.6	287.0	301.2	304.3	290.6	278.8
36433	Switches for electrical circuitry.....	1,636.6	1,525.7	1,473.9	1,423.5	1,310.4	1,348.6	1,376.6	1,524.6	1,425.2	1,254.5
36434	Metal contacts precious and other.....	259.4	244.9	208.0	240.1	332.3	317.4	375.4	201.8	176.6	159.8
36435	Wire connectors for electrical circuitry.....	1,140.0	1,081.6	976.0	1,007.3	915.8	844.3	857.2	842.0	794.6	720.9
36436	Other current-carrying wiring devices, including attachment plug caps, connector bodies, lightning arrestors, and pin and sleeve convenience power outlets.....	1,099.3	1,017.5	904.4	953.3	857.6	830.4	884.2	822.6	758.2	704.6
3644	Noncurrent-carrying wiring devices.....	3,908.5	3,622.4	3,250.7	3,140.4	2,930.3	3,095.8	3,114.7	3,212.1	2,791.1	2,434.1
36441	Pole line and transmission hardware.....	695.2	641.1	618.0	541.6	493.6	516.5	525.5	455.3	384.6	375.2
36442	Electrical conduit and conduit fittings.....	2,041.9	1,865.5	1,633.9	1,601.1	1,496.5	1,657.7	1,664.7	1,833.9	1,528.6	1,265.9
36443	Other noncurrent-carrying wiring devices and supplies.....	1,171.4	1,115.8	998.7	997.7	940.1	921.6	924.5	923.0	877.9	793.0

Table 11. Quantity and Value of Shipments of Wiring Devices and Supplies: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3643—	Wiring devices and supplies .....	(X)	(X)	8,608,641	(X)	8,044,125
36431—	Current-carrying wiring devices .....	(X)	(X)	4,700,174	(X)	4,421,719
36431—	Lampholders .....	33	720,111	202,475	750,537	211,281
	Incandescent:					
36431 03	Outlet box, threaded, medium base only, pull and keyless types .....	8	19,605	20,730	20,594	21,271
36431 04	Push through and pull types, all materials, threaded, medium base only, excluding outlet box type and socket interiors .....	4	( <sup>1</sup> )	( <sup>1</sup> )	226,134	42,605
36431 06	Weatherproof, threaded, medium base only .....	9	3,828	4,791	4,221	4,693
36431 11	Candelabra base, all types .....	11	<sup>c</sup> 50,453	<sup>a</sup> 10,253	63,573	13,509
36431 13	Sign and fixture, medium base only .....	7	18,077	16,583	18,964	16,994
36431 19	All other incandescent, medium, admedium, intermediate, lumiline, miniature, including but not limited to pin-type, cleat, hasp, and socket interiors sold separately, all bases .....	15	<sup>1</sup> 359,520	<sup>1</sup> 94,291	155,039	56,444
	Fluorescent:					
36431 15	Bi-pin .....	8	220,414	28,208	211,930	27,565
36431 21	Slimline .....	5	17,073	6,532	17,794	6,374
36431 23	Recessed double contact .....	5	12,555	9,219	12,377	8,692
36431 25	All other fluorescent, including but not limited to circline, panelescent, and starter holders .....	6	12,470	5,563	13,089	5,710
36431 28	All other lampholders, including cold cathode neon, and bases for quartz lamps .....	8	<sup>b</sup> 6,116	<sup>c</sup> 6,305	<sup>b</sup> 6,822	<sup>a</sup> 7,424
36432—	Convenience and power outlets, both general- and special-purpose, excluding pin and sleeve type .....	16	241,299	362,382	243,437	340,837
36432 27	Receptacles with GFIC (all types, all amperages) .....	6	18,320	125,046	17,854	123,027
36432 28	2-pole, 2-wire (flush, all types) .....	7	3,046	1,863	3,084	2,080
	2-pole, 3-wire and up (flush):					
36432 29	Locking, 15 amperes and under .....	6	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36432 30	Locking, 20 amperes and over .....	6	3,492	16,644	3,524	15,840
36432 31	Nonlocking, 15 amperes and under .....	6	77,415	54,142	76,076	52,719
36432 32	Nonlocking, 20 amperes and over .....	8	23,183	43,858	21,424	40,564
36432 34	Appliance and special applications all amperages, all types .....	5	17,888	7,012	17,822	7,014
36432 39	All other types, including dust and explosion proof, surface and 2-pole/2-wire .....	8	<sup>2</sup> 97,955	<sup>2</sup> 113,817	<sup>2</sup> 103,653	<sup>2</sup> 99,593
36433—	Switches for electrical circuitry .....	81	854,693	1,636,647	860,937	<sup>1</sup> 1,525,664
	General use flush-mounted switches, designed for mounting in switch or outlet boxes (except dimmers):					
	Ac (except mercury):					
36433 60	Single pole, 15 amperes and under .....	9	78,909	56,679	80,025	56,999
36433 63	Single pole, over 15 amperes .....	5	8,804	20,138	6,483	18,262
36433 64	Other than single pole, including but not limited to double pole 3-way, 4-way .....	8	40,975	66,928	48,063	67,541
36433 51	Ac-dc (except mercury) .....	4	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36433 69	All other general-use switches, including surface-mounted, mercury, etc. ....	8	<sup>3</sup> 19,541	<sup>3</sup> 17,768	<sup>3</sup> 20,545	<sup>3</sup> 20,960

See footnotes at end of table.



Table 11. Quantity and Value of Shipments of Wiring Devices and Supplies: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3643- —	Wiring devices and supplies—Con.					
36433 —	Current-carrying wiring devices—Con.					
36433 70	Switches for electrical circuitry—Con. Special-purpose switches: Appliance and fixture, including pendant and canopy types and variable speed controls .....	21	95,227	144,161	<sup>r</sup> 99,322	<sup>r</sup> 156,375
36433 71	Precision (1/8-inch gap or less) snap-acting switches, excluding limit switches .....	11	<sup>a</sup> 95,592	<sup>a</sup> 58,754	<sup>a</sup> <sup>r</sup> 76,108	<sup>a</sup> 52,211
36433 72	Aircraft types .....	9	2,819	80,657	2,701	75,620
36433 76	Automotive types .....	28	324,686	842,177	<sup>r</sup> 324,571	759,156
36433 77	All other special-purpose switches, including foot actuated, light sensing, and signal actuated .....	28	178,969	255,455	193,748	232,709
	Dimmers:					
	Incandescent:					
36433 93	Infinitely variable, 600 watts or less. ....	11	7,160	40,424	<sup>r</sup> 7,407	<sup>r</sup> 41,947
36433 94	Infinitely variable, over 600 watts. ....	10	<sup>a</sup> 331	18,306	<sup>a</sup> 360	18,903
36433 95	All other types, including but not limited to portable lamps and high-low switches .....	9	1,680	<sup>a</sup> 35,200	1,604	<sup>a</sup> 24,981
36434 —	Metal contacts, precious and other .....	16	<sup>4</sup> 18,210	259,426	<sup>4</sup> 16,180	244,876
36435 —	Wire connectors, including connectors used under national electrical application .....	67	<sup>4</sup> 27,232	1,139,989	<sup>4</sup> 25,432	1,081,553
36435 82	Pressure connectors, where pressure is applied by screw, cone, or other mechanical device .....	28	<sup>4</sup> 671	175,508	<sup>4</sup> 643	160,174
36435 83	Compression connectors, uninsulated terminals and splicers, tool installed .....	27	<sup>4</sup> <sup>b</sup> 2,535	<sup>a</sup> 148,187	<sup>4</sup> 2,389	132,559
36435 84	Preinsulated terminals and splicers, tool installed .....	17	<sup>4</sup> <sup>a</sup> 1,634	<sup>a</sup> 164,135	<sup>4</sup> 2,016	203,193
36435 86	Banded or strip terminals and splicers, machine installed .....	15	<sup>4</sup> 6,790	155,645	<sup>4</sup> <sup>r</sup> 6,386	<sup>r</sup> 127,056
36435 87	Pigtail connectors, including wire nuts .....	15	<sup>4</sup> 2,948	<sup>a</sup> 75,303	<sup>4</sup> 2,860	74,405
36435 88	Blade or pin type, separable terminations and splicers .....	12	<sup>4</sup> 4,659	151,712	<sup>4</sup> <sup>r</sup> 4,846	138,699
36435 89	Other wire connectors, n.e.c., including solder type .....	28	<sup>4</sup> 7,995	269,499	<sup>4</sup> 6,292	245,467
36436 —	Other current-carrying wiring devices, including attachment plug caps, connector bodies, lightning arresters, pin and sleeve convenience power outlets, etc. ....	128	(X)	1,099,255	(X)	1,017,508
	Attachment plug caps and flanged outlets, including motor bases, all types; including fused, fuseless, switch, and switchless:					
36436 40	2-pole, 2-wire, all types, general use locking and nonlocking, all amperages ..	14	<sup>c</sup> 46,569	<sup>b</sup> 16,153	54,780	18,497
	2-pole, 3-wire and up:					
36436 41	Locking, 15 amperes and under. ....	9	2,406	5,860	2,575	6,180
36436 42	Locking, 20 amperes and over .....	9	2,310	17,566	2,156	17,033
36436 43	Nonlocking, 15 amperes and under. ....	12	22,127	38,383	22,683	36,922
36436 44	Nonlocking, 20 amperes and over .....	12	9,670	20,745	9,877	20,924
36436 45	All other types (except pin and sleeve), including dust and explosion-proof, appliance, and other special application .....	10	2,725	37,823	2,607	35,705
	Connector bodies and flanged outlets, all types:					
36436 49	2-pole, 2-wire, all types, all amperages ..	12	<sup>c</sup> 5,011	<sup>b</sup> 2,324	5,742	2,671
	2-pole, 3-wire and up:					
36436 51	Locking, 15 amperes and under. ....	9	2,073	12,649	1,615	10,121
36436 53	Locking, 20 amperes and over .....	9	941	14,986	878	<sup>r</sup> 14,448
36436 55	Nonlocking, 15 amperes and under. ....	11	5,360	20,484	5,353	19,407
36436 57	Nonlocking, 20 amperes and over .....	7	652	4,326	715	4,023

See footnotes at end of table.

Table 11. Quantity and Value of Shipments of Wiring Devices and Supplies: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3643—	Wiring devices and supplies—Con.					
36436 —	Current-carrying wiring devices—Con.					
	Other current-carrying wiring devices, including attachment plug cups, connector bodies, lightning arresters, pin and sleeve convenience power outlets, etc.—Con.					
	Connector bodies and flanged outlets, all types—Con.					
36436 58	All other types, excluding pin and sleeve, including dust and explosion-proof, appliance, and other special application. . . . .	9	41,156	33,477	40,131	<sup>†</sup> 32,236
	Pin and sleeve convenience and power outlets, attachment plug caps, and connector bodies:					
	Pin and sleeve, general-purpose (120 volts and over, 20 amperes and over):					
36436 65	Convenience and power outlets . . . . .	11	963	33,140	950	33,636
36436 67	Attachment plug caps . . . . .	9	318	19,561	296	19,353
36436 69	Connector bodies . . . . .	9	438	23,591	443	22,792
36436 72	All other pin and sleeve, including dust and explosion-proof, 20-ampere types, etc. . . . .	7	(S)	<sup>(5)</sup>	302	11,682
36436 79	Fluorescent starters . . . . .	5	9,469	2,324	9,631	2,504
36436 81	Terminal blocks . . . . .	24	157,468	127,408	133,516	109,120
36436 83	Lightning arresters for alternating current power transmission systems and substations; U.S. designation, station and intermediate, I.E.C. designation 10 kA and 5 kA Series A . . . . .	7	(X)	32,633	(X)	31,827
36436 85	Lightning arresters for alternating current power distribution systems and substations; U.S. designation, distribution and secondary I.E.C. designation 5 kA Series B, 2.5 kA and 1.5 kA . . . . .	6	(X)	121,988	(X)	111,318
36436 88	Surge suppressors, designed for equipment operating on 110/120 volt circuits. . . . .	12	(X)	90,404	(X)	<sup>†</sup> 77,855
36436 91	Lightning rods . . . . .	12	(X)	39,863	(X)	37,308
36436 94	Electric harnesses and assemblies, excluding engine harnesses (from purchased wire). . . . .	20	(X)	<sup>b</sup> 124,371	(X)	<sup>†</sup> 103,645
36436 97	Miscellaneous, including combination devices, adaptors, current taps, surface extensions, rosettes, choke coils, rail bonds, and overhead trolley line materials . . . . .	38	(X)	<sup>5</sup> 249,299	(X)	<sup>†</sup> 228,353
36436 98	All other wiring devices with integral ground fault circuit interrupting capabilities, excluding circuit breakers . . . . .	6	7,356	9,897	<sup>†</sup> 7,098	<sup>†</sup> 9,948
3644—	Noncurrent-carrying wiring devices . . . . .	(X)	(X)	3,908,467	(X)	3,622,406
36441 —	Pole and transmission line hardware . . . . .	38	(X)	695,208	(X)	641,073
36441 12	Pole and transmission line construction materials, also known as overhead and underground line hardware for electric transmission, distribution, and communication lines . . . . .	30	(X)	559,094	(X)	516,633
36441 13	Pole and transmission line anchors. . . . .	5	(X)	16,509	(X)	16,604
36441 19	All other pole and transmission line hardware . . . . .	11	(X)	119,605	(X)	107,836
36442 —	Electrical conduit and conduit fittings . . . . .	78	(X)	2,041,858	(X)	1,865,486
	Rigid metal conduit, excluding couplings, nipples, bends, and elbows:					
36442 01	Standard weights (steel) (short tons) . . . .	7	<sup>6</sup> 262,693	<sup>6</sup> 260,834	243,240	231,542
36442 05	Other metallic conduit (short tons). . . . .	3	<sup>(6)</sup>	<sup>(6)</sup>	24,058	22,071
36442 24	Nonmetallic conduit (1,000 pounds) . . . . .	6	<sup>a</sup> 649,090	<sup>a</sup> 312,726	630,533	285,581

See footnotes at end of table.

Table 11. Quantity and Value of Shipments of Wiring Devices and Supplies: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3644—	Wiring devices and supplies—Con.					
36442 —	Noncurrent-carrying wiring devices—Con.					
36442 33	Electrical conduit and conduit fittings—Con.					
	Electrical metallic tubing (short tons) . . . . .	6	381,441	328,190	358,848	294,183
	Flexible steel and aluminum conduit (1,000 feet) . . . . .	10	282,199	87,564	<sup>f</sup> 277,658	<sup>f</sup> 85,011
36442 32	Flexible nonmetallic conduit (1,000 pounds) . . . . .	12	<sup>e</sup> 94,952	45,995	<sup>e</sup> 86,279	37,808
36422 35	Raceways and wire ways, including fittings, metal . . . . .	15	(X)	156,923	(X)	147,181
36442 38	Ventilated cable tray and accessories . . . . .	5	(X)	<sup>b</sup> 62,009	(X)	41,411
36442 51	Cast conduit bodies, covers, and gaskets . . . . .	11	(X)	123,883	(X)	116,358
	Rigid conduit fittings, including couplings, nipples, bends, and elbows:					
36442 53	Couplings, connectors, and unions . . . . .	18	(X)	141,356	(X)	<sup>f</sup> 132,071
36442 54	Locknuts and bushings . . . . .	10	(X)	38,305	(X)	30,321
36442 59	All other rigid conduit fittings . . . . .	8	(X)	36,721	(X)	53,826
36442 52	Nonmetallic conduit fittings . . . . .	15	(X)	48,389	(X)	45,685
	EMT fittings (couplings and connectors):					
36442 56	Gland type . . . . .	14	(X)	43,019	(X)	33,998
36442 57	Set-screw type . . . . .	10	(X)	41,707	(X)	47,402
36442 58	All others . . . . .	11	(X)	9,929	(X)	<sup>f</sup> 8,164
36442 44	Service entrance caps, ells, and connectors . . . . .	13	(X)	<sup>a</sup> 9,361	(X)	10,216
	Cable, cord, and flexible conduit fittings:					
36442 71	Armored cable, metallic sheathed cable, and flexible conduit fittings . . . . .	14	(X)	152,576	(X)	<sup>f</sup> 116,620
36442 77	Liquid-tight flexible conduit fittings . . . . .	11	(X)	63,170	(X)	54,927
36442 72	Nonmetallic sheathed cable and cord fittings . . . . .	17	(X)	40,779	(X)	38,693
36442 46	Other electric conduit fittings . . . . .	17	(X)	38,422	(X)	32,417
36443 —	Other noncurrent-carrying wiring devices and supplies . . . . .	80	(X)	1,171,401	(X)	1,115,847
	Stamped metal boxes, covers, and accessories, including stamped conduit boxes:					
36443 31	Switch and receptacle boxes . . . . .	13	(X)	355,299	(X)	334,551
36443 32	Outlet boxes . . . . .	10	(X)	93,913	(X)	116,845
36443 33	Covers . . . . .	13	(X)	47,879	(X)	37,951
36443 34	Supports, bar hangers, and other accessories . . . . .	16	(X)	56,941	(X)	44,790
	Cast metal boxes, covers, gaskets, and accessories:					
36443 41	FS and FD switch and receptacle type . . . . .	11	(X)	26,399	(X)	37,816
36443 42	Outlet type . . . . .	9	(X)	<sup>a</sup> 43,553	(X)	36,552
36443 43	Junction type . . . . .	17	(X)	74,363	(X)	78,558
	Switch, outlet, FM/TV, and telephone wall plates:					
36443 35	Metallic . . . . .	9	42,537	21,093	44,371	22,953
36443 36	Nonmetallic . . . . .	9	247,794	55,708	253,343	55,803
36443 37	Plastics boxes and covers . . . . .	17	(X)	129,755	(X)	<sup>f</sup> 105,218
36443 38	Floor boxes and covers . . . . .	8	(X)	<sup>b</sup> 31,771	(X)	<sup>f</sup> 26,782
36443 48	Other noncurrent-carrying wiring devices and supplies . . . . .	35	(X)	234,727	(X)	218,028

<sup>f</sup>Revised by 5 percent or more from previously published data. S Does not meet publication standards. X Not applicable.

<sup>1</sup>Product codes 36431 04 and 36431 19 are combined for 1995 to avoid disclosing data for individual companies.

<sup>2</sup>Product codes 36432 29 and 36432 39 are combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 36433 51 and 36433 69 are combined to avoid disclosing data for individual companies.

<sup>4</sup>Quantities for product codes beginning with 36434 and 36435 are published in millions of units rather than thousands of units.

<sup>5</sup>Product codes 36436 72 and 36436 97 are combined to avoid disclosing data for individual companies.

<sup>6</sup>Product codes 36442 01 and 36442 05 are combined for 1995 to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item is estimated. <sup>b</sup>26 to 50 percent of this item is estimated. <sup>c</sup>Over 50 percent of this item is estimated.

Table 12. Value of Shipments, Exports, and Imports of Selected Wiring Devices: 1995 and 1994

[Millions of dollars]

Product description	Manufacturers' shipments f.o.b. plant <sup>1</sup>	Exports of domestic merchandise at port <sup>1 2</sup>	Imports for consumption <sup>1 3</sup>
<b>1995</b>			
Lampholders .....	202.5	14.2	62.2
Metal contacts .....	259.4	40.4	50.7
<b>1994</b>			
Lampholders .....	213.3	13.9	66.2
Metal contacts .....	244.4	28.0	36.6

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

## HISTORICAL NOTE

Data on wiring devices and supplies have been collected by the Bureau of the Census since 1960. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Raphael Corrado, 301-457-4743.

## ELECTRIC LIGHTING FIXTURES (MA36L)

### INTRODUCTION

These data cover companies engaged in the manufacture of specified types of electric lighting fixtures, except very small firms (generally fewer than 10 employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies.

The statistics were collected by mail on Bureau of the Census annual Form MA36L, Electric Lighting Fixtures. The survey panel includes all known producers of the specified types of electric lighting fixtures, except the very small firms excluded from the scope of the survey. Approximately 320 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of electric lighting fixtures was \$5,831.1 million. This represents a 5-percent increase from the 1994 total value of \$5,548.0 million. The 1995 figure includes residential type fixtures, \$1,003.1 million, a decrease of 2 percent from 1994; commercial and institutional type fixtures, \$2,776.4 million, an increase of 5 percent from 1994; industrial type fixtures, \$616.7 million, an increase of 11 percent from 1994; and outdoor lighting equipment, \$1,434.9 million, an increase of 8 percent from 1994. Vehicular lighting equipment data were discontinued in 1992.

### EXPLANATION OF TERMS

See Introduction for an explanation of terms.

**Table 13. Value of Shipments of Electric Fixtures: 1986 to 1995**

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
36451	Electric lighting fixtures <sup>1</sup> . . . . .	5,831.1	5,548.0	5,115.0	4,720.1	4,426.0	4,798.2	4,738.0	4,571.8	4,417.8	4,102.8
36462	Residential type . . . . .	1,003.1	1,025.1	996.5	898.2	760.9	827.6	858.5	877.1	916.1	844.9
	Commercial and institutional type (except spot-light) . . . . .	2,776.4	2,633.7	2,390.8	2,221.2	2,164.8	2,379.7	2,316.7	2,242.7	2,094.8	1,940.2
36463	Industrial type . . . . .	616.7	554.9	493.4	442.1	446.4	529.4	504.6	430.6	419.1	400.9
36470	Vehicular lighting equipment . . . . .	(NA)	(NA)	(NA)	(NA)	1,616.1	1,620.7	1,570.5	1,564.4	1,368.5	1,222.4
36485	Outdoor lighting equipment . . . . .	1,439.4	1,334.2	1,234.2	1,158.6	1,053.9	1,061.5	1,058.2	1,021.4	987.8	916.8

NA Not available.

<sup>1</sup>Excludes product code 36470, "Vehicular lighting equipment," which is not available after 1991.

Table 14. Quantity and Value of Shipments of Electric Lighting Fixtures: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36451 —	Electric lighting fixtures, residential type	124	(X)	1,003,081	(X)	1,025,073
	Incandescent, excluding PAR lampholders and floodlights:					
	Interior, including bath or kitchen:					
36451 11	Ceiling or pendant	74	<sup>b</sup> 15,448	<sup>b</sup> 284,907	<sup>b</sup> 16,681	<sup>b</sup> 312,842
36451 13	Wall or bracket	62	<sup>b</sup> 3,939	<sup>b</sup> 84,785	<sup>b</sup> 3,686	<sup>b</sup> 74,231
	Track lighting:					
36451 06	Single circuit track lengths and accessories	4	(X)	5,280	(X)	5,606
36451 07	Multiple circuit track lengths and accessories	3	(X)	<sup>b</sup> 317	(X)	(D)
36451 08	Line voltage heads	3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
36451 09	Low voltage heads	3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
36451 10	Track lengths and heads sold together (kits)	2	<sup>1</sup> 492	<sup>1</sup> 10,449	<sup>1</sup> 505	<sup>1</sup> 10,741
36451 12	Recessed IC (direct contact with ceiling insulation)	8	<sup>a</sup> 10,400	<sup>a</sup> 99,493	12,153	92,864
36451 14	Recessed non-IC (3-inch minimum clearance from ceiling insulation)	8	<sup>b</sup> 3,392	<sup>a</sup> 83,887	<sup>a</sup> 5,174	80,038
	Outdoor:					
36451 15	Designed for attachment to house	46	<sup>b</sup> 3,981	<sup>b</sup> 58,255	<sup>b</sup> 4,840	<sup>a</sup> 71,200
36451 16	Custom lighting (lanterns, etc.)	8	(D)	(D)	(D)	(D)
36451 17	Not designed for attachment to house (garden, patio, and yard)	38	<sup>a</sup> 2,614	<sup>a</sup> 63,022	<sup>a</sup> 2,328	<sup>a</sup> 63,210
	Fluorescent:					
	Wraparounds:					
36451 19	4 foot, 2 lamp	9	1,758	35,422	1,253	25,551
36451 21	4 foot, 4 lamp	6	302	9,274	261	8,418
36451 23	All other residential wraparounds	8	<sup>b</sup> 2,506	<sup>b</sup> 26,668	<sup>a</sup> 3,343	<sup>a</sup> 37,321
36451 20	Ceiling mounted decorative	27	<sup>b</sup> 5,297	<sup>a</sup> 84,710	5,438	76,283
36451 22	Ceiling mounted general-purpose	17	5,128	53,004	5,773	60,437
36451 24	Pendant	8	(D)	(D)	(D)	(D)
36451 26	Recessed IC (direct contact with ceiling insulation)	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36451 28	Recessed non-IC (3-inch minimum clearance from ceiling insulation)	8	<sup>2</sup> 864	<sup>2</sup> 33,866	<sup>2</sup> 845	<sup>2</sup> 25,182
36451 30	Wall or bracket	26	<sup>c</sup> 1,047	<sup>a</sup> 15,834	<sup>c</sup> 929	12,262
36451 69	Components and renewal parts for residential type, sold separately	34	(X)	<sup>a</sup> 34,273	(X)	<sup>a</sup> 31,212
36462 —	Electric lighting fixtures, commercial and institutional type (except portable and spotlight)	189	(X)	2,776,404	(X)	2,633,725
	Incandescent fixtures:					
	Utilitarian and ornamental types (primarily for public buildings, banks, stores, office buildings, schools, auditoriums, churches, theaters, etc.):					
36462 11	Surface or pendant	57	<sup>b</sup> 1,263	<sup>c</sup> 77,951	<sup>b</sup> 1,588	<sup>a</sup> 99,777
36462 12	Recessed:					
	IC (direct contact with ceiling insulation)	20	<sup>b</sup> 7,585	<sup>b</sup> 77,045	<sup>a</sup> <sup>r</sup> 8,054	<sup>a</sup> <sup>r</sup> 75,858
36462 14	Non-IC (3-inch minimum clearance from ceiling insulation)	23	<sup>a</sup> 9,995	<sup>a</sup> 153,982	<sup>a</sup> <sup>r</sup> 10,788	<sup>a</sup> <sup>r</sup> 152,273
	Track lighting:					
36462 20	Single circuit track lengths and accessories	9	(X)	54,711	(X)	<sup>r</sup> 52,363
36462 22	Multiple circuit track lengths and accessories	9	(X)	<sup>b</sup> 10,407	(X)	<sup>a</sup> 10,317
36462 24	Line voltage heads	11	2,488	50,957	2,651	48,625
36462 26	Low voltage heads	10	2,251	32,254	<sup>r</sup> 2,019	<sup>r</sup> 31,587
36462 28	Track lengths and heads sold together (kits)	5	280	4,171	277	4,227
36462 18	Specialized custom lighting fixtures, chandeliers, church lighting, etc.	41	(X)	<sup>b</sup> 58,399	(X)	<sup>a</sup> <sup>r</sup> 52,094
36462 19	Other incandescent fixtures, such as interior display and PAR lampholders	21	(X)	<sup>c</sup> 23,177	(X)	<sup>c</sup> 40,055
	High intensity discharge types:					
36462 30	Surface or pendant	30	<sup>b</sup> 213	<sup>b</sup> 24,358	<sup>a</sup> <sup>r</sup> 167	<sup>a</sup> <sup>r</sup> 20,212
36462 31	Indirect lighting	12	<sup>c</sup> 113	<sup>c</sup> 29,313	88	21,827
	Recessed non-IC (3-inch minimum clearance from ceiling insulation):					
36462 36	Open reflector	20	<sup>a</sup> 549	<sup>a</sup> 35,148	<sup>r</sup> 370	<sup>a</sup> 27,069
36462 38	Enclosed	20	<sup>b</sup> 198	<sup>b</sup> 27,334	335	<sup>a</sup> 33,734
	Recessed IC (direct contact with ceiling insulation):					
36462 39	Open reflector	1	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36462 41	Enclosed	5	<sup>3</sup> 13	<sup>3</sup> 2,761	<sup>3</sup> 15	<sup>3</sup> <sup>r</sup> 2,602
	Fluorescent:					
	Recessed troffers, airhandling, including heat extraction versions:					
	Lensed:					
36462 80	2 feet X 4 feet, 4 lamp	9	74	4,177	78	3,867
36462 81	2 feet X 4 feet, 3 lamp	10	77	4,513	84	4,368
36462 82	2 feet X 4 feet, 2 lamp	8	57	2,902	61	2,830
36462 52	All other lensed, airhandling	11	<sup>a</sup> 162	<sup>a</sup> 10,856	<sup>a</sup> 160	<sup>a</sup> 10,615

See footnotes at end of table.

Table 14. Quantity and Value of Shipments of Electric Lighting Fixtures: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36462 —	Electric lighting fixtures, commercial and institutional type (except portable and spotlight)—Con. Fluorescent—Con. Recessed troffers, airhandling, including heat extraction versions—Con. Metal louvered:					
36462 83	2 feet X 4 feet, 4 lamp	8	250	17,155	287	17,585
36462 84	2 feet X 4 feet, 3 lamp	10	1,292	83,197	1,463	82,435
36462 85	2 feet X 4 feet, 2 lamp	7	420	24,275	483	24,119
36462 53	All other metal louvered, airhandling	12	1,873	123,913	1,723	108,025
	Nonmetal louvered:					
36462 86	2 feet X 4 feet, 4 lamp	5	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
36462 87	2 feet X 4 feet, 3 lamp	4	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
36462 88	2 feet X 4 feet, 2 lamp	4	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
36462 54	All other nonmetal louvered, airhandling	6	<sup>4</sup> 57	<sup>4</sup> 6,479	<sup>4</sup> 59	<sup>4</sup> 6,446
	Recessed troffers, nonairhandling, including heat extraction versions:					
	Lensed:					
36462 89	2 feet X 4 feet, 4 lamp	18	3,421	130,968	3,057	110,374
36462 90	2 feet X 4 feet, 3 lamp	16	1,592	66,258	1,547	59,824
36462 91	2 feet X 4 feet, 2 lamp	16	2,224	73,135	2,154	64,954
36462 58	All other lensed, nonairhandling	20	<sup>a</sup> 4,270	<sup>a</sup> 177,024	<sup>a</sup> 4,301	<sup>a</sup> 167,353
	Metal louvered:					
36462 92	2 feet X 4 feet, 4 lamp	9	372	23,115	296	17,329
36462 93	2 feet X 4 feet, 3 lamp	7	291	18,988	278	16,880
36462 94	2 feet X 4 feet, 2 lamp	10	552	32,848	557	29,066
36462 56	All other metal louvered, airhandling	11	<sup>a</sup> 411	<sup>a</sup> 24,889	<sup>a</sup> 399	<sup>a</sup> 21,859
	Nonmetal louvered:					
36462 95	2 feet X 4 feet, 4 lamp	7	41	1,928	29	1,519
36462 96	2 feet X 4 feet, 3 lamp	5	30	1,600	24	1,228
36462 97	2 feet X 4 feet, 2 lamp	7	49	1,806	44	1,484
36462 60	All other nonmetal louvered, nonairhandling	6	<sup>c</sup> 80	<sup>c</sup> 2,709	<sup>c</sup> 77	<sup>c</sup> 2,436
36462 49	Striplights (surface)	53	10,978	<sup>a</sup> 236,327	11,561	228,024
36462 50	Striplights (recessed)	12	715	24,163	762	27,150
36462 55	Ceiling systems, including luminous ceilings	17	(X)	<sup>c</sup> 19,077	(X)	<sup>b</sup> 25,970
	Plastics wraparounds:					
36462 40	4 foot, 2 lamp	19	2,105	58,347	2,113	54,676
36462 42	4 foot, 4 lamp	15	697	27,438	678	25,554
36462 51	All other plastics commercial and institutional wraparounds	18	<sup>b</sup> 1,630	<sup>b</sup> 58,524	<sup>b</sup> 1,553	<sup>b</sup> 53,611
36462 57	Wall mounted fixtures	60	<sup>b</sup> 1,232	<sup>b</sup> 78,902	<sup>b</sup> 1,390	<sup>b</sup> 76,055
36462 65	Under cabinet mount task light	27	<sup>b</sup> 1,721	<sup>a</sup> 63,758	1,846	62,403
	Surface and pendant, all other:					
36462 66	Lensed	53	<sup>c</sup> 3,368	<sup>a</sup> 113,439	<sup>r</sup> 3,575	<sup>r</sup> 108,771
36462 68	Louvered	25	<sup>b</sup> 282	<sup>c</sup> 35,490	<sup>a</sup> 272	<sup>a</sup> 34,017
	Compact fluorescent downlights:					
36462 70	Recessed IC (direct contact with ceiling insulation)	7	<sup>a</sup> 213	<sup>b</sup> 14,642	<sup>b</sup> 164	<sup>c</sup> 16,554
36462 72	Recessed non-IC (3-inch minimum clearance from ceiling insulation)	18	<sup>a</sup> 1,736	<sup>a</sup> 87,612	<sup>a</sup> 1,746	<sup>a</sup> 80,065
	Specific function lighting, all sources (incandescent, HID, and fluorescent):					
36462 59	Enclosed and gasketed (clean room fixtures)	38	<sup>a</sup> 620	<sup>a</sup> 47,993	<sup>b</sup> 557	<sup>b</sup> 40,825
36462 74	Indirect lighting, furniture mount	4	30	<sup>a</sup> 3,113	34	2,845
36462 76	Indirect lighting, pendant mount	5	<sup>c</sup> 15	<sup>c</sup> 3,493	<sup>a</sup> 12	<sup>a</sup> 2,939
36462 61	Indoor signs, including electroluminescence (exit, directional, etc.), excluding portable lighting	31	<sup>b</sup> 2,129	<sup>b</sup> 145,131	<sup>b</sup> 1,771	<sup>b</sup> 130,042
36462 62	Indoor emergency lighting (automatic self-powered)	17	<sup>a</sup> 1,526	<sup>a</sup> 79,142	<sup>a</sup> 1,437	<sup>a</sup> 76,207
36462 63	Vandal resistant (specialty products designed for this application)	13	257	16,334	245	15,650
36462 64	All other	34	(X)	<sup>c</sup> 94,480	(X)	<sup>c</sup> 87,354
36462 69	Components and renewal parts for commercial and institutional type, sold separately	50	(X)	<sup>a</sup> 66,913	(X)	<sup>a</sup> 60,337
36463 —	Electric lighting fixtures, industrial type	72	(X)	616,689	(X)	554,942
	General lighting (except portable):					
36463 11	Incandescent	16	<sup>b</sup> 907	<sup>b</sup> 23,368	<sup>a</sup> 896	<sup>b</sup> 25,404
36463 13	Fluorescent	38	<sup>a</sup> 3,489	<sup>a</sup> 137,277	<sup>r</sup> 3,982	<sup>a</sup> 135,110
	High intensity discharge types, including integrally mounted and remote ballasts:					
36463 06	Open reflector	16	<sup>b</sup> 1,891	<sup>b</sup> 177,178	<sup>r</sup> 1,495	<sup>r</sup> 136,629
36463 08	Enclosed	17	<sup>a</sup> 1,045	137,513	<sup>r</sup> 902	<sup>r</sup> 116,294
36463 10	Parking garage lighting (fixtures designed specifically for this application)	9	113	12,316	<sup>r</sup> 136	<sup>r</sup> 14,440
	Hazardous lighting —UL listed, class, division, group:					
36463 16	Incandescent, including portable	11	(X)	<sup>a</sup> 18,371	(X)	18,957
36463 17	Fluorescent, including portable	18	(X)	<sup>b</sup> 19,203	(X)	<sup>b</sup> 18,010
36463 19	High intensity discharge types, including integrally mounted and remote ballasts	12	(X)	<sup>a</sup> 60,817	(X)	<sup>r</sup> 58,765

See footnotes at end of table.

Table 14. Quantity and Value of Shipments of Electric Lighting Fixtures: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36463 — 36463 29	Electric lighting fixtures, industrial type—Con. Components and renewal parts for industrial type, sold separately . . . . .	22	(X)	<sup>b</sup> 30,646	(X)	<sup>a</sup> 31,333
36485 —	Outdoor lighting equipment, excluding lamps. . . . .	120	(X)	1,434,945	(X)	1,334,229
36485 11	Street and highway lighting luminaries, including bridge and tunnel lighting: Incandescent (filament and quartz iodine) . . . . .	4	(D)	(D)	(D)	(D)
36485 13	High intensity discharge types, including low pressure sodium and integrally mounted and remote ballasts:					
36485 14	Open . . . . .	4		476	<sup>r</sup> 528	<sup>r</sup> 20,943
36485 15	Enclosed . . . . .	18		1,148	<sup>a</sup> 101,673	107,788
36485 17	Fluorescent . . . . .	5		<sup>c</sup> 11	<sup>b</sup> 116	<sup>b</sup> 3,182
36485 20	Special-purpose luminaries for highmast, sign lighting, and expressway fixtures, excluding value of poles . . . . .	7	<sup>c</sup> 137	<sup>c</sup> 21,697	<sup>b</sup> 141	<sup>b</sup> 22,510
36485 22	Floodlighting, area, and site lighting luminaries: General-purpose floodlighting: Incandescent filament . . . . .	12	<sup>b</sup> 472	<sup>c</sup> 15,818	<sup>b</sup> 242	<sup>c</sup> 15,030
36485 23	Incandescent quartz iodine . . . . .	20	<sup>c</sup> 2,505	<sup>c</sup> 33,796	2,507	33,495
36485 26	High intensity discharge types, general, including low pressure sodium and integrally mounted and remote ballasts . . . . .	36	<sup>a</sup> 1,192	<sup>b</sup> 182,819	1,103	<sup>a</sup> 165,291
36485 27	Fluorescent . . . . .	13	<sup>c</sup> 428	<sup>c</sup> 17,425	393	15,734
36485 35	HID sportslighting (fixtures designed specifically for this application) . . . . .	10	176	32,287	160	26,951
36485 39	HID area and site lighting: Site lighting (under 20-foot mounting) . . . . .	29	<sup>b</sup> 1,706	<sup>b</sup> 101,409	1,935	<sup>a</sup> 103,643
36485 51	Bollards . . . . .	17	<sup>a</sup> 50	<sup>b</sup> 12,849	<sup>a</sup> 39	<sup>a</sup> 12,223
36485 52	Post-top . . . . .	15	135	20,254	100	15,108
36485 53	Large area lighting (20- to 60-foot mounting) . . . . .	26	<sup>b</sup> 583	<sup>a</sup> 132,623	<sup>a</sup> 482	<sup>a</sup> 110,495
36485 54	Wall packs (such as high intensity discharge, incandescent, and quartz) . . . . .	28	<sup>a</sup> 1,157	<sup>a</sup> 122,638	1,030	103,288
36485 55	Outdoor PAR lampholders . . . . .	17	<sup>b</sup> 8,043	<sup>b</sup> 76,305	7,491	76,078
36485 56	Other floodlighting and area lighting equipment: Spotlights, including indoor and stage and excluding vehicular . . . . .	9	<sup>c</sup> 288	<sup>b</sup> 34,658	<sup>c</sup> 276	<sup>b</sup> 32,620
36485 57	All other outdoor lighting equipment (such as underwater fountain and pool lighting) . . . . .	30	(X)	<sup>b</sup> 86,101	(X)	<sup>b</sup> 87,362
36485 58	Aviation ground lighting equipment (for fixed-based airports): Runway approach lighting, including fixtures, regulators, insulating transformers, isolating lamp transformers, beacons, wind tees, and cones . . . . .	7	(X)	<sup>b</sup> 16,587	(X)	<sup>a</sup> 14,590
36485 59	Runway (except runway approach), taxiway, and ramp light, including fixtures, regulators, and isolating lamp transformers . . . . .	8	(X)	<sup>a</sup> 40,310	(X)	42,610
36485 60	Components and renewal parts for outdoor lighting equipment, sold separately . . . . .	36	(X)	<sup>a</sup> 49,788	(X)	<sup>a</sup> 51,231
36485 61	Poles, standards, newels, brackets, and accessories: For street and highway lighting, including traffic signal standards:					
36485 62	Steel and cast iron poles . . . . .	17	(X)	<sup>c</sup> 88,452	(X)	67,524
36485 63	Aluminum poles . . . . .	13	(X)	<sup>a</sup> 34,935	(X)	<sup>r</sup> 42,623
36485 64	Concrete poles . . . . .	2	(X)	<sup>a</sup> 38,111 <sup>(5)</sup>	(X)	<sup>a</sup> 31,539 <sup>(5)</sup>
36485 65	All other (fiberglass, wood, etc.) . . . . .	2	(X)	<sup>5</sup> 20,607	(X)	<sup>5</sup> 20,039
36485 66	For area lighting, sports and other off-street use: Steel and cast iron poles (60-foot and over) . . . . .	7	(X)	<sup>c</sup> 9,989	(X)	12,632
36485 67	Steel and cast iron poles (under 60-foot) . . . . .	28	(X)	<sup>b</sup> 94,787	(X)	<sup>a</sup> 78,223
36485 68	Aluminum poles . . . . .	24	(X)	<sup>a</sup> 38,111	(X)	<sup>r</sup> 31,539
36485 69	All other (concrete, wood, etc.) . . . . .	9	(X)	(D)	(X)	(D)

D Withheld to avoid disclosing data for individual companies. <sup>r</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Product codes 36451 08, 36451 09, and 36451 10 are combined to avoid disclosing data for individual companies.

<sup>2</sup>Product codes 36451 26 and 36451 28 are combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 36462 39 and 36462 41 are combined to avoid disclosing data for individual companies.

<sup>4</sup>Product codes 36462 86, 36462 87, 36462 88, and 36462 54 are combined to avoid disclosing data for individual companies.

<sup>5</sup>Product codes 36485 40 and 36485 37 are combined to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item is estimated. <sup>b</sup>26 to 50 percent of this item is estimated. <sup>c</sup>Over 50 percent of this item is estimated.



Table 15. Shipments, Exports, and Imports of Electric Lighting Fixtures: 1995

[Quantity in units. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments f.o.b. plant (value)	Exports of domestic merchandise <sup>1</sup>		Imports for consumption <sup>1</sup>	
			Quantity	Value at port <sup>2</sup>	Quantity	Value in foreign country <sup>3</sup>
36451 06-18, 20, 22, 24, 26, 28, 30	Electric lighting fixtures, residential type (except portable), excluding components and renewal parts .....	968,808	2,084,045	26,154	52,435,422	478,366
36462 11-12, 14, 18-20, 22, 24, 26, 28, 30-31, 36, 38, 39, 41, 43-50, 55-57, 59, 61-66, 68, 70, 72, 74, 76, 36463 06, 08, 10-11, 13, 16-17, 19	Electric lighting fixtures, commercial, institutional and industrial types, excluding components and renewal parts .....	3,295,534	2,681,173	88,470	9,869,265	105,655
36485 11, 13-15, 17, 20, 22-23, 26-27, 31-35, 39, 42-43, 45, 51	Outdoor lighting equipment (except lamps), excluding components and renewal parts .....	1,072,429	11,603,972	169,552	82,993,634	351,524
36451 69, 36462 69, 36463 29, 36485 98	Components and renewal parts for lighting fixtures .....	181,620	(NA)	156,667	(NA)	191,937

NA Not available.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

## HISTORICAL NOTE

Data on electric lighting fixtures have been collected by the Bureau of the Census since 1962. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## FUNDING

The MA36L survey is funded by the National Electric Manufacturers Association.

## CONTACT FOR DATA USERS

For additional information about these data, contact Wanda Sledd, 301-457-4790.

## COMMUNICATION EQUIPMENT (MA36P)

### INTRODUCTION

These data cover all significant manufacturers of communication equipment, including telephone, telegraph, and other electronic systems. The mailing panel included all establishments with 20 employees or more for industries 3661, 3663, 3669, and 3699.

The statistics were collected by mail on Bureau of the Census annual Form MA36P, Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment. The survey panel includes all known manufacturers of telephone and telegraph apparatus, communications systems and equipment, and electronic equipment, except the firms excluded from the scope of the survey. Approximately 1,040 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of communication equipment totaled \$55.8 billion, an increase of 12.5 percent from the 1994 figure of \$49.5 billion. Telephone switching equipment totaled \$8.1 billion, which remains

unchanged from 1994. Carrier line equipment and modems totaled \$5.8 billion, an increase of 14 percent from the 1994 value of \$5.1 billion. Other telephone and telegraph equipment totaled \$10.3 billion, an increase of 22 percent from the 1994 value of \$8.5 billion.

Communication systems and equipment totaled \$23.0 billion, an increase of 15 percent from the 1994 value of \$20.0 billion.

Broadcast, studio, and related electronic equipment totaled \$2.7 billion, an increase of 9.4 percent from the 1994 value of \$2.5 billion. Alarm systems totaled \$1.6 billion, an increase of 5.9 percent from the 1994 value of \$1.5 billion. Electronic teaching machines, teaching aids, trainers, and simulators totaled \$922.1 million, an increase of 10 percent from the 1994 value of \$838.5 million.

### EXPLANATION OF TERMS

**Research and development.** Dollar shipments reflect income from development, design, and engineering services in connection with the manufacture of the products shipped.

Table 16. **Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment by Class of Product: 1990 to 1995**

[Millions of unadjusted dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990
	Communication equipment, including telephone, telegraph, and other electronic systems and equipment . . .	55,894.0	49,598.1	42,113.8	39,501.9	37,821.0	36,990.3
36611	Telephone switching and switchboard equipment . . . .	8,120.5	8,067.6	7,240.9	7,291.3	6,956.6	7,537.1
36613	Carrier line equipment and modems . . . . .	5,837.8	5,114.0	4,993.3	4,810.6	4,298.4	5,013.8
36614	Other telephone and telegraph equipment and components . . . . .	10,347.6	8,479.5	7,026.4	5,507.3	4,909.5	3,180.5
36631	Communication systems and equipment (except broadcast) . . . . .	23,037.9	19,977.5	16,196.7	15,162.8	14,987.9	14,768.0
36632	Broadcast, studio, and related electronic equipment .	2,700.7	2,469.5	2,077.5	1,948.2	1,836.3	1,856.4
36693	Intercommunications systems, including inductive paging systems (selective calling) . . . . .	293.8	283.7	241.7	288.5	303.8	346.1
36691	Alarm systems . . . . .	1,639.8	1,550.5	1,532.4	1,370.4	1,145.0	1,027.2
36692	Vehicular and pedestrian traffic control equipment and electrical railway signals and attachments . . . .	676.9	669.9	573.4	597.3	491.1	470.6
36991	Electronic teaching machines, teaching aids, trainers, and simulators . . . . .	922.1	838.5	847.7	1,310.8	1,411.0	1,208.8
36992	Laser sources <sup>1</sup> . . . . .	791.9	726.4	(NA)	(NA)	(NA)	(NA)
36995	Ultrasonic equipment . . . . .	164.7	137.5	127.3	119.2	113.7	108.8
36999	Other electronic systems and equipment, n.e.c. <sup>2</sup> . . . .	1,360.3	1,283.5	1,256.5	1,095.5	720.8	1,473.0

NA Not available. n.e.c. Not elsewhere classified. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Beginning in 1994, data for "Laser equipment, instrumentation, and components" have been eliminated from this survey. Only laser sources are being collected.

<sup>2</sup>Product code 36997 changed to product code 36999 for 1992. Product codes 36998, 39992, and 39447 are no longer collected on this survey.

Table 17. Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment by Product Code: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36611 —	Telephone switching and switchboard equipment.....	84	(X)	8,120,516	(X)	8,067,562
	Central office switching equipment:					
36611 23	Local switching .....	12	(X)	2,716,010	(X)	3,129,500
36611 28	Toll switching .....	10	(X)	1,284,322	(X)	1,230,131
	Private branch exchange switching equipment:					
36611 41	Up to 99 lines .....	8	(X)	( <sup>1</sup> )	(X)	( <sup>1</sup> )
36611 43	100-399 lines .....	7	(X)	<sup>1</sup> 539,520	(X)	<sup>1</sup> 456,350
36611 45	400-1,000 lines .....	7	(X)	246,588	(X)	235,765
36611 49	Over 1,000 lines .....	7	(X)	241,196	(X)	216,133
36611 51	Cellular mobile telephone switching equipment .....	9	(X)	( <sup>2</sup> )	(X)	( <sup>2</sup> )
36611 55	Packet switching equipment .....	7	(X)	<sup>2</sup> 570,014	(X)	<sup>2</sup> 604,792
36611 91	Other telephone switching and switchboard equipment .....	36	(X)	2,281,653	(X)	1,892,513
36611 98	Parts, components and subassemblies for telephone switching equipment .....	29	(X)	241,213	(X)	302,378
36613 —	Carrier line equipment and modems .....	89	(X)	5,837,779	(X)	<sup>5</sup> 5,113,972
	Carrier line equipment:					
	Repeaters and line transceivers:					
36613 01	Analog .....	4	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
36613 05	Digital, all copper wire .....	15	(X)	( <sup>3</sup> )	(X)	( <sup>3</sup> )
36613 09	Digital, optical input or output .....	6	(X)	<sup>3</sup> 477,281	(X)	<sup>3</sup> 436,458
	Multiplex equipment, including channel banks:					
36613 30	Analog .....	6	(X)	56,359	(X)	74,179
36613 33	Digital, all copper wire .....	9	(X)	( <sup>4</sup> )	(X)	( <sup>4</sup> )
36613 36	Digital, optical input or output .....	13	(X)	<sup>4</sup> 1,077,300	(X)	<sup>4</sup> 1,010,209
	Other subscriber loop carrier terminal and line equipment:					
36613 41	Analog .....	31	(X)	( <sup>5</sup> )	(X)	<sup>5</sup> 55,300
36613 45	Digital, all copper wire .....	28	(X)	( <sup>5</sup> )	(X)	( <sup>6</sup> )
36613 49	Digital, optical input or output .....	89	(X)	<sup>5</sup> 1,313,619	(X)	<sup>6</sup> 928,740
	Other carrier line equipment:					
36613 51	Analog .....	10	(X)	( <sup>7</sup> )	(X)	( <sup>7</sup> )
	Digital:					
36613 55	Meeting or exceeding T1 standard (1.5 mbps) ..	8	(X)	( <sup>7</sup> )	(X)	( <sup>7</sup> )
36613 59	Other .....	7	(X)	<sup>7</sup> 1,283,383	(X)	<sup>7</sup> 1,164,762
	Modems:					
36613 61	Up through 10,000 bps .....	5		1,821,108		1,907,235
36613 65	Over 10,000 bps .....	13		3,894,026		2,749,286
36614 —	Other telephone and telegraph equipment and components .....	215	(X)	10,347,575	(X)	8,479,543
	Telephone sets:					
36614 21	Single line and ISDN sets .....	10		( <sup>8</sup> )		1,456,410
36614 25	Key sets .....	8		<sup>8</sup> 2,784,420		<sup>8</sup> 237,895
36614 29	Public pay telephone equipment .....	7		<sup>b</sup> 119,297		<sup>b</sup> 51,922
36614 36	Cordless handsets .....	5	(D)	( <sup>9</sup> )	(D)	( <sup>9</sup> )
36614 38	Other telephone sets and accessories (e.g., handsets) .....	13	(X)	<sup>9</sup> <sup>b</sup> 237,720	(X)	<sup>9</sup> <sup>b</sup> 191,462
	Other data communications equipment:					
36614 41	Routers and gateways .....	20	(X)	3,389,931	(X)	2,302,494
36614 43	Bridges .....	16	(X)	<sup>a</sup> 91,758	(X)	<sup>a</sup> 87,884
36614 45	Terminal servers .....	12	(X)	( <sup>10</sup> )	(X)	( <sup>10</sup> )
36614 47	Concentrators .....	13	(X)	<sup>10</sup> 1,936,665	(X)	<sup>10</sup> 799,489
36614 49	Other data communications equipment (front end processors, translators, etc.) .....	37	(X)	<sup>b</sup> 771,201	(X)	<sup>a</sup> 779,890
36614 51	Voice frequency equipment .....	13	(X)	55,661	(X)	79,232
36614 55	Telephone key systems equipment .....	7	(X)	( <sup>11</sup> )	(X)	( <sup>11</sup> )
36614 59	Video teleconferencing equipment (video CODECS and other systems equipment) .....	17	(X)	400,967	(X)	<sup>3</sup> 369,001
	Voice/call message processing equipment, including answering devices:					
36614 61	Voice mail equipment .....	11	(X)	<sup>a</sup> 289,767	(X)	<sup>a</sup> 260,458
36614 63	Voice response equipment .....	14	(X)	( <sup>12</sup> )	(X)	( <sup>12</sup> )
36614 65	Automated attendance equipment .....	4	(X)	( <sup>12</sup> )	(X)	( <sup>12</sup> )
36614 67	Automatic call distributors .....	4	(X)	<sup>12</sup> 567,372	(X)	<sup>12</sup> 534,776
36614 69	Other voice or call processing equipment .....	19	(X)	142,801	(X)	97,791
36614 91	Facsimile communication equipment (complete) .....	11	(X)	<sup>a</sup> 71,361	(X)	<sup>5</sup> 58,052

See footnotes at end of table.

Table 17. Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment by Product Code: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36614 97	Other telephone and telegraph equipment and components—Con.					
36614 99	Other telephone/telegraph equipment . . . . .	58	(X)	<sup>11</sup> 1,828,057	(X)	<sup>11</sup> 1,635,905
	Parts, components and subassemblies for other telephone equipment . . . . .	38	(X)	<sup>b</sup> 274,497	(X)	<sup>a</sup> <sup>12</sup> 217,683
36631 —	Communications systems and equipment (except broadcast) . . . . .	346	(X)	23,037,882	(X)	<sup>13</sup> 19,977,529
	Radio station type <sup>13</sup> . . . . .	(NA)	(X)	15,933,318	(X)	<sup>13</sup> 13,463,184
36631 15	Amateur . . . . .	12	(X)	18,120	(X)	22,429
36631 17	Broadcast (sound and television) . . . . .	9	(X)	( <sup>14</sup> )	(X)	( <sup>15</sup> )
36631 19	Earth exploration . . . . .	2	(X)	( <sup>14</sup> )	(X)	( <sup>15</sup> )
36631 21	Meteorological . . . . .	4	(X)	10,505	(X)	( <sup>15</sup> )
36631 23	Fixed . . . . .	28	(X)	<sup>14</sup> 3,271,845	(X)	<sup>15</sup> 3,220,390
36631 25	Intersatellite . . . . .	17	(X)	1,895,018	(X)	<sup>16</sup> 1,654,835
36631 27	Telecommand . . . . .	4	(X)	( <sup>16</sup> )	(X)	( <sup>16</sup> )
36631 29	Telemetry . . . . .	16	(X)	86,332	(X)	<sup>17</sup> 101,417
36631 31	Radionavigational and locational . . . . .	9	(X)	197,993	(X)	<sup>18</sup> 139,632
36631 33	Aeronautical communications . . . . .	8	(X)	<sup>16</sup> 298,505	(X)	<sup>16</sup> 305,291
	Mobile:					
	Cellular system equipment (report switching equipment in 36611 51):					
36631 34	Analog . . . . .	9	(X)	( <sup>17</sup> )	(X)	( <sup>17</sup> )
36631 35	Digital . . . . .	11	(X)	( <sup>17</sup> )	(X)	( <sup>17</sup> )
36631 42	Other conventional and trunked system equipment . . . . .	15	(X)	<sup>17</sup> 9,921,398	(X)	<sup>17</sup> 7,691,450
36631 44	Other mobile . . . . .	10	(X)	80,202	(X)	92,882
36631 46	Other . . . . .	12	(X)	153,400	(X)	234,858
36631 48	Other type . . . . .	(NA)	(X)	7,104,564	(X)	6,514,345
	Checkout, monitoring, evaluation, and other electronic support equipment for communications systems . . . . .	55	(X)	478,833	(X)	451,609
	Antenna systems (sold separately):					
36631 53	Below 890 MHz . . . . .	50	(X)	692,894	(X)	<sup>17</sup> 711,714
36631 55	890 MHz and above . . . . .	45	(X)	371,715	(X)	338,728
	Fiber optics equipment, excluding connectors, cable, photodiode and laser diode components, microwave equipment, and multiplexors:					
	Equipment meeting SONET standards:					
36631 57	OC-1 equipment . . . . .	2	(X)	( <sup>18</sup> )	(X)	( <sup>18</sup> )
36631 59	OC-2 and 3 equipment . . . . .	5	(X)	( <sup>18</sup> )	(X)	( <sup>18</sup> )
36631 61	OC-4 through OC-9 equipment . . . . .	1	(X)	( <sup>18</sup> )	(X)	( <sup>18</sup> )
36631 63	Greater than OC-9 equipment . . . . .	5	(X)	( <sup>18</sup> )	(X)	( <sup>18</sup> )
36631 69	Equipment not meeting SONET standards . . . . .	18	(X)	676,398	(X)	<sup>18</sup> 607,293
36631 73	Other carrier equipment, n.e.c. . . . .	14	(X)	<sup>18</sup> 412,671	(X)	<sup>18</sup> 364,352
36631 79	Other communications systems and equipment . . . . .	180	(X)	4,472,053	(X)	4,040,649
36632 —	Broadcast, studio, and related electronic equipment . . . . .	172	(X)	2,700,658	(X)	2,469,499
	Audio equipment, excluding consumer and PA types:					
36632 12	Amplifiers and preamplifiers . . . . .	27		582,494		<sup>19</sup> 606,107
36632 13	Control consoles and switchers . . . . .	20		<sup>b</sup> 25,823		<sup>b</sup> 84,683
36632 17	Other (power supplies, terminal equipment, broadcast recorders, etc.) . . . . .	20	(X)	<sup>b</sup> 259,989	(X)	232,516
	Video equipment, excluding consumer and PA types:					
36632 22	Amplifiers . . . . .	6	(D)	( <sup>19</sup> )	(D)	( <sup>19</sup> )
36632 24	Television cameras . . . . .	3	(D)	( <sup>19</sup> )	(D)	( <sup>19</sup> )
36632 25	Video tape recorders . . . . .	3	(X)	<sup>19</sup> 78,460	(X)	<sup>19</sup> 101,983
36632 28	Other (power supplies, synchronization equipment, terminal equipment monitors, telecine chains, control consoles and switchers, film equipment, and television outside vans) . . . . .	28	(X)	<sup>a</sup> 528,913	(X)	<sup>19</sup> 394,174
	Transmitters, translators, RF power amplifiers, and related equipment:					
36632 31	AM and FM transmitters . . . . .	13	(X)	56,392	(X)	51,801

See footnotes at end of table.

Table 17. Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment by Product Code: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36632 —	Broadcast, studio, and related electronic equipment—Con.					
	Transmitters, translators, RF power amplifiers, and related equipment —Con.					
36632 34	Television transmitters .....	7	(X)	87,020	(X)	<sup>a</sup> 78,985
36632 37	Other (broadcast transmission line equipment, phasing equipment, television boosters and repeaters (translators), etc.) .....	22	(X)	301,173	(X)	<sup>r</sup> 314,556
36632 39	Studio transmission links (STL) and remote pickup equipment .....	5	(X)	<sup>a</sup> 59,900	(X)	85,288
	Cable television (master antennae and CATV equipment), excluding construction cost:					
36632 41	Head end equipment (antennae baluns, carrier generators, head end control units, single and broadband preamplifiers and strip amplifiers, converters, modulators and demodulators; splitting filters and traps, power supplies, switches, etc.) ...	20	(X)	224,604	(X)	198,646
36632 46	Subscriber converters .....	1	(X)	<sup>(20)</sup>	(X)	<sup>(21)</sup>
36632 49	Subscriber equipment (decoders, switchers; wall outlet taps; distribution amplifiers; power suppliers; directional couplers, splitters, alternators, and equalizers) .....	5	(X)	<sup>(20)</sup>	(X)	<sup>(21)</sup>
36632 43	Broadcasting transmitting antennae and community antennae systems .....	9	(X)	<sup>a</sup> 27,501	(X)	<sup>21</sup> <sup>r</sup> 147,151
36632 44	Closed circuit television systems and equipment, (specially designed cameras, monitors, video recorders, receivers, scan converters and control consoles), excluding broadcast and consumer products .....	23	(X)	<sup>20</sup> 493,583	(X)	309,912
36632 45	Other broadcast, studio, theatre, and commercial sound equipment (sold separately), excluding studio lighting equipment, radiating and supporting towers ..	34	(X)	250,737	(X)	<sup>r</sup> 226,650
36632 59	Parts and accessories for broadcast, studio, and related electronic equipment, sold separately .....	16	(X)	<sup>b</sup> 37,914	(X)	<sup>r</sup> 38,214
36691 —	Alarm systems .....	106	(X)	1,639,807	(X)	1,550,491
	Intrusion detection:					
36691 48	Local .....	32	(X)	102,702	(X)	118,219
36691 49	Central station .....	26	(X)	380,127	(X)	337,156
36691 50	Direct connect .....	12	(X)	<sup>a</sup> 21,631	(X)	<sup>r</sup> 20,624
36691 51	Hold-up systems (commercial and industrial) .....	8	(X)	<sup>(22)</sup>	(X)	<sup>(22)</sup>
36691 52	Automotive .....	9	(X)	184,569	(X)	<sup>a</sup> 170,114
	Fire detection and prevention:					
	Smoke and heat detection alarms:					
36691 53	Ionization chamber type .....	12	(X)	122,906	(X)	125,041
36691 54	Other, including photo cell type .....	20	(X)	282,711	(X)	261,686
36691 56	Central station .....	14	(X)	104,500	(X)	92,791
36691 57	Direct connect .....	17	(X)	154,620	(X)	144,025
36691 59	Other intercommunication and alarm systems, including electric sirens, and horns (marine, industrial, and air raid), and security locking systems ..	36	(X)	<sup>22</sup> <sup>a</sup> 286,041	(X)	<sup>22</sup> <sup>a</sup> 280,835
36692 —	Vehicular and pedestrian traffic control equipment, electrical railway signal, and attachments .....	41	(X)	676,850	(X)	<sup>r</sup> 669,922
	Vehicular and pedestrian traffic control equipment:					
36692 42	Signal heads, including parts and accessories .....	11	(X)	63,248	(X)	66,246
36692 43	Electronic and electromechanical controllers, detectors, and sensors, including parts and accessories .....	25	(X)	222,906	(X)	<sup>r</sup> 216,943
	Railway signals and attachments, electric:					
36692 45	Railway highway grade crossing signals, excluding relays and other control apparatus .....	5	(X)	<sup>(23)</sup>	(X)	<sup>(23)</sup>
36692 46	Other railway signal systems and safety control equipment .....	10	(X)	<sup>23</sup> 390,696	(X)	<sup>23</sup> 386,733

See footnotes at end of table.

Table 17. Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment by Product Code: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36693 —	Intercommunications systems, including inductive paging systems (selective calling).....	47	(X)	<sup>a</sup> 293,803	(X)	<sup>a</sup> 283,672
36693 12	Wired.....	42	(X)	<sup>a</sup> 210,447	(X)	<sup>a</sup> 212,285
36693 13	Nonwired.....	11	(X)	<sup>a</sup> 83,356	(X)	<sup>a</sup> 71,387
36991 —	Electronic teaching machines, teaching aids, trainers, and simulators.....	50	(X)	922,055	(X)	<sup>r</sup> 838,522
36991 81	Electronic trainers and simulators.....	42	(X)	<sup>b</sup> 882,711	(X)	<sup>a</sup> 802,717
36991 85	Other electronic teaching machines and teaching aids.....	12	(X)	<sup>a</sup> 39,344	(X)	<sup>a</sup> 35,805
36992 —	Laser sources.....	46	(X)	791,871	(X)	726,353
	Gas lasers:					
36992 12	5 watts or less.....	8	(X)	50,823	(X)	<sup>r</sup> 49,447
36992 16	6 watts to 100 watts.....	6	(X)	<sup>(24)</sup>	(X)	<sup>(24)</sup>
36992 22	101 watts to 500 watts.....	2	(X)	<sup>(24)</sup>	(X)	<sup>(24)</sup>
36992 26	Over 500 watts.....	4	(X)	<sup>24</sup> 131,413	(X)	<sup>24</sup> 126,159
	Solid-state lasers:					
36992 32	100 watts or less.....	11	(X)	22,196	(X)	<sup>r</sup> 16,068
36992 36	101 watts to 500 watts.....	6	(X)	<sup>(25)</sup>	(X)	<sup>(25)</sup>
36992 42	Over 500 watts.....	2	(X)	<sup>(25)</sup>	(X)	<sup>(25)</sup>
36992 60	Other lasers, including dye lasers.....	28	(X)	<sup>25</sup> 587,439	(X)	<sup>25</sup> 534,679
36995 —	Ultrasonic equipment, n.e.c.....	19	(X)	164,706	(X)	137,503
36999 —	Other electronic systems and equipment, n.e.c.....	169	(X)	<sup>a</sup> 1,360,298	(X)	<sup>a</sup> 1,283,534
36999 51	Consumer electronic equipment, n.e.c.....	22	(X)	287,652	(X)	352,678
36999 55	Scientific electronic equipment, n.e.c.....	21	(X)	125,121	(X)	101,460
36999 61	Industrial electronic equipment, n.e.c.....	41	(X)	238,246	(X)	<sup>r</sup> 147,027
36999 65	All other electronic equipment, n.e.c.....	104	(X)	<sup>a</sup> 709,279	(X)	682,369
50650 00	Selected nonmanufacturing revenues: Supplies and accessories shipped without further manufacture, for use with communication equipment.....	56	(X)	<sup>a</sup> 281,919	(X)	<sup>r</sup> 368,632
99980 49	Research and development, testing, and evaluation of systems and components.....	37	(X)	584,505	(X)	730,413
73700 00	Software sold with communications systems shipped by manufacturers.....	33	(X)	<sup>a</sup> 261,431	(X)	<sup>r</sup> 296,844
73730 00	Systems integration revenues, including configuration installation and site preparation, and custom programming.....	50	(X)	<sup>b</sup> 172,357	(X)	180,314
73790 00	Other nonmanufacturing revenues associated with computer systems.....	30	(X)	<sup>a</sup> 610,665	(X)	353,508

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. <sup>r</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Product code 36611 41 is included with product code 36611 43 to avoid disclosing data for individual companies.  
<sup>2</sup>Product code 36611 51 is included with product code 36611 55 to avoid disclosing data for individual companies.  
<sup>3</sup>Product codes 36613 01 and 36613 05 are included with product code 36613 09 to avoid disclosing data for individual companies.  
<sup>4</sup>Product code 36613 33 is included with product code 36613 36 to avoid disclosing data for individual companies.  
<sup>5</sup>For 1995, product codes 36613 41 and 36613 45 are included with product code 36613 49 to avoid disclosing data for individual companies.  
<sup>6</sup>For 1994, product code 36613 45 is included with product code 36613 49 to avoid disclosing data for individual companies.  
<sup>7</sup>Product codes 36613 51 and 36613 55 are included with product code 36613 59 to avoid disclosing data for individual companies.  
<sup>8</sup>For 1995, product code 36614 21 is included with product code 36614 25 to avoid disclosing data for individual companies.  
<sup>9</sup>Product code 36614 36 is included with product code 36614 38 to avoid disclosing data for individual companies.  
<sup>10</sup>Product code 36614 45 is included with product code 36614 47 to avoid disclosing data for individual companies.  
<sup>11</sup>Product code 36614 55 is included with product code 36614 97 to avoid disclosing data for individual companies.  
<sup>12</sup>Product codes 36614 63 and 36614 65 are included with product code 36614 67 to avoid disclosing data for individual companies.  
<sup>13</sup>Of this total, space-based (satellite) accounted for \$3.4 billion in 1995 and \$2.9 billion in 1994, airborne and marine based accounted for \$459.6 million in 1995 and \$370.3 million in 1994, earth (fixed) based accounted for \$2.3 billion in 1995 and \$2.3 billion in 1994, and earth (mobile) portable based accounted for \$9.8 billion in 1995 and \$7.7 billion in 1994.  
<sup>14</sup>For 1995, product codes 36631 17 and 36631 19 are included with product code 36631 23 to avoid disclosing data for individual companies.  
<sup>15</sup>For 1994, product codes 36631 17, 36631 19, and 36631 21 are included with product code 36631 33 to avoid disclosing data for individual companies.  
<sup>16</sup>Product code 36631 27 is included with product code 36631 33 to avoid disclosing data for individual companies.

Table 17. Quantity and Value of Shipments of Communications Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment by Product Code: 1995 and 1994—Con.

<sup>17</sup>Product codes 36631 34 and 36631 35 are included with product code 36631 42 to avoid disclosing data for individual companies.

<sup>18</sup>Product codes 36631 57, 36631 59, 36631 61, and 36631 63 are included with product code 36631 73 to avoid disclosing data for individual companies.

<sup>19</sup>Product codes 36632 22 and 36632 24 are included with product code 36632 25 to avoid disclosing data for individual companies.

<sup>20</sup>For 1995, product codes 36632 46 and 36632 49 are included with product code 36632 44 to avoid disclosing data for individual companies.

<sup>21</sup>For 1994, product codes 36632 46 and 36632 49 are included with product code 36632 43 to avoid disclosing data for individual companies.

<sup>22</sup>Product code 36691 51 is included with product code 36691 59 to avoid disclosing data for individual companies.

<sup>23</sup>Product code 36692 45 is included with product code 36692 46 to avoid disclosing data for individual companies.

<sup>24</sup>Product codes 36692 16 and 36692 22 are included with product code 36692 26 to avoid disclosing data for individual companies.

<sup>25</sup>Product codes 36692 36 and 36992 42 are included with product code 36692 60 to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.

Table 18. Shipments, Imports, and Exports of Communications Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment: 1995

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value) <sup>2</sup>
36611 41, 43, 45, 49	Private branch telephonic exchange switching apparatus . . . . .	1,027,304	281,300	39,780
36611 23, 28	Central office telephonic switching apparatus . . . . .	4,000,332	289,639	139,848
36611 51, 55, 91	Telephonic switching apparatus, n.e.c. . . . .	2,851,667	94,588	49,962
36611 98	Parts, components, and subassemblies for telephone switching and switchboard apparatus . . . . .	241,213	867,250	224,473
36613 01, 05, 09	Repeaters and line transceivers, carrier line equipment . . . . .	477,281	33,327	62,022
36613 30, 33, 36, 41, 45, 49, 51, 55, 59	Carrier line equipment, n.e.c. . . . .	3,730,661	730,400	373,862
36614 21, 25, 29, 38	Telephone sets (except cordless handset telephones) . . . . .	( <sup>3</sup> )	238,101	1,103,715
36614 36	Cordless handset telephones . . . . .	<sup>3</sup> 527,537	181,200	1,325,979
36613 61, 65	Modems, including auxiliary sets . . . . .	1,054,067	720,679	319,646
36614 41, 43, 45, 47, 49, 51, 59, 97	Telephone and telegraphic equipment, n.e.c., including voice frequency equipment . . . . .	( <sup>4</sup> )	442,800	393,534
36614 55	Telephone key systems . . . . .	<sup>4</sup> 8,474,240	20,947	10,150
36614 61, 63, 65, 67, 69	Telephone answering devices . . . . .	999,940	130,752	248,757
36614 91	Facsimile communication equipment (complete) . . . . .	<sup>a</sup> 71,361	(NA)	1,064,859
36614 99	Parts, components, and subassemblies for other telephone equipment . . . . .	<sup>b</sup> 274,497	1,065,423	892,543
36632 12	Audio amplifiers and preamplifiers (except consumer and PA types) . . . . .	209,789	187,775	(NA)
36632 31, 34, 37	Transmitters, translators, RF power amplifiers, and related equipment . . . . .	444,585	503,468	202,272
36631 34, 35, 42, 44	Mobile radio systems and equipment, including transceivers, and portable receivers, transmitter and receiver, hand held . . . . .	10,001,600	6,225,632	1,682,224
36693 12, 13	Intercommunications systems, including inductive paging systems (selective calling) . . . . .	<sup>a</sup> 293,803	141,493	58,749
36632 24	Television cameras (except consumer and PA types) . . . . .	(D)	245,858	17,117
36631 53, 55, 36632 43	Antennae systems, including broadcasting, transmitting, and community antennae systems . . . . .	1,092,110	606,804	343,814

See footnotes at end of table.

Table 18. **Shipments, Imports, and Exports of Communications Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment: 1995—Con.**

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value) <sup>2</sup>
36632 41, 44, 46, 49	Cable television and closed circuit television systems and equipment, including AM and FM transmitters .....	718,187	465,400	1,228,255
36691 48, 49, 50, 51, 52, 59	Intrusion detection alarm systems .....	975,070	44,649	211,205
36691 53	Smoke detection alarms, ionization type .....	122,906	10,367	86,567
36691 54	Smoke detection alarms, n.e.c., including photo cell type .....	282,711	34,773	25,117
36691 56-57	Central station and direct connect fire detection and prevention alarm systems .....	154,620	111,038	66,860
36692 42-43	Vehicular and pedestrian traffic control equipment .....	222,906	51,670	34,189
36692 45-46	Railway signals and attachments, electric .....	390,696	23,291	3,315
36991 81	Electronic trainers and simulators .....	<sup>b</sup> 882,711	122,248	56,033
36995 00	Ultrasonic equipment, n.e.c. ....	164,706	10,728	68

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. Value represents c.i.f. (cost, insurance, and freight) value at first point of entry in the United States plus U.S. import duties.<sup>3</sup>Product codes 36614 21, 36614 25, 36614 29, 36614 36, and 36614 38 are combined to avoid disclosing data for individual companies.<sup>4</sup>Product codes 36614 41, 36614 43, 36614 45, 36614 47, 36614 49, 36614 51, 36614 55, 36614 59, and 36614 97 are combined to avoid disclosing data for individual companies.Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.

## HISTORICAL NOTE

Data on selected electronic and associated products have been collected by the Bureau of the Census since 1961 on survey MA36N, Selected Electronics and Associated Products. In 1985, survey MA36N was divided into three annual surveys: MA36P, Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment; MA36Q, Semiconductors, Printed Circuit Boards, and Other Electronic Components; and MA38R (formerly MA36R), Electromedical Equipment and

Irradiation Equipment (Including X-Ray). Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Cynthia Ramsey, 301-457-1307.



## SEMICONDUCTORS, PRINTED CIRCUIT BOARDS, AND RELATED EQUIPMENT (MA36Q)

### INTRODUCTION

These data cover all significant manufacturers of semiconductors, printed circuit boards, and other electronic components. The mailing panel included all establishments with 20 employees or more for industries 3671, 3672, 3674, 3675, 3676, 3677, 3678, and 3679.

The statistics were collected by mail on Bureau of the Census annual Form MA36Q, Semiconductors, Printed Circuit Boards, and Other Electronic Components. The survey panel includes all known producers of these products, except the firms excluded from the scope of the survey. Approximately 2,392 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of semiconductors, printed circuit boards, and other electronic components totaled \$117,923.1 million. This represents a 26.8 percent increase from the revised 1994 total of \$92,996.5 million. The 1995 figure includes: electron tubes and parts,

\$3,894.7 million, an increase of 2.7 percent from 1994; printed circuit boards, \$8,310.4 million, an increase of 22.2 percent from 1994; semiconductors and related devices, \$66,496.5 million, an increase of 39.7 percent over the revised total from 1994. Capacitors increased 18.7 percent to \$1,794.4 million; resistors increased by 21.8 percent, to \$1,058.7 million; coils and transformers had a 10.9-percent increase to \$1,386.6 million; electronic connectors had \$4,246.9 million in 1995, compared to \$3,999.9 million in 1994, an increase of 6.2 percent; and other electronic components increased to \$30,735.0 million, from a revised 1994 total of \$27,157.9 million, an increase of 13.2 percent.

### EXPLANATION OF TERMS

**Research and development.** Dollar shipments reflect income development, design, and engineering services performed by the reporting plant in connection with the manufacture of the products shipped, whether included in a single production contract, or contracted for separately, but intended as preparation for the manufacture of the specific products.

Table 19. **Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components by Class of Product: 1988 to 1995**

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988
36713	Transmittal, industrial, and special-purpose electron tubes (except X-ray) .....	905.9	<sup>1</sup> 1,052.1	677.6	868.4	1,072.5	1,096.5	1,163.2	1,126.2
36714	Electron tubes, receiving type .....	( <sup>1</sup> )	( <sup>1</sup> )	27.1	24.6	21.6	24.2	(D)	35.2
36714	Cathode ray picture tubes, including rebuilt .....	<sup>1</sup> 2,868.6	<sup>1</sup> 2,627.1	2,231.5	2,022.8	1,903.5	1,344.1	1,346.5	1,086.2
36715	Electron tube parts .....	120.2	114.9	<sup>1</sup> 160.1	129.5	120.3	142.6	172.8	153.5
36720	Printed circuit boards .....	8,310.4	6,812.3	6,273.0	5,721.7	6,275.3	7,174.5	6,515.8	6,497.3
36741	Integrated microcircuits (semiconductor networks) ..	51,551.0	<sup>3</sup> 36,020.4	23,636.1	20,065.4	19,150.9	16,623.3	16,177.0	14,868.7
36742	Transistors .....	942.3	834.6	704.5	674.8	736.9	682.3	710.5	864.1
36743	Diodes and rectifiers .....	1,066.8	<sup>8</sup> 829.5	640.7	652.2	653.5	668.2	687.1	806.8
36749	Other semiconductor devices .....	12,936.3	<sup>9</sup> 9,915.4	<sup>6</sup> 6,908.2	5,899.2	5,760.8	5,741.0	4,706.0	3,253.8
36750	Capacitors for electronic applications .....	1,794.4	1,512.3	1,294.3	1,288.0	1,224.0	1,391.5	1,526.1	1,540.2
36760	Resistors .....	1,058.7	<sup>8</sup> 869.5	716.5	708.3	721.5	799.8	812.2	880.1
36770	Coils, transformers, reactors, and chokes for electronic applications .....	1,386.6	<sup>1</sup> 1,250.7	1,121.4	1,095.3	1,006.6	975.6	1,099.7	1,183.1
36781	Coaxial connectors .....	692.1	<sup>6</sup> 642.4	419.0	424.5	384.4	420.0	405.0	454.3
36782	Cylindrical connectors .....	547.8	<sup>5</sup> 511.3	482.8	503.9	483.4	513.6	540.3	578.7
36783	Rack and panel connectors .....	563.9	<sup>5</sup> 545.6	427.6	461.9	484.9	500.0	537.2	513.6
36784	Printed circuit connectors .....	1,023.7	923.4	859.4	855.2	843.8	804.9	986.3	1,149.8
36785	Other connectors, including parts .....	1,419.4	<sup>1</sup> 1,377.2	1,152.8	1,123.3	1,068.9	1,085.0	1,123.7	1,051.5
36791	Filters (except microwave) and piezoelectric devices .....	691.3	674.1	534.3	448.8	451.5	457.4	442.6	624.1
36793	Microwave components and devices .....	1,269.1	1,227.2	1,136.3	1,258.4	1,178.5	1,368.7	1,178.6	1,178.2
36795	Transducers, electrical/electronic input or output. ...	1,093.9	<sup>9</sup> 970.5	<sup>8</sup> 832.5	810.3	799.5	741.1	786.3	642.6
36796	Switches, mechanical types for electronic circuitry ..	654.6	621.5	572.6	541.7	545.1	579.4	644.3	624.7
36798	Printed circuit assemblies .....	20,555.7	17,514.8	15,087.1	13,745.8	12,590.4	8,269.3	7,304.0	5,794.2
36799	All other electronic components, n.e.c. ....	6,470.4	6,149.7	5,257.6	5,260.3	5,997.3	4,898.3	4,734.4	3,631.7

D Withheld to avoid disclosing data for individual companies. published data.

n.e.c. Not elsewhere classified.

<sup>1</sup>Revised by 5 percent or more from previously

<sup>1</sup>"Electron tubes, receiving type" and "Cathode ray picture tubes, including rebuilt" are combined to avoid disclosing data for individual companies.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3671—	Electron tubes .....	(NA)	(X)	3,894,597	(X)	3,794,134
36713 —	Transmittal, industrial, and special-purpose electron tubes (except X-ray) .....	41	(X)	905,887	(X)	1,052,120
36713 15	Power and special-purpose tubes: High vacuum tubes, including triodes, multigrid external and internal anodes, diodes, and other .....	8	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
36713 24	Gas and vapor tubes, including thyratrons, ignitrons, gas duplexers, spark gaps, and other .....	9	<sup>1</sup> 666	<sup>1</sup> 180,046	<sup>1</sup> 1,655	<sup>1</sup> 215,591
36713 34	Klystrons, including amplifier, reflex, and other .....	6	510	49,595	656	56,861
36713 47	Magnetrons, including pulsed, fixed, tunable, cross-field, continuous wave, and other .....	7	116	54,792	<sup>1</sup> 106	57,632
36713 55	Traveling wave tubes (TWT): Forward wave: Continuous wave (CW): Up to and including 10 watts CW power output rating .....	2	( <sup>2</sup> )	( <sup>2</sup> )	172	6,472
36713 61	Over 10 watts CW power output rating .....	5	<sup>2</sup> 1,454	<sup>2</sup> 75,983	1,852	93,648
36713 65	Pulsed power: Up to and including 1 kW peak power output rating .....	2	( <sup>3</sup> )	( <sup>3</sup> )	1,221	17,672
36713 66	Over 1 kW peak power output rating .....	4	<sup>3</sup> 1,803	<sup>3</sup> 75,604	1,399	95,665
36713 92	Backward wave .....	2	(D)	(D)	(D)	(D)
36713 70	Light sensing tubes: Camera tubes, photo emissive and photo conductive .....	4	( <sup>4</sup> )	( <sup>4</sup> )	<sup>1</sup> 42	<sup>1</sup> 52,389
36713 73	Image intensifiers and converters .....	2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
36713 76	Photo multipliers and other .....	3	<sup>4</sup> 163	<sup>4</sup> 191,953	<sup>4</sup> 630	<sup>4</sup> 185,263
36713 83	Light emitting devices, including storage tubes all sizes, cathode ray tubes, color and monochrome (industrial and military), special display devices, including alphanumeric readout tubes, figure indicating tubes, and other .....	15	2,391	114,135	2,155	102,815
36713 96	Miscellaneous special-purpose tubes (reference cavities, radiation detection (geiger, neutron counters, etc.), beam deflection, decade counters, orbital beam, vacuum gauges, vacuum capacitors, switches, relays, etc.) .....	11	(X)	162,563	(X)	<sup>1</sup> 166,895
36714 —	Receiving type electron tubes and cathode ray picture tubes .....	(NA)	(X)	2,868,557	(X)	2,627,077
36714 01	Receiving type electron tubes, all types, including rebuilt .....	4	(D)	(D)	(D)	(D)
36714 09	Television tubes, including any defective tube that has been rebuilt: Color having a video display diagonal of: 50 cm and under (20 inches and under) .....	9	10,787	767,615	9,763	725,087
36714 12	Over 50 cm, but not exceeding 63 cm (21 through 25 inches) .....	5	4,029	442,901	4,288	457,316
36714 14	Exceeding 63 cm (26 inches and over) .....	8	8,023	1,616,699	7,607	1,397,379
36714 27	Other, including rebuilt color and new and rebuilt black and white .....	3	(D)	(D)	(D)	(D)
36715 57	Electron tube parts (except glass blanks): bases, getters, cathodes, headers, and guns .....	19	(X)	120,153	(X)	114,937
36720—	Printed-circuit (wiring) boards <sup>5</sup> .....	586	(X)	8,310,411	(X)	6,812,252
36720 12	Single-sided glass printed .....	279	(X)	324,794	(X)	<sup>1</sup> 225,075
36720 14	Double-sided glass printed .....	395	(X)	1,826,381	(X)	<sup>1</sup> 1,327,046
36720 16	Multilayer glass printed .....	373	(X)	3,866,018	(X)	<sup>1</sup> 3,576,766
36720 20	Single-sided flex printed .....	24	(X)	140,177	(X)	(NA)
36720 23	Double-sided flex printed .....	25	(X)	92,830	(X)	(NA)
36720 27	Multilayer flex and rigid/flex printed .....	38	(X)	324,025	(X)	(NA)
36720 29	All paper/mat/composite printed boards .....	11	(X)	72,518	(X)	(NA)

See footnotes at end of table.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36720—	Printed-circuit (wiring) boards—Con.					
36720 31	Other substitute printed boards .....	34	(X)	801,003	(X)	(NA)
36720 40	Receipts for contract work on printed circuit boards (etching, dip-soldering, imprinting, etc.) but not printed board assembly .....	82	(X)	862,665	(X)	(NA)
3674—	Semiconductors and related devices .....	(NA)	(X)	66,496,467	(X)	47,599,932
36741 —	Monolithic integrated circuits .....	182	11,614,584	51,551,039	9,293,458	36,020,406
	Monolithic integrated circuits, digital, nonsilicon (e.g., gallium arsenide):					
36741 19	Memory .....	3	(D)	(D)	3,325	109,239
36741 28	Logic and other .....	9	(D)	(D)	(D)	(D)
	Monolithic integrated circuits, digital, silicon:					
	Bipolar transistors, memory:					
36741 07	Static read-write random access (SRAM) .....	6	(D)	(D)	<sup>9</sup> 9,083	<sup>9</sup> 99,096
36741 09	Other memory .....	4	(D)	(D)	(D)	(D)
	Other bipolar transistors, including logic:					
36741 13	Transistor-transistor logic (TTL) .....	12	2,301,848	1,300,437	2,028,122	<sup>1</sup> 1,132,439
36741 14	Emitter coupled logic (ECL) .....	10	334,272	199,482	<sup>1</sup> 290,170	<sup>1</sup> 185,567
36741 15	Other .....	11	566,766	808,362	<sup>5</sup> 42,050	<sup>7</sup> 14,102
	Metal oxide semiconductor (MOS) field effect transistors:					
	Volatile memory DRAM (dynamic read-write random access):					
36741 81	Not over 80 k .....	5	1,811	10,239	<sup>1</sup> 1,938	<sup>1</sup> 10,954
36741 82	Over 80 k but not over 300 k .....	6	<sup>(6)</sup>	<sup>(6)</sup>	<sup>(6)</sup>	<sup>(6)</sup>
36741 83	Over 300 k but not over 3 MB .....	10	<sup>6</sup> 153,271	<sup>6</sup> 2,136,803	<sup>6</sup> 152,085	<sup>6</sup> 969,911
36741 84	Over 3 MB but not over 15 MB .....	9	238,326	3,846,270	<sup>(7)</sup>	<sup>(7)</sup>
36741 85	Over 15 MB .....	7	5,172	491,465	<sup>7</sup> 201,804	<sup>7</sup> 2,870,514
	Volatile memory SRAM (static read-write random access):					
36741 91	Not over 40 k .....	11	43,252	280,869	<sup>1</sup> 33,356	200,108
36741 92	Over 40 k but not over 80 k .....	11	(D)	(D)	32,440	123,034
36741 93	Over 80 k but not over 300 k .....	19	94,537	541,394	48,468	350,847
36741 94	Over 300 k but not over 3 MB .....	11	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>	<sup>(8)</sup>
36741 95	Over 3 MB .....	5	<sup>8</sup> 54,304	<sup>8</sup> 835,165	<sup>8</sup> 37,457	<sup>8</sup> 562,040
	Nonvolatile EEPROM's (electrically erasable programmable read-only memory):					
36741 96	Not over 80 k .....	7	289,369	240,861	236,242	192,674
36741 97	Over 80 k but not over 900 k .....	7	39,294	158,570	<sup>1</sup> 33,870	<sup>1</sup> 124,743
36741 98	Over 900 k .....	4	(D)	(D)	(D)	(D)
	Nonvolatile EPROM's (erasable, except electrically), programmable read-only memory):					
36741 86	Not over 80 k .....	7	16,915	76,858	13,235	54,693
36741 87	Over 80 k but not over 900 k .....	14	189,665	603,776	198,708	639,507
36741 88	Over 900 k .....	6	68,508	273,669	40,047	223,076
36741 90	Other nonvolatile memory .....	14	181,719	1,480,816	113,811	<sup>1</sup> 952,202
	Other, including microprocessors, controllers, application specific integrated circuits (ASIC's), and programmable logic arrays (PLA's):					
36741 36	Microprocessors having an internal data bus of 8 bits or less .....	14	518,835	2,133,065	385,656	<sup>1</sup> 1,535,385
36741 38	Microprocessors having an internal data bus of 16 bits .....	13	194,849	1,477,620	95,677	<sup>1</sup> 1,011,999
36741 39	Microprocessors having an internal data bus of 32 bits or more .....	13	89,402	7,745,654	<sup>1</sup> 85,717	<sup>1</sup> 7,884,730
36741 18	Other (microcontrollers, ASIC's, PLA's, etc.) .....	40	1,340,353	5,794,548	<sup>1</sup> 1,077,509	<sup>1</sup> 3,991,346
	Other digital, silicon, including bipolar combined with MOS:					
36741 20	Complementary BiMOS (BiCMOS) .....	2	(D)	(D)	(D)	(D)
36741 21	Other complementary (BiCMOS), including logic .....	9	674,915	302,631	464,174	229,357
36741 26	Other digital silicon IC's .....	21	263,823	666,232	<sup>1</sup> 202,489	<sup>1</sup> 450,234

See footnotes at end of table.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3674—	Semiconductors and related devices—Con.					
36741—	Monolithic integrated circuits—Con.					
	Nondigital silicon monolithic integrated circuits (e.g., linear and analog):					
36741 49	Radio frequency .....	7	79,859	132,992	<sup>1</sup> 52,662	<sup>1</sup> 84,659
36741 02	Other, analog .....	25	1,547,794	1,953,337	1,194,516	1,553,590
36741 03	Other, including mixed signal (analog and digital), logic .....	5	<sup>(9)</sup>	<sup>(9)</sup>	<sup>(9)</sup>	<sup>(9)</sup>
	Nondigital silicon monolithic integrated circuits (e.g., linear and analog):					
36741 04	Other, including mixed signal (analog and digital), other .....	9	<sup>9</sup> 214,623	<sup>9</sup> 1,414,182	<sup>9</sup> 185,973	<sup>9</sup> 149,754
	Hybrid integrated circuits:					
36741 08	Radio frequency .....	20	62,571	241,863	58,255	<sup>1</sup> 225,262
36741 31	Other .....	49	151,466	703,996	137,376	775,453
36741 06	Other .....	54	1,352,450	12,804,789	<sup>1</sup> 1,211,469	<sup>1</sup> 7,047,429
36742—	Transistors .....	36	(X)	942,342	(X)	834,623
36742 63	Signal (less than 1 watt dissipation) .....	22	(X)	373,345	(X)	<sup>1</sup> 334,148
36742 64	Power (1 watt or greater dissipation) .....	28	(X)	568,997	(X)	<sup>1</sup> 500,475
36743—	Diodes and rectifiers .....	45	4,198,610	1,066,754	3,449,258	829,466
36743 22	Signal diodes and assemblies thereof (maximum current 0.5 amps) .....	16	43,516	15,478	42,920	18,102
36743 42	Semiconductor rectifiers/power diodes and assemblies thereof (current rating greater than 0.5 amps) .....	23	1,437,535	487,710	<sup>1</sup> 1,142,274	<sup>1</sup> 394,652
36743 94	Zener diodes (voltage regulator and voltage reference diodes) .....	15	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
36743 12	Selenium rectifiers .....	4	<sup>10</sup> 2,294,095	<sup>10</sup> 248,231	<sup>10</sup> 1,978,138	<sup>10</sup> 205,117
36743 83	Microwave diodes (mixers, detectors, varactors, parametric, harmonic generators, etc.) .....	14	423,464	315,335	<sup>1</sup> 285,926	<sup>1</sup> 211,595
36749—	Other semiconductor devices .....	169	(X)	12,936,332	(X)	9,915,437
36749 12	Light-sensitive and light-emitting devices:					
	Solar cells .....	10	(X)	64,430	(X)	47,937
	Light-emitting diodes (LED's):					
36749 14	Discrete, infrared and laser .....	17	(X)	<sup>(11)</sup>	(X)	<sup>(11)</sup>
36749 16	Alpha or numeric displays .....	9	(X)	<sup>11</sup> 401,460	(X)	<sup>11</sup> 389,605
36749 22	Photodiodes, including infrared detectors .....	16	(X)	52,942	(X)	49,702
36749 24	Optical coupled isolators, including sensors and emitters .....	9	(X)	113,015	(X)	<sup>1</sup> 116,509
36749 29	Other light sensitive and light-emitting devices, including photovoltaic devices and photoelectric-magnetic devices .....	12	(X)	133,771	(X)	125,366
	Other semiconductor devices:					
36749 85	Thyristors (SCR's, triacs, PNP diodes) .....	10	(X)	<sup>(12)</sup>	(X)	<sup>(12)</sup>
36749 86	Hall effect devices .....	1	(X)	<sup>12</sup> 146,012	(X)	<sup>12</sup> 141,639
36749 87	All other semiconductor devices (tunnel diodes, thermoelectric semiconductor junctions, metal-oxide varistors, solidstate transducers, and special semiconductor devices, n.e.c.) .....	25	(X)	1,939,517	(X)	1,560,594
	Semiconductor parts:					
	Chips and wafers:					
36749 94	For integrated circuits (IC's) .....	45	(X)	4,528,207	(X)	3,491,273
36749 96	For discrete semiconductors .....	33	(X)	2,295,384	(X)	<sup>1</sup> 818,713
36749 97	All other semiconductor parts (headers, packages, heat sinks, other accessories, etc.) ..	55	(X)	3,261,594	(X)	<sup>1</sup> 3,174,099
36291—	Paper, plastics (film), metalized, and dual (film/paper) dielectric capacitors, fixed .....	23	83,585	152,472	93,304	157,698
	Ac types:					
36291 11	Less than 300 volts .....	14	11,618	22,257	10,195	20,460
36291 13	300 volts to 599 volts .....	17	61,414	105,004	70,716	<sup>1</sup> 110,500
36291 15	600 volts to 999 volts .....	11	6,161	11,328	7,982	13,669
36291 17	1,000 volts or over .....	9	4,392	13,883	4,411	13,069

See footnotes at end of table.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36750 —	Capacitors .....	84	(X)	1,794,425	(X)	1,512,305
	Capacitors having a reactive power handling capacity of 0.5 kVAR or less:					
	Dc types/other:					
36750 19	Axial lead .....	24	48,284	45,942	50,602	50,049
36750 21	Radial lead .....	14	140,655	26,799	<sup>(13)</sup>	<sup>(13)</sup>
36750 24	Chips and other leaded devices .....	-	-	-	<sup>13</sup> 117,115	<sup>13</sup> 22,156
	Tantalum electrolytic:					
36750 26	Metal case, including foil and wet .....	5	52,592	64,726	48,672	58,277
36750 28	Dipped .....	2	(D)	(D)	(D)	(D)
36750 31	Chips .....	4	<sup>(14)</sup>	<sup>(14)</sup>	<sup>(14)</sup>	<sup>(14)</sup>
36750 33	Other leaded (molded axial and molded radial) .....	2	<sup>14</sup> 844,114	<sup>14</sup> 174,061	<sup>14</sup> 860,271	<sup>14</sup> 153,921
	Aluminum electrolytic:					
36750 38	Less than 18 mm through 35 mm .....	4	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>
36750 41	Small can style (over 35 mm through 51 mm) .....	4	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>
36750 43	Other can style (over 51 mm) .....	5	7,166	57,398	6,959	44,688
36750 45	Ac motor start .....	1	<sup>15</sup> 89,407	<sup>15</sup> 113,826	<sup>15</sup> 72,926	<sup>15</sup> 83,824
	Ceramic dielectric, single layer:					
36750 54	Axial and radial .....	8	<sup>(16)</sup>	<sup>(16)</sup>	<sup>(16)</sup>	<sup>(16)</sup>
36750 51	Chips .....	1	<sup>16</sup> 212,746	<sup>16</sup> 31,819	<sup>16</sup> 162,065	<sup>16</sup> 21,847
	Ceramic dielectric, multilayer:					
36750 53	Axial leads .....	3	<sup>(17)</sup>	<sup>(17)</sup>	<sup>(17)</sup>	<sup>(17)</sup>
36750 55	Radial leads .....	8	<sup>17</sup> 3,701,629	<sup>17</sup> 194,511	<sup>17</sup> 3,199,630	<sup>17</sup> 162,963
36750 57	Chips .....	12	26,504,558	540,702	<sup>17</sup> 21,939,402	<sup>17</sup> 468,860
	Other:					
36750 59	Mica dielectric .....	9	12,936	11,902	<sup>17</sup> 12,157	<sup>17</sup> 12,028
36750 61	All other fixed .....	20	148,502	69,675	134,751	65,439
	Variable:					
36750 63	Mica, ceramic or glass dielectric .....	5	26,513	36,606	26,259	31,278
36750 69	Other .....	6	1,295	6,526	1,293	6,707
36750 75	Parts of capacitors, including unfinished chips for further finishing and assembly .....	8	(X)	(D)	(X)	(D)
36760 —	Resistors .....	86	(X)	1,058,661	(X)	869,507
36760 11	Fixed carbon resistors, composition or film types .....	8	147,131	49,437	154,123	48,319
	Other fixed resistors (power capacity 20W or less):					
	Surface mounted, having two terminals:					
36760 24	Flat resistor chips .....	13	379,075	49,215	499,003	<sup>17</sup> 42,141
36760 25	Cylindrical leadless resistors, including metal film, metal oxide, and thick cermet film .....	6	(D)	(D)	85,054	13,678
	Surface mounted, having more than two terminals (resistor networks):					
36760 28	Dual-in-line package .....	5	121,912	34,549	106,516	29,247
36760 32	Other, including flat packs .....	7	85,565	34,230	74,729	21,860
	Resistors, having two leads:					
36760 34	Wirewound .....	26	160,781	77,934	173,489	70,948
36760 36	Other, including metal film, metal oxide, and thick cermet film .....	17	1,007,198	97,505	1,599,702	86,484
	Resistor networks, having more than two leads:					
36760 38	Single-in-line .....	12	243,806	55,595	242,871	50,402
36760 42	Dual-in-line .....	9	45,966	15,998	51,355	16,420
36760 44	Other .....	10	26,213	28,458	9,644	22,118
	Variable, nonwirewound:					
	Trimmers:					
36760 51	Single-turn, carbon and other film .....	7	117,306	61,350	103,393	49,775
36760 54	Multiturn, carbon and other film .....	6	104,183	82,114	84,442	61,775
36760 58	Surface mounted .....	2	(D)	(D)	(D)	(D)
	Potentiometers:					
36760 57	Precision type .....	13	18,192	73,446	12,039	65,362
36760 62	Panel type .....	4	11,251	21,653	(D)	(D)
	Variable, wirewound:					
36760 72	Variable wirewound (except potentiometers), including nonprecision and trimmers .....	7	9,436	16,768	5,403	9,823
36760 67	Potentiometers, precision type .....	13	18,280	51,738	2,153	21,148
36760 74	Potentiometers, panel type .....	5	2,238	6,780	2,241	6,461

See footnotes at end of table.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36760 —	Resistors—Con.					
	Miscellaneous:					
36760 75	Varistors .....	5	250,396	52,121	(D)	(D)
36760 77	Thermistors, bead type, disc, rod .....	12	214,792	100,779	161,031	95,174
36760 79	Parts for resistors .....	9	(X)	(D)	(X)	(D)
36770 —	Coils, transformers, reactors, and chokes for electronic applications .....	251	(X)	1,386,618	(X)	1,250,724
36770 32	Audio frequency (AF) transformers .....	91	46,410	128,925	140,857	118,597
36770 33	Low frequency (LF) chokes .....	88	10,273	54,576	8,206	48,718
36770 41	Plate and filament transformers, including autotransformers (except toroidal) .....	66	13,205	129,590	15,432	133,632
36770 61	Pulse transformers, computer, and other types .....	90	87,981	205,089	60,130	163,525
36770 12	Radio frequency (RF) chokes .....	41	66,234	29,051	76,117	32,360
36770 13	Radio frequency (RF) coils .....	45	249,223	101,322	201,484	84,881
36770 14	Intermediate frequency (IF) transformers .....	31	9,103	47,476	6,783	36,275
36770 71	Television transformers and reactors (horizontal output, vertical deflection, focus coils, deflection yokes, etc.) .....	16	11,121	84,494	8,895	67,004
36770 91	Toroidal windings (transformers and reactors) (except complete magnetic amplifiers) .....	114	28,558	140,176	28,614	146,896
36770 92	Other (balun coils, permeability tuning devices, etc.) .....	93	(X)	465,919	(X)	418,836
3678— —	Electronic connectors .....	(NA)	(X)	4,246,940	(X)	3,999,901
36781 —	Coaxial (RF) connectors .....	48	590,779	692,093	571,249	642,421
36781 21	Miniature (BNC, PNC, MHB) .....	22	56,610	73,305	72,839	87,697
36781 22	Subminiature (SMA, SMB, SMC) .....	21	24,345	65,238	26,256	68,726
36781 24	Other standard and precision .....	37	509,824	553,550	472,154	485,998
36782 —	Cylindrical connectors .....	36	151,458	547,810	169,440	511,301
36782 25	Heavy duty and standard .....	27	69,631	271,503	72,516	275,700
36782 29	Miniature .....	15	13,522	104,460	11,170	85,970
36782 31	Subminiature .....	13	68,305	171,847	85,754	149,631
36783 —	Rack and panel (rectangular) connectors .....	37	1,398,318	563,893	971,860	545,553
36783 35	Integral shell, Mil-C-22857 (8434) and similar types .....	20	177,120	113,331	194,861	150,882
	Subminiature:					
36783 42	Ribbon, including planar cable type .....	10	25,796	68,820	26,343	60,129
36783 44	D-Subminiature, including planar cable type .....	14	1,188,677	299,863	745,246	258,466
36783 46	Microminiatures .....	14	6,725	81,879	5,410	76,076
36784 —	Printed circuit connectors .....	48	2,776,749	1,023,708	2,826,299	923,417
36784 44	Card insertion types .....	22	1,018,865	188,011	1,134,234	189,176
	Two-piece types:					
36784 48	Post, header and receptacle type .....	30	1,523,406	520,011	1,499,871	489,220
36784 49	Other two-piece types .....	20	234,478	315,686	192,194	245,021
36785 —	Other connectors, including parts .....	84	(X)	1,419,436	(X)	1,377,209
36785 41	Hermetic sealed (except single-contact and coaxial types) .....	23	41,164	94,054	33,574	107,704
36785 51	Plate module types .....	5	7,387	28,293	7,463	28,261
36785 53	Fiber optic connectors .....	10	17,359	165,855	( <sup>18</sup> )	( <sup>18</sup> )
36785 59	Other planar cable (flat conductor or ribbon cable), excluding rack and panel (rectangular) types) .....	15	778,053	244,824	<sup>18</sup> 731,846	<sup>18</sup> 308,800
36785 54	Miscellaneous special purpose .....	49	3,626,791	747,074	3,884,700	777,546
36785 56	Parts for connectors (connectors shipped but still requiring further manufacture) .....	22	(X)	139,336	(X)	154,898
3679— —	Electronic components and subassemblies, n.e.c. ....	(NA)	(X)	30,734,922	(X)	27,157,901
36791 —	Filters (except microwave) and piezoelectric devices .....	106	174,548	691,318	150,828	674,069
36791 10	Filters (except microwave) .....	(NA)	113,534	362,413	99,809	383,099
36791 11	Mechanical, excluding optical lenses (germanium silicon, fused quartz, rock salt, and other) .....	3	107	15,854	110	14,641

See footnotes at end of table.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3679—	Electronic components and subassemblies, n.e.c.—Con.					
36791—	Filters (except microwave) and piezoelectric devices—Con.					
36791 10	Filters (except microwave)—Con. Radio frequency interference/electromagnetic interference (RFI/EMI) control filters:					
36791 13	Ceramic dielectric . . . . .	13	77,239	194,362	69,118	219,001
36791 15	Combination or other dielectric . . . . .	15	35,187	123,863	29,299	113,831
36791 21	Electronic wave filters (LC band and high pass) . . . . .	20	1,001	28,334	1,282	35,626
36791 30	Piezoelectric devices . . . . .	(NA)	61,014	328,905	51,019	290,970
	Oscillator crystals:					
36791 31	AT-cut . . . . .	29	14,525	54,122	12,460	49,367
36791 33	Other . . . . .	10	23,654	48,018	16,589	34,845
	Crystal oscillators:					
36791 35	Oven . . . . .	6	130	27,875	139	27,868
36791 37	TCXO/VCXO . . . . .	9	516	28,585	339	26,307
36791 39	Hybrid . . . . .	11	4,194	25,088	4,393	26,682
36791 41	Other . . . . .	10	2,439	33,264	2,337	32,957
	Crystal filters:					
36791 43	Monolithic, including filter crystals and/or monolithic filter units not assembled into filters . . . . .	5	601	6,180	872	9,242
36791 45	Packaged AT-cut (packaged, including monolithic, tandem monolithic, and resonator filter assemblies) . . . . .	12	308	7,647	347	8,463
36791 47	Other . . . . .	6	1,195	47,269	613	27,835
	Crystal blanks:					
36791 51	AT-cut . . . . .	5	3,919	7,145	3,052	6,018
36791 55	Other . . . . .	11	9,533	43,712	9,878	41,386
36793—	Microwave components and devices (except antenna), tubes, and semiconductors . . . . .	133	(X)	1,269,068	(X)	1,227,186
36793 11	Ferrite, microwave components including yttrium garnets (circulators, isolators, phase shifters, attenuators, equalizers, limiters, mixers, etc.) . . . . .	39	(X)	303,374	(X)	252,605
	Microwave devices, other than ferrite and solid state:					
36793 21	Attenuators (dummy loads, high and low-power terminations, etc.) . . . . .	40	(X)	60,960	(X)	57,399
36793 23	Cavities (amplifier cavities, coaxial tuned cavities, etc.) . . . . .	12	(X)	59,693	(X)	61,029
36793 25	Couplers (directional couplers, hybrid junctions, etc.) . . . . .	30	(X)	44,041	(X)	49,437
36793 27	Reactive microwave components, n.e.c. . . . .	44	(X)	142,363	(X)	144,317
36793 29	Switches, coaxial and waveguide . . . . .	30	(X)	64,860	(X)	64,975
36793 31	Rigid waveguide and fittings (bend and twists, couplings, flanges, other simple waveguide components, n.e.c.) . . . . .	27	(X)	53,323	(X)	44,208
36793 33	Flexible waveguides and fittings . . . . .	14	(X)	33,810	(X)	29,504
36793 51	Other microwave components (except ferrite devices) (coaxial to waveguide and other transitions, duplexers and diplexers, holders and mounts, linear and circular polarizers, magnetron test plumbing, rotary joints and sector scan joints, mixer arrays, shutters, tuners, windows, etc.) . . . . .	41	(X)	131,652	(X)	134,858
36793 71	Microwave subassemblies, including parametric amplifiers and other solid-state assemblies . . . . .	32	(X)	374,992	(X)	388,854
36795—	Transducers, electrical/electronic I/O, n.e.c. . . . .	88	100,880	1,093,905	87,313	970,523
36795 11	Electroacoustic (sonar, ultrasonic, vibration*, etc.) . . . . .	15	19,016	108,359	17,396	110,157
	Electromechanical:					
36795 21	Accelerometers* . . . . .	14	404	99,857	2,534	104,319

See footnotes at end of table.

Table 20. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3679—	Electronic components and subassemblies, n.e.c.—Con.					
36795 —	Transducers, electrical/electronic I/O, n.e.c.—Con.					
	Electromechanical—Con. ....					
36795 23	Pressure* .....	39	43,516	445,816	35,477	<sup>1</sup> 394,064
36795 25	Strain gauges and other mechanical* .....	25	13,482	171,354	<sup>1</sup> 12,224	<sup>1</sup> 155,300
36795 31	Thermoelectric (pyrometers, thermocouples*, etc.) .	7	1,626	47,081	1,425	40,370
36795 98	Other (optical, chemical, magnetic, nuclear*, etc.) .	24	22,836	221,438	<sup>1</sup> 18,257	<sup>1</sup> 166,313
36796 —	Switches, mechanical types for electronic circuitry ...	71	(X)	654,568	(X)	621,527
36796 15	Slide, including rocker, miniature and sub-miniature* .....	14	(X)	53,025	(X)	63,084
36796 19	Rotary selector, including lever and jog-lever, miniature and subminiature* .....	22	(X)	83,070	(X)	78,377
36796 21	Keyboard* .....	7	(X)	48,488	(X)	45,261
36796 25	Pushbutton* .....	21	(X)	53,024	(X)	48,884
36796 29	Snap-action* .....	10	(X)	19,359	(X)	<sup>1</sup> 23,955
36796 31	Thumbwheel* .....	5	(X)	18,189	(X)	15,462
36796 14	Membrane .....	13	(X)	47,490	(X)	54,478
36796 12	Toggle standard type .....	12	(X)	32,264	(X)	44,532
36796 13	Toggle miniature and subminiature .....	4	(X)	<sup>(19)</sup>	(X)	<sup>(19)</sup>
36796 33	DIP .....	5	(X)	<sup>1</sup> 964,349	(X)	<sup>1</sup> 959,654
36796 39	Other .....	30	(X)	235,310	(X)	<sup>1</sup> 187,840
36798 —	Printed circuit assemblies (loaded boards, subassemblies and modules) <sup>20</sup> .....	648	(X)	20,555,695	(X)	17,514,845
36798 51	Computer and peripheral printed board assemblies <sup>20</sup> .....	244	(X)	10,346,635	(X)	(NA)
36798 53	Communications printed board assemblies <sup>20</sup> .....	211	(X)	1,744,105	(X)	(NA)
36798 55	Industrial process control board assemblies <sup>20</sup> .....	140	(X)	239,776	(X)	(NA)
36798 57	Instrumentation printed board assemblies (except industrial process) <sup>20</sup> .....	148	(X)	2,637,508	(X)	(NA)
36798 59	Search and detection printed board assemblies <sup>20</sup> ..	31	(X)	22,700	(X)	(NA)
36798 61	Consumer electronics, printed board assemblies <sup>20</sup> .	91	(X)	310,117	(X)	(NA)
36798 90	Other electronics, printed board assemblies, including office equipment and point of sales <sup>20</sup> ...	182	(X)	5,254,854	(X)	(NA)
36799 —	Electronic components and subassemblies, n.e.c. ....	557	(X)	6,470,368	(X)	6,149,751
	Antenna systems (except structural towers sold separately):					
36799 07	Home antenna .....	11		22,316	18,130	171,107
36799 08	Auto antenna .....	10		18,260	<sup>1</sup> 18,804	<sup>1</sup> 66,548
36799 09	Antenna accessories, sold separately (pedestals, drives, passive reflectors, rotators, radomes, etc.) .....	20	(X)	180,916	(X)	139,053
36799 11	Delay lines (distributed constant, lumped constant, magnetostrictive, ultrasonic, etc.) .....	16		16,366	<sup>1</sup> 13,218	<sup>1</sup> 94,739
36799 13	Oscillators (except instrumentation and crystal types) .....	14		9,220	12,391	116,716
36799 20	Magnetic recording and reproducing heads, including audio, video, digital and instrumentation .....	19		10,833	8,869	89,513
	Static power supply converters for electronic applications (sold separately):					
36799 21	Regulated .....	89		145,516	<sup>1</sup> 128,478	1,001,938
36799 22	Other (unregulated, variable frequency, ac, dc, converters and inverters, vibrator, etc.) .....	63	(X)	574,913	(X)	565,758
36799 31	Electronic cable harnesses and cable assemblies ..	231	(X)	1,567,461	(X)	1,401,535
36799 33	Cryogenic cooling devices (cryostats, etc.) for infrared detectors, masers .....	7	(X)	39,546	(X)	42,424
36799 51	Liquid crystal displays (LCD's) and other liquid devices .....	13	(X)	162,002	(X)	129,324
36799 55	Magnetic cores .....	14	(X)	218,203	(X)	<sup>1</sup> 181,580
	Electronic parts, n.e.c. and specialized electronic hardware:					
	Sockets for electronic component insertion:					
36799 66	Integrated circuit sockets .....	10	(X)	199,303	(X)	218,986

See footnotes at end of table.



Table 20. **Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995 and 1994—Con.**

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3679—	Electronic components and subassemblies, n.e.c.—Con.					
36799—	Electronic components and subassemblies, n.e.c.—Con.					
	Electronic parts n.e.c. and specialized electronic hardware:					
	Sockets for electronic component insertion:					
36799 62	Other, including tube, relay, discrete semiconductors, ac and dc converters and inverters, etc. . . . .	12	(X)	56,712	(X)	50,301
36799 98	All other electronic parts and specialized electronic hardware, n.e.c. . . . .	140	(X)	1,659,280	(X)	<sup>1</sup> 1,573,440
	Electronic research, development, testing, and evaluation (receipts or billings, not reported as shipments of specific products):					
99980 42	Systems . . . . .	24	(X)	117,942	(X)	<sup>1</sup> 103,492
99980 43	Equipment and subassemblies. . . . .	32	(X)	33,339	(X)	60,026
99980 44	Component parts. . . . .	31	(X)	68,325	(X)	<sup>1</sup> 74,914
99980 46	Basic scientific electronic research . . . . .	17	(X)	31,036	(X)	<sup>1</sup> 31,638
99980 47	Design and engineering services. . . . .	41	(X)	296,318	(X)	(D)
99980 48	Software . . . . .	11	(X)	5,656	(X)	6,322
99980 49	Testing. . . . .	6	(X)	7,251	(X)	(D)
99980 50	Supplies and accessories sold with components . . .	6	(X)	1,419	(X)	1,247

\*Similar products are collected on Current Industrial Report forms MA36A, *Switchgear, Switchgear Apparatus, Relays, and Industrial Controls* and MA36K, *Wiring Devices and Supplies*. - Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Product codes 36713 15 and 36713 24 are combined to avoid disclosing data for individual companies.

<sup>2</sup>Product codes 36713 55 and 36713 61 are combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 36713 65 and 36713 66 are combined to avoid disclosing data for individual companies.

<sup>4</sup>Product codes 36713 70, 36713 73 and 36713 76 are combined to avoid disclosing data for individual companies.

<sup>5</sup>Detail revised in 1995. Some previous data not applicable.

<sup>6</sup>Product codes 36741 82 and 36741 83 are combined to avoid disclosing data for individual companies.

<sup>7</sup>For 1994, product codes 36741 84 and 36741 85 are combined to avoid disclosing data for individual companies.

<sup>8</sup>Product codes 36741 94 and 36741 95 are combined to avoid disclosing data for individual companies.

<sup>9</sup>Product codes 36741 03 and 36741 04 are combined to avoid disclosing data for individual companies.

<sup>10</sup>Product codes 36743 94 and 36743 12 are combined to avoid disclosing data for individual companies.

<sup>11</sup>Product codes 36749 14 and 36749 16 are combined to avoid disclosing data for individual companies.

<sup>12</sup>Product codes 36749 85 and 36749 86 are combined to avoid disclosing data for individual companies.

<sup>13</sup>For 1994, product codes 36750 21 and 36750 24 are combined to avoid disclosing data for individual companies.

<sup>14</sup>Product codes 36750 31 and 36750 33 are combined to avoid disclosing data for individual companies.

<sup>15</sup>Product codes 36750 38, 36750 41, and 36750 45 are combined to avoid disclosing data for individual companies.

<sup>16</sup>Product codes 36750 54 and 36750 51 are combined to avoid disclosing data for individual companies.

<sup>17</sup>Product codes 36750 53 and 36750 55 are combined to avoid disclosing data for individual companies.

<sup>18</sup>For 1994, product codes 36785 53 and 36785 59 are combined to avoid disclosing data for individual companies.

<sup>19</sup>Value for product codes 36796 13 and 36796 33 are combined to avoid disclosing data for individual companies.

<sup>20</sup>Data are collected on two Current Industrial Report forms, MA35R, "Computer and Office and Accounting Machines," and MA36Q, "Semiconductors, Printed Circuit Boards, and Other Electronic Components."

Table 21. Shipments, Imports, and Exports of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value in foreign country) <sup>2,3</sup>
36713 15	High vacuum tubes .....	( <sup>4</sup> )	27,342	6,485
36713 24	Gas and vapor tubes .....	<sup>4</sup> 180,046	8,102	1,603
36713 34	Klystrons, including amplifiers, reflex, and other .....	49,595	6,784	17,647
36713 47	Magnetrons, including pulsed, fixed, tunable, cross-field, continuous wave and other .....	54,792	9,605	58,733
36713 70, 73	Light sensing tubes, including camera tubes, photo emissive and photo conductive, and image intensifiers and converters .....	(D)	112,291	27,362
36713 76	Light sensing tubes, n.e.c., including photo multipliers .....	(D)	20,628	38,405
36714 01	Receiving type electron tubes, including rebuilt .....	(D)	3,602	7,622
36714 09, 12, 14, 27	Television tubes, color and black and white, new and rebuilt .....	(D)	336,952	368,944
36715 57	Electron tube parts (except glass blanks) .....	120,153	149,180	400,852
36720 12, 14, 16, 20, 23, 27, 29, 31	Printed circuit boards .....	7,447,746	1,650,685	1,958,616
36741 28	Monolithic integrated circuits, digital (except memory and silicon) .....	(D)	763,706	163,469
36741 19	Monolithic integrated circuits, digital, memory (except silicon) .....	(D)	65,769	18,144
36741 07	Monolithic integrated circuits, digital, silicon, bipolar transistors, memory, static random access memory (SRAM) .....	(D)	87,267	26,027
36741 09	Monolithic integrated circuits, digital, silicon, bipolar transistors, memory (except static random access memory (SRAM)) .....	(D)	48,442	71,009
36741 14	Monolithic integrated circuits, digital, silicon, bipolar transistors (except memory, emitter logic (ECL)) .....	199,482	75,403	90,967
36741 13	Monolithic integrated circuits, digital, silicon, bipolar transistors (except memory, transistor-transistor logic (TTL)) .....	1,300,437	94,048	375,164
36741 15	Monolithic integrated circuits, digital, silicon, bipolar transistors (except memory, n.e.c.) .....	808,362	333,888	247,904
	Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors:			
36741 81-82	With volatile memory DRAM's, not over 300 k .....	( <sup>5</sup> )	152,170	167,367
36741 83-85	With volatile memory DRAM's, over 300 k .....	<sup>5</sup> 6,484,777	1,555,930	11,747,262
36741 91-93	With volatile memory SRAM's, not over 300 k .....	(D)	65,909	864,766
36741 94-95	With volatile memory SRAM's, over 300 k .....	835,165	118,467	1,025,602
36741 96-98	Except volatile memory, electrically (EEPROM) .....	(D)	398,772	801,457
36741 86-88	Except volatile memory (except electrically (EEPROM)) .....	954,303	114,934	511,255
36741 90	Except volatile memory, n.e.c. ....	1,480,816	390,829	1,170,690
	Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors (except memory type):			
36741 36	Microprocessors 8 bits or less .....	2,133,065	295,784	1,330,263
36741 38	Microprocessors 16 bits .....	1,477,620	121,488	379,842
36741 39	Microprocessors 32 bits or more .....	7,745,654	783,676	1,951,019
36741 18	Other (microcontrollers, ASIC's, PLA's, etc.) .....	5,794,548	1,106,700	6,310,724
36741 20	Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors, complementary BiMOS, memory type .....	(D)	70,242	136,375
36741 21	Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors, complementary BiMOS (except memory type) .....	(D)	76,109	252,641
36741 26	Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors, complementary BiMOS, n.e.c., including logic type (except memory types) .....	666,232	323,896	382,068
36741 49, 02-04	Monolithic integrated circuits, nondigital, silicon, including linear, analog, radio frequency, etc. ....	3,500,511	978,572	1,326,985
36741 08, 31	Hybrid integrated circuits .....	945,859	282,345	869,511
36750 26	Capacitors, fixed, tantalum electrolytic, metal case, including foil and wet .....	64,726	13,662	14,935
36750 28	Capacitors, fixed, tantalum electrolytic, dipped .....	(D)	20,323	95,694
36750 31	Capacitors, fixed, tantalum electrolytic, chips .....	( <sup>6</sup> )	125,359	218,150
36750 33	Capacitors, fixed, tantalum electrolytic, n.e.c., including leaded .....	<sup>6</sup> 174,061	50,131	42,294
36750 38	Capacitors, fixed, aluminum electrolytic, not exceeding 35 mm .....	( <sup>7</sup> )	45,961	266,135

See footnotes at end of table.

Table 21. Shipments, Imports, and Exports of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995—Con.

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value in foreign country) <sup>2,3</sup>
36750 41, 43, 45	Capacitors, fixed, aluminum electrolytic, over 35 mm .....	<sup>7</sup> 171,224	7,184	31,786
36750 51	Capacitors, fixed, ceramic dielectric, single layer, chips .....	( <sup>8</sup> )	15,920	7,252
36750 54	Capacitors, fixed, ceramic dielectric, single layer, axial and radial .....	<sup>8</sup> 31,819	7,169	38,735
36750 53	Capacitors, fixed, ceramic dielectric, multilayer, axial .....	( <sup>9</sup> )	20,259	40,638
36750 55	Capacitors, fixed, ceramic dielectric, multilayer, radial .....	<sup>9</sup> 194,511	27,917	77,767
36750 57	Capacitors, fixed, ceramic dielectric, multilayer, chips .....	540,702	170,631	143,124
36750 59	Capacitors, fixed, mica dielectric .....	11,902	919	5,471
36750 61	Capacitors, fixed, n.e.c. ....	69,675	364,588	77,499
36750 63	Capacitors, variable, mica/ceramic/glass dielectric .....	36,606	10,939	13,182
36750 69	Capacitors, variable, n.e.c. ....	6,526	26,013	23,223
36750 75	Capacitors, parts, including unfinished chips for further finishing ..	(D)	215,014	34,212
36291 11	Capacitors, fixed, ac type, less than 300 volts .....	22,257	4,670	51,150
36291 13	Capacitors, fixed, ac type, 300-599 volts .....	105,004	887	20,265
36291 15	Capacitors, fixed, ac type, 600-999 volts .....	11,328	37	2,653
36291 17	Capacitors, fixed, ac type, 1,000 volts or more .....	13,883	28,432	1,512
36750 19	Capacitors, fixed, dc type, axial .....	45,942	807	4,240
36750 21	Capacitors, fixed, dc type, radial .....	26,799	152	44,232
36750 24	Capacitors, fixed, dc type, chips and other leaded .....	-	15,277	54,372
36742 63	Transistors, signal, less than 1 watt dissipation .....	373,345	89,127	340,526
36742 64	Transistors, power, 1 watt or greater dissipation .....	568,997	207,407	639,445
36743 22	Signal diodes and assemblies .....	15,478	6,490	93,903
36743 94	Zener diodes .....	( <sup>10</sup> )	21,962	87,721
36743 42, 12	Diodes and rectifiers, n.e.c. ....	<sup>10</sup> 735,941	180,686	375,447
36743 83	Microwave diodes .....	315,335	37,381	20,839
36749 12	Solar cell .....	64,430	72,876	43,305
36749 14, 16	Light emitting diodes .....	401,460	65,782	322,626
36749 24	Optical coupled isolators .....	113,015	11,785	75,160
36749 29	Other light-sensitive and light-emitting devices .....	133,771	48,810	121,425
36749 85	Thyristors, SCR's, triacs, and PNP diodes .....	(D)	24,430	147,710
36749 94	Chips and wafers for integrated circuits .....	4,528,207	10,832,528	3,268,235
36749 96	Chips and wafers for discrete semiconductors .....	2,295,384	1,134,405	68,469
36749 97	Other semiconductor parts .....	3,261,594	161,311	93,909
36760 11	Carbon resistors, fixed, composition or film types, designed for surface mounting (SMD) by contact, having two terminals, cylindrical leadless having two leads, carbon composition and carbon film .....	49,437	22,256	75,305
36760 24, 25	Carbon resistors, fixed, with a power capacity of 20 watts or less, surface mounted (SMD), having two terminals, including both flat resistor chips, and cylindrical leadless resistors .....	(D)	9,269	81,518
36760 28, 32	Carbon resistors, fixed, with a power capacity of 20 watts or less, surface mounted (SMD), having more than two terminals, resistor, and resistor-capacitor networks .....	68,779	11,524	20,542
36760 34	Resistors, fixed, with a power capacity of 20 watts or less, wirewound, having two leads .....	77,934	11,540	25,677
36760 36	Resistors, fixed, with a power capacity of 20 watts or less, other than wirewound, having two leads .....	97,505	28,978	79,584
36760 38, 42, 44	Resistors, fixed, with a power capacity of 20 watts or less, resistor networks, having more than two leads .....	100,051	13,064	93,025
36760 72, 67, 74	Resistors, variable, wirewound, including rheostats and potentiometers, for a power handling capacity not exceeding 20 watts .....	75,286	8,647	21,574
36760 51, 54, 58, 57, 62, 75, 77	Resistors, variable, n.e.c. ....	(D)	79,748	189,698
36760 79	Resistors, parts .....	(D)	116,931	10,942
36791 31, 33, 35, 37, 39, 41, 43, 45, 47	Piezoelectric devices (except crystal blanks) .....	278,048	128,516	560,054
36791 51, 55	Piezoelectric devices, crystal blanks .....	50,857	10,946	11,486

See footnotes at end of table.

Table 21. Shipments, Imports, and Exports of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1995—Con.

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value in foreign country) <sup>2,3</sup>
36770 71	Television transformers and reactors .....	84,494	56,110	169,032
36770 32, 41, 61, 13, 14, 91, 92	Coils, transformers, reactors, and chokes for electronic applications, n.e.c. ....	1,218,497	154,588	490,970
36781	Connectors, coaxial .....	692,093	72,624	104,164
36782	Connectors, cylindrical .....	547,810	28,720	60,491
36783	Connectors, rack and panel .....	563,893	63,995	8,535
36784	Connectors, printed circuit .....	1,023,708	172,044	98,712
36799 07-09	Antenna systems (except structural towers sold separately) .....	494,943	59,628	51,871
36799 20	Magnetic recording and reproducing heads .....	126,528	12,026	34,360
36796 19	Switches, rotary selector .....	83,070	12,690	16,367
36796 25	Switches, pushbutton .....	53,024	21,361	79,802
36796 15	Switches, slide, including rocker, miniature and subminiature .....	53,025	14,268	19,176
36796 29	Switches, snap-action .....	19,359	65,094	61,800
36796 21, 31, 12-14, 33, 39	Switches, other .....	446,090	738,803	910,759

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>2</sup>Source: Bureau of the Census report IM 145, *General Imports for Consumption*.

<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry into the United States.

<sup>4</sup>Manufacturers' shipments for "High vacuum tubes," and "Gas and vapor tubes" are combined to avoid disclosing data for individual companies.

<sup>5</sup>Manufacturers' shipments for "Volatile memory, DRAM's, not over 300 k" and "Volatile memory, DRAM's, over 300 k" are combined to avoid disclosing data for individual companies.

<sup>6</sup>Manufacturers' shipments for "Tantalum electrolytic, fixed capacitors, chips," and "Tantalum electrolytic, fixed capacitors, n.e.c., including leaded" are combined to avoid disclosing data for individual companies.

<sup>7</sup>Manufacturers' shipments for "Aluminum electrolytic, fixed capacitors not exceeding 35 mm" and "Aluminum electrolytic, fixed capacitors, over 35 mm" are combined to avoid disclosing data for individual companies.

<sup>8</sup>Manufacturers' shipments for "Ceramic dielectric, fixed capacitors, single layer, chips" and "Ceramic dielectric, fixed capacitors, single layer, axial and radial" are combined to avoid disclosing data for individual companies.

<sup>9</sup>Manufacturers' shipments for "Ceramic dielectric, fixed capacitors, multilayer, axial leads" and "Ceramic dielectric, fixed capacitors, multilayer, radial leads" are combined to avoid disclosing data for individual companies.

<sup>10</sup>Manufacturers' shipments for "Zener diodes" and "Diodes and rectifiers, n.e.c." are combined to avoid disclosing data for individual companies.

## HISTORICAL NOTE

Data on selected electronic and associated products have been collected by the Bureau of the Census since 1961 on survey MA36N, Selected Electronics and Associated Products. In 1985, survey MA36N was divided into three annual surveys: MA36P, Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment; MA36Q, Semiconductors, Printed Circuit Boards, and Other Electronic Components; and MA38R (formerly MA36R), Electromedical Equipment and

Irradiation Equipment (Including X-ray). Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Philippe Morris, 301-457-4819.

## SELECTED INSTRUMENTS AND RELATED PRODUCTS (MA38B)

### INTRODUCTION

These data cover firms engaged in the manufacture of instruments and related products, except very small firms (generally less than 20 employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies.

The statistics were collected by mail on Bureau of the Census annual Form MA38B, Selected Instruments and Related Products. The survey panel includes all known producers of these products, except the very small firms excluded from the scope of the survey. Approximately 2,208 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of selected instruments and related products totaled \$65.3 billion, up 3 percent from the 1994 value of \$63.7 billion. The 1995 figure includes automatic regulating, control, and solenoid valves, \$2.3 billion, virtually unchanged from 1994; search, detection, navigation, guidance, aeronautical, and nautical systems, instruments, and equipment, \$26.9 billion, a decrease of 2 percent from 1994; laboratory apparatus and furniture; \$1.8 billion, virtually unchanged from 1994; controls for monitoring residential and commercial environments, and appliance regulating controls, \$2.5 billion, virtually unchanged from 1994; process control instruments, \$6.3 billion, an increase of 2 percent from 1994; fluid meters and counting devices, \$3.5 billion, an increase of 6 percent from 1994; instruments to measure electricity, \$9.8 billion, an increase of 14 percent from 1994; analytical and scientific instruments (except optical), \$5.7 billion, an increase of 4 percent from 1994; optical instruments and

lenses, \$2.4 billion, an increase of 9 percent from 1994; measuring and controlling devices, n.e.c., \$4.0 billion, an increase of 5 percent from 1994.

### EXPLANATION OF TERMS

**Electronic systems—unified architecture.** Includes system-type control, display, and computing instruments actuated from standardized electrical transmission signals in which control and signal conditioning are integral with the display/operator interface.

**Electronic systems—nonunified architecture.** Includes system-type instruments and related equipment actuated from standardized electrical transmission signals in which control and signal conditioning are separated from the display/operator interface. Equipment includes single-loop and multiloop controllers, dedicated operator stations, shared CRT-based operator work stations, process I/O equipment, communication equipment, and other related miscellaneous equipment, such as power supplies, racks, panels, cables, console furniture, printers, tape drives, mounting hardware, shelves, nests, calibrators, and testors. Does not include multifunction process computers reported in product code 38230 12.

**Industrial multifunction process computers.** Includes the hardware and standard software of the CPU and all peripheral equipment of the computers that provide centralized processing intelligence for two or more of the following functions: data manipulation and reporting, supervisory control and data acquisition, calculations using control algorithms, database management, use of a high-level programming language, and operator interface.

Table 22. Value of Shipments of Selected Instruments and Related Products by Product Code: 1986 to 1995

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
34918	Automatic regulating and control valves . . . . .	1,846.2	1,807.1	1,647.5	1,579.3	1,537.4	1,418.0	1,331.0	1,261.9	1,221.0	1,302.3
34919	Solenoid-operated valves (except nuclear and fluid power transfer) . . . . .	451.8	452.3	406.0	404.7	360.1	345.9	374.3	338.3	326.9	284.8
38121	Aeronautical, nautical, and navigational instruments . . . . .	1,996.8	1,858.9	2,121.2	2,517.4	2,671.6	2,517.5	2,521.4	2,365.2	2,269.7	1,788.9
38122	Search and detection, navigation and guidance systems and equipment <sup>1</sup> . . . . .	24,887.8	25,566.7	28,604.4	31,311.2	31,773.8	32,420.2	30,840.2	31,144.9	30,910.9	29,503.7
38210	Laboratory apparatus and laboratory furniture <sup>2</sup> . . . . .	1,828.4	1,811.1	1,597.8	1,714.8	1,612.0	1,675.0	1,697.9	1,564.9	1,549.1	1,329.9
38220	Controls for monitoring residential and commercial environments and appliance regulating controls . . . . .	2,537.1	2,520.9	2,309.9	2,196.6	1,982.2	1,982.0	2,224.4	2,207.2	2,092.7	1,965.9
38230	Process control instruments . . . . .	6,299.1	6,240.0	5,934.9	5,731.4	5,229.6	5,223.5	4,743.2	4,347.9	4,083.6	3,894.5
38242	Integrating and totalizing meters for gas and liquids . . . . .	917.0	859.1	777.0	727.4	697.8	724.6	647.3	609.6	589.3	525.8
38243	Counting devices . . . . .	370.0	354.9	285.4	273.4	226.3	209.8	206.0	192.5	197.8	177.4
38244	Motor vehicle instruments <sup>3</sup> . . . . .	2,194.2	2,092.0	1,768.1	1,576.3	1,329.5	1,456.6	637.4	681.6	232.1	197.3
38251	Integrating instruments, electrical . . . . .	447.3	440.3	461.0	439.3	389.6	396.1	401.4	387.6	400.5	402.9
38252	Test equipment for testing electrical, radio and communication circuits, and motors . . . . .	8,838.2	7,582.0	6,571.6	6,493.0	6,524.5	6,156.0	6,133.8	6,248.0	6,143.6	5,592.1
38253	Instruments to measure electricity . . . . .	557.1	554.4	525.8	557.9	584.0	586.4	620.3	663.2	646.5	617.3
38260	Analytical and scientific instruments (except optical) . . . . .	5,689.5	5,534.0	4,766.1	4,885.9	4,519.1	4,411.8	4,042.2	3,442.2	3,046.1	2,531.6
38271	Sighting, tracking, and fire control equipment, optical type . . . . .	659.3	652.1	768.6	770.9	547.2	580.8	595.1	609.4	726.1	651.2
38274	Optical instruments and lenses <sup>4 5</sup> . . . . .	1,749.1	1,596.7	1,455.8	1,322.4	1,292.3	1,251.8	1,273.8	1,269.8	1,214.8	1,245.2
38291	Aircraft engine instruments (except flight) . . . . .	427.7	430.4	551.6	590.3	682.0	579.0	508.0	504.5	520.0	505.4
38292	Physical properties and kinematic testing equipment . . . . .	1,382.2	1,199.3	1,174.7	1,148.6	1,023.7	1,012.4	946.0	893.9	859.4	775.1
38294	Nuclear radiation detection and monitoring instruments . . . . .	491.8	489.1	519.4	533.4	570.4	566.7	606.0	654.3	637.2	587.2
38295	Commercial, geophysical, meteorological, and general purpose instruments <sup>6</sup> . . . . .	1,347.6	1,344.0	1,271.4	1,361.0	1,335.1	1,139.8	1,034.7	1,072.4	358.0	316.5
38296	Surveying and drafting instruments <sup>2</sup> . . . . .	346.3	324.3	301.4	255.1	234.6	273.9	270.2	269.5	246.5	229.9

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Prior to 1989, data for product code 38122 "Search and detection, navigation and guidance systems and equipment," were published in the Current Industrial Report MA36P, *Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment*.

<sup>2</sup>Starting in 1987, product code 38210 (formerly 38112) includes laboratory furniture. Prior to 1987, laboratory furniture had been included in product code 38296 (formerly 38113).

<sup>3</sup>Revision for 1990 in product code 38244, "Motor vehicle instruments," is due to clarification of products in product code 38244 60, "Instrument panels, including cluster modules." Previously, a large part of these data were collected in product code 37149, "All other motor vehicle parts and accessories, new, n.e.c."

<sup>4</sup>Prior to 1987, "Binoculars and astronomical instruments" and "Other optical instruments and lenses" were combined under product code 38235.

<sup>5</sup>Beginning in 1992, product codes 38272, "Binoculars and astronomical instruments" and 38273, "Other optical instruments and lenses (except sighting, tracking, and fire control)" have been combined into product code 38274, "Optical instruments and lenses"; years 1986 to 1991 have been restated.

<sup>6</sup>Beginning in 1988, product code 38295 "Commercial, geophysical, meteorological, and general-purpose instruments" includes additional product data (product codes 38295 51 and 39295 59) formerly collected on the Current Industrial Report MA36P, *Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment*.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
34918 —	Automatic valves (regulating and control type, except nuclear) . . . . .	143	(X)	1,846,234	(X)	1,807,133
	Automated control valves:					
	Pneumatic actuated . . . . .	(NA)	(X)	540,665	(X)	568,938
	Sliding stem valves . . . . .	(NA)	(S)	204,011	(S)	245,778
34918 01	Globe body . . . . .	22	546,779	136,821	698,044	187,477
34918 02	All other types . . . . .	18	(S)	67,190	(S)	58,301
	Rotary valves . . . . .	(NA)	(S)	134,535	(S)	134,984
34918 03	Ball . . . . .	16	(S)	73,171	(S)	67,253
34918 04	Butterfly . . . . .	13	29,102	30,887	32,364	42,772
34918 07	All other rotary valves, including eccentric disc . . . . .	11	18,492	30,477	16,394	24,959
34918 08	All other pneumatic power-operated control valves . . . . .	21	(S)	89,576	(S)	70,717
34918 09	Parts for pneumatic-actuated valves, sold separately . . . . .	30	(X)	112,543	(X)	117,459
	All other actuation, including electric-actuated and electrohydraulic-actuated . . . . .	(NA)	(X)	247,761	(X)	231,051
	Sliding stem valves . . . . .	(NA)	(S)	34,927	(S)	36,336
34918 11	Globe body . . . . .	9	(S)	12,866	(S)	14,491
34918 12	All other types . . . . .	15	(S)	22,061	(S)	21,845
	Rotary valves . . . . .	(NA)	(S)	54,428	(S)	53,758
34918 13	Ball . . . . .	11	(S)	( <sup>1</sup> )	(S)	( <sup>1</sup> )
34918 14	Butterfly . . . . .	8	(S)	( <sup>1</sup> )	(S)	( <sup>1</sup> )
34918 17	All other rotary valves, including eccentric disc . . . . .	3	(S)	154,428	(S)	153,758
34918 18	All other power-operated (except pneumatic) control valves . . . . .	17	4,261,379	144,810	3,850,717	124,645
34918 21	Parts for all other power-operated (except pneumatic) control valves . . . . .	10	(X)	13,596	(X)	16,312
34918 23	Valve actuators, sold separately . . . . .	17	103,551	89,802	126,216	83,576
	Regulator valves:					
34918 25	Remote-sensing direct-actuated temperature regulators <sup>2</sup> . . . . .	19	4,055	88,673	4,148	83,695
34918 30	Self-contained direct-actuated pressure regulators (except instrument type and safety relief valves) <sup>2</sup> . . . . .	33	4,999	223,151	4,721	226,289
34918 35	Pilot (internal and external)-actuated pressure regulators <sup>2</sup> . . . . .	28	198	69,496	188	66,093
34918 41	Self-contained direct-acting precision and instrument-type pneumatic (air and gas) pressure regulators <sup>2</sup> . . . . .	12	575	50,499	535	45,080
34918 45	Flow regulators for gas, vapors, or liquids <sup>2</sup> . . . . .	45	17,871	207,781	18,718	193,441
34918 48	Other regulator valves <sup>2</sup> . . . . .	32	(X)	276,844	(X)	251,169
	Parts for regulator valves, sold separately . . . . .	35	(X)	51,562	(X)	57,801
34919 —	Solenoid-operated valves (except nuclear and fluid power transfer) . . . . .	44	(X)	451,797	(X)	452,335
	Solenoid-operated valves (except nuclear and fluid power transfer valves):					
	Commercial/industrial types:					
34919 56	Two-way <sup>2</sup> . . . . .	30	5,855	204,871	5,948	202,549
34919 58	Three-way <sup>2</sup> . . . . .	16	1,188	31,713	610	23,115
34919 59	Other <sup>2</sup> . . . . .	14	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
34919 61	Household appliance type <sup>2</sup> . . . . .	2	<sup>3</sup> 17,171	<sup>3</sup> 166,959	<sup>3</sup> 21,461	<sup>3</sup> 179,819
34919 79	Parts, components, and operators for solenoid-operated valves (except nuclear and fluid power transfer valves, sold separately) . . . . .	22	(X)	48,254	(X)	46,852
38121 —	Aeronautical, nautical, and navigational instruments (except aircraft engine instruments) . . . . .	85	(X)	1,996,839	(X)	1,858,890
	Flight and navigation sensors, transmitters, and displays:					
38121 01	Compasses (magnetic and gyroscopic) . . . . .	15	(X)	204,556	(X)	187,764
38121 08	Altimeters (except radio and radar altimeters) . . . . .	8	(X)	23,195	(X)	23,172
38121 10	Airspeed indicators, including machmeters and air data computers . . . . .	15	(X)	249,884	(X)	226,403
38121 12	Acceleration indicators and systems components . . . . .	7	(D)	(D)	(D)	(D)
38121 13	Rate-of-climb indicators . . . . .	5	(S)	( <sup>4</sup> )	(S)	2,620
38121 15	Angle-of-attack indicators . . . . .	8	(S)	417,576	(S)	14,859

See footnotes at end of table.

Table 23. **Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.**

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38121 —	Aeronautical, nautical, and navigational instruments (except aircraft engine instruments)—Con. Flight and navigation sensors, transmitters, and displays—Con.					
38121 18	Artificial horizon flight instruments . . . . .	7	6,962	17,730	<sup>r</sup> 6,977	14,009
38121 20	Other aerospace and navigational instruments . . . . .	30	(X)	(D)	(X)	<sup>r</sup> (D)
	Gyroscopes (sold separately):					
38121 21	Vertical . . . . .	5	2,031	8,341	1,980	8,062
38121 23	Directional . . . . .	6	7,203	15,271	7,939	20,900
38121 25	Free, torqued and untorqued . . . . .	2	(X)	<sup>(5)</sup>	(X)	<sup>(5)</sup>
38121 26	Rate, inertial grade . . . . .	3	(X)	<sup>5</sup> 57,599	(X)	<sup>5</sup> 72,104
38121 28	Rate, noninertial grade . . . . .	6	(X)	67,686	(X)	63,502
	Airframe equipment instruments:					
38121 61	Position indicators (mechanical, as for landing gear, cowl flaps, stabilizers, etc.) . . . . .	14	(X)	18,009	(X)	16,701
38121 63	Hydraulic system (both electrical and mechanical measuring means, as for liquid level and temperature and pressure indicators) . . . . .	10	(X)	22,729	(X)	20,248
38121 64	Cabin environmental measuring and control instruments (air-conditioning and heating, cabin pressure, oxygen, etc.) . . . . .	12	(X)	53,547	(X)	54,613
38121 80	Other aerospace flight instruments . . . . .	20	(X)	550,742	(X)	474,979
38121 85	Nautical instruments (all types, including temperature, speed, pitch, and roll instruments and system components, etc.) . . . . .	12	248,642	58,954	285,679	68,664
38121 89	Parts and components for aeronautical, nautical, and navigational instruments (except aircraft engine instruments, sold separately) . . . . .	24	(X)	121,803	(X)	141,274
38122 —	Search and detection systems and navigation and guidance systems and equipment . . . . .	235	(X)	24,887,826	(X)	25,566,737
38122 11	Light reconnaissance and surveillance electronic systems and equipment (infrared, ultraviolet, and visible light) . . . . .	47	(X)	2,468,374	(X)	2,366,041
38122 13	IFF equipment . . . . .	10	(X)	111,317	(X)	92,684
38122 15	Proximity fuses . . . . .	4	(X)	136,293	(X)	149,510
	Radar systems and equipment:					
	Search, detection, and acquisition radar systems and equipment (BMEWS, airborne and other early warning radar, air traffic control radar, air defense and fighter control radar, ship radar, harbor control radar, meteorological radar, etc.):					
38122 17	Airborne and missile/space radar . . . . .	22	(X)	1,856,073	(X)	1,474,144
38122 19	Ship (marine) radar . . . . .	16	(X)	803,871	(X)	1,069,799
38122 21	Ground radar . . . . .	25	(X)	460,123	(X)	605,035
	Tracking radar systems and equipment (fire control, bombing, bombing navigational radar, aircraft, and missile tracking radar, etc.):					
38122 23	Airborne and missile/space radar . . . . .	14	(X)	1,063,800	(X)	<sup>r</sup> 1,088,196
38122 25	Ship (marine) radar . . . . .	16	(X)	234,870	(X)	312,499
38122 27	Ground radar . . . . .	20	(X)	1,424,904	(X)	1,335,777
	Instrumentation radar systems and equipment (altimeters, highway speed control radar, missile and space satellite tracking range radar, GCA and other precision approach radar, etc.):					
38122 29	Airborne, missile/space, and ship (marine) radar . . . . .	12	(X)	88,178	(X)	100,176
38122 31	Ground radar . . . . .	9	(X)	127,893	(X)	105,842
38122 33	Electronic checkout, monitoring, evaluation, and other electronic support equipment for radar systems . . . . .	20	(X)	153,424	(X)	<sup>r</sup> 184,669

See footnotes at end of table.



Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38122 —	Search and detection systems and navigation and guidance systems and equipment—Con. Sonar search, detection, tracking, and communication systems and equipment, including ASW (sonar telephone communication equipment, depth finding, fire control, fusing, guidance, hydrophones, mapping, sonabuys, navigation, sonar fish finders, sonar range instrumentation, and other):					
38122 35	Surface ship applications (destroyers, destroyer escort, etc.) . . . . .	28	(X)	244,425	(X)	314,513
38122 37	Submarine applications . . . . .	22	(X)	627,488	(X)	718,590
38122 39	Airborne . . . . .	19	(X)	224,312	(X)	304,567
38122 41	Electronic checkout, monitoring, evaluation, and other electronic support equipment for sonar systems and submerged fixed systems . . . . .	11	(X)	143,504	(X)	162,383
38122 43	Specialized command and control data processing and display equipment, sold separately from complete systems . . . . .	23	(X)	1,104,865	(X)	1,031,522
38122 45	Search, detection, identification, and tracking systems and equipment, n.e.c. . . . .	33	(X)	1,539,367	(X)	1,515,383
	Electronic warfare systems and equipment: Countermeasures equipment:					
38122 47	Jamming equipment, communications, and radar . . . .	31	(X)	1,138,975	(X)	1,331,069
38122 49	Underwater countermeasures equipment . . . . .	8	(X)	( <sup>6</sup> )	(X)	223,086
38122 51	Other active countermeasures equipment, excluding passive materials such as chaff, window, needles, and rope . . . . .	13	(X)	<sup>6</sup> 486,154	(X)	<sup>3</sup> 339,703
38122 53	Specialized electronic and communication intelligence equipment, including specially designed DF equipment, signal reduction and processing equipment, and signal analyzers and display equipment . . . . .	39	(X)	1,861,236	(X)	1,982,654
	Missile and space vehicle systems and equipment (beam riders, command guidance, inertial systems, infrared homing systems, radar systems, stellar trackers, television systems, combination systems, etc.):					
38122 55	Missile-borne and space-vehicle-borne equipment . . . .	46	(X)	3,724,344	(X)	3,767,275
38122 57	Nonmissile and space vehicle guidance equipment (ground, ship, or airborne command guidance systems, etc.) . . . . .	10	(X)	464,720	(X)	479,977
38122 59	Electronic checkout, launching, and other missile and space vehicle support systems (ground, ship, and air) .	18	(X)	181,287	(X)	243,277
	Navigation systems and equipment, navigational aids for aircraft, ship, and ground navigation (autopilots, beacons, transponders, collision warning devices, DECCA, DME, ILS, Doppler navigation systems, inertial navigation systems, optical/laser LORAN, radio compasses and direction finders, SHORAN, TACAN, VOR, VORTAC equipment, etc.):					
	Airborne navigational systems:					
38122 61	Radio navigation receivers and displays, including OMNI, radio magnetic, glide slope/localizer, and DME . . . . .	20	(X)	459,265	(X)	419,183
38122 63	Airborne integrated data systems/flight recorders . . . .	12	(X)	204,628	(X)	<sup>1</sup> 218,847
38122 65	Distance measuring equipment (DME) . . . . .	7	(X)	(D)	(X)	<sup>1</sup> 73,749
38122 67	Flight directors/situation display . . . . .	6	(X)	242,722	(X)	281,631
38122 69	Heads-up display (HUD) systems . . . . .	11	(X)	119,604	(X)	<sup>1</sup> 119,322
38122 71	Inertial navigation systems . . . . .	9	(X)	378,616	(X)	341,541
38122 73	Proximity warning/collision avoidance equipment . . . .	5	(X)	149,426	(X)	<sup>1</sup> 144,274
38122 75	Complete automatic pilots . . . . .	7	(X)	181,140	(X)	<sup>1</sup> 201,306
38122 77	Other airborne navigational systems . . . . .	26	(X)	944,722	(X)	924,149
38122 79	Surface (ship and ground) navigational systems . . . . .	35	(X)	514,612	(X)	462,224
38122 81	Underwater navigational systems . . . . .	8	(X)	(D)	(X)	<sup>1</sup> 247,643
38122 83	Electronic checkout, monitoring, evaluation, and other electronic support equipment for navigational systems and equipment . . . . .	40	(X)	700,575	(X)	834,497

See footnotes at end of table.

Table 23. **Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.**

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38210 —	Laboratory apparatus and laboratory furniture .....	163	(X)	1,828,420	(X)	<sup>1</sup> 1,811,139
	Laboratory balances and scales:					
38210 11	Sensitivity of 5 centigrams or better .....	9	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
38210 13	Sensitivity of less than 5 centigrams .....	9	<sup>7</sup> 73,496	<sup>7</sup> 42,554	<sup>7</sup> 72,072	<sup>7</sup> 41,591
38210 15	Laboratory furnaces and ovens .....	22	(X)	29,217	(X)	28,936
	Laboratory centrifuges:					
38210 17	Table-top type .....	15	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
38210 19	Floor type .....	6	<sup>8</sup> 26,530	<sup>8</sup> 138,385	<sup>8</sup> 33,735	<sup>8</sup> 143,976
38210 27	Laboratory evaporation and distillation apparatus .....	17	(X)	18,685	(X)	20,035
38210 28	Laboratory sterilizers and autoclaves .....	11	(X)	142,176	(X)	<sup>1</sup> 107,955
38210 29	Laboratory burners and hotplates .....	14	(X)	13,494	(X)	12,160
38210 31	Laboratory granulators, mills, and other particle size reduction apparatus .....	7	(X)	6,326	(X)	6,088
38210 33	Laboratory dryers .....	10	(X)	8,852	(X)	9,625
38210 35	Laboratory blenders, mixers, shakers, dispensers, fraction collectors, and other liquid sample preparation apparatus .....	31	(X)	117,070	(X)	104,286
38210 36	Laboratory incubators .....	12	14,544	41,305	12,404	41,332
38210 37	Environmental test chambers .....	18	21,505	52,029	20,216	45,241
38210 38	Laboratory freezers .....	7	5,107	38,953	9,954	39,313
38210 42	Microtomes .....	4	260	1,763	(X)	( <sup>9</sup> )
38210 81	Laboratory furniture, including cabinets, cases, benches, tables, stools, and reagent shelves .....	25	(X)	276,241	(X)	( <sup>10</sup> )
38210 88	Parts and components for laboratory furniture (sold separately) .....	8	(X)	4,623	(X)	<sup>10</sup> 324,405
38210 98	All other laboratory and scientific apparatus not specified above, including wet and dry baths and melting point apparatus; excluding analytical instruments .....	88	(X)	651,950	(X)	<sup>9</sup> 579,352
38210 99	Components, parts and accessories for laboratory and scientific apparatus (sold separately) .....	60	(X)	244,797	(X)	<sup>1</sup> 306,844
38220 —	Controls for monitoring residential and commercial environments and appliance regulating controls .....	105	(X)	2,537,107	(X)	2,520,948
	Automatic controls of the type principally used as components of air-conditioning, refrigeration, and comfort heating, including pneumatic controls:					
	Temperature responsive (thermostats):					
38220 21	Electric <sup>2</sup> .....	36	37,444	336,095	38,933	342,177
38220 22	Pneumatic <sup>2</sup> .....	6	2,724	35,596	<sup>12</sup> 2,679	<sup>1</sup> 34,047
38220 25	Pressure responsive (pressurestats) <sup>2</sup> .....	10	5,521	48,304	5,348	47,849
38220 30	Hydronic responsive <sup>2</sup> .....	5	2,180	44,249	2,362	44,934
38220 35	Humidity responsive (humidistats) <sup>2</sup> .....	6	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )
38220 40	Light responsive <sup>2</sup> .....	3	<sup>11</sup> 6,625	<sup>11</sup> 23,711	<sup>11</sup> 6,672	<sup>11</sup> 23,985
38220 50	Liquid level <sup>2</sup> .....	7	(S)	9,040	(S)	<sup>18</sup> 8,829
38220 60	Igniters <sup>2</sup> .....	8	( <sup>12</sup> )	( <sup>12</sup> )	( <sup>12</sup> )	( <sup>12</sup> )
38220 65	Inherent motor protectors <sup>2</sup> .....	3	<sup>12</sup> 582,098	<sup>12</sup> 319,082	<sup>12</sup> 484,438	<sup>12</sup> 309,003
38220 66	Microprocessor-based load programmers for buildings: energy control <sup>2</sup> .....	11	408	69,297	424	81,156
38220 70	Computerized energy control systems for buildings .....	13	(S)	452,935	(S)	405,674
38220 74	Other .....	18	(X)	371,436	(X)	<sup>1</sup> 367,787
	Controls for major appliances such as domestic laundry and cooking appliances, refrigerators and freezers, vending machines, and air-conditioners:					
38220 75	Temperature responsive <sup>2</sup> .....	19	217,344	344,397	225,074	359,570
38220 81	All other controls for appliances <sup>2</sup> .....	15	30,501	269,256	37,752	265,674
38220 98	Parts and components for controls monitoring residential and commercial environments and for appliance regulating controls (sold separately) .....	27	(X)	213,709	(X)	230,263

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38230 —	Process control instruments . . . . .	35	(X)	6,299,091	(X)	6,239,996
	General-purpose control system instruments (commonly called receiver-type), operating from standardized transmission signals (electrical types ac or dc milliampere, millivolt, or telemetering signals; pneumatic types, 3 to 15 and 3 to 27 p.s.i. signals):					
	Electronic systems—unified architecture type:					
38230 35	Controllers (recording, indicating, or blind) . . . . .	39	293,612	201,080	337,907	<sup>r</sup> 281,619
38230 36	Recorders, with or without self-contained set-point stations . . . . .	20	(S)	72,372	(S)	69,477
38230 37	Indicators, with or without self-contained set-point stations . . . . .	25	74,234	27,365	66,947	25,657
38230 38	Auxiliary stations and analog computing devices associated with the above, including manual loaders, auto-to-manual stations, ratio stations, adders, multipliers, and integrators . . . . .	19	(S)	79,313	(S)	<sup>r</sup> 43,544
38230 07	Electronic systems—nonunified architecture type . . . . .	74	(X)	1,318,960	(X)	1,351,941
38230 12	Industrial multifunction process computers . . . . .	74	(X)	424,815	(X)	404,976
	Pneumatic systems, including all system-type control, display, and computing instruments actuated from standardized pneumatic transmission signals:					
38230 39	Controllers (recording, indicating, or blind) . . . . .	16	115,442	48,095	78,394	22,962
38230 40	Recorders, with or without self-contained set-point stations . . . . .	3	(S)	<sup>(13)</sup>	(S)	<sup>(13)</sup>
38230 41	Indicators, with or without self-contained set-point stations . . . . .	6	(S)	<sup>13</sup> 11,556	(S)	<sup>13</sup> 11,380
38230 42	Auxiliary stations and analog computing devices associated with the above, including manual loaders, auto-to-manual stations, ratio stations, adders, multipliers, and integrators . . . . .	7	<sup>b</sup> 45,570	<sup>b</sup> 14,999	<sup>b</sup> 66,780	<sup>b</sup> 16,834
38230 43	Receiver-type gauges, analog and digital . . . . .	10	(S)	7,682	(S)	7,643
38230 44	Annunciators, industrial; electromechanical and solid-state types . . . . .	11	15,089	23,723	13,419	<sup>r</sup> 21,934
	Temperature measuring instruments, excluding general-purpose, receiver-type instruments:					
	Electrical and electronic measuring types (thermocouple, resistance temperature detector, radiation, optical, thermistor, and other electrical sensors):					
38230 45	Direct-deflecting types (controllers for all types of electrical temperature sensors) . . . . .	5	305,994	4,910	253,235	4,782
38230 46	Direct-deflecting types (indicators and recorders for all types of electrical temperature sensors) . . . . .	11	(S)	5,032	(S)	4,561
38230 47	Electromechanical self-balancing types (electric or pneumatic controllers for all types of electrical temperature sensors) . . . . .	2	(S)	<sup>(14)</sup>	(S)	<sup>(14)</sup>
38230 48	Electromechanical self-balancing types (indicators, recorders, and integrators for all types of electrical temperature sensors) . . . . .	5	(S)	<sup>14</sup> 7,945	(S)	<sup>14</sup> 9,982
38230 49	Electronic controllers for all types of electrical temperature sensors . . . . .	24	477,139	92,874	420,102	93,569
38230 50	Digital indicators for all types of electrical temperature sensors, excluding data loggers . . . . .	38	103,446	35,473	<sup>r</sup> 94,937	33,887
	Transmitters, producing standardized electric or pneumatic analog transmission signals for all types of electrical temperature sensors:					
38230 54	Electric . . . . .	24	146,434	43,934	120,048	38,748
38230 55	Pneumatic . . . . .	5	557	452	503	391
	Mechanical measuring types, filled systems (liquid filled, vapor pressure, gas filled, and mercury filled types):					
38230 52	Indicating or recording controllers . . . . .	11	268,334	43,536	292,050	41,292
38230 53	Recorders, noncontrol . . . . .	14	589,515	23,650	537,921	22,900
38230 56	Indicators only, excluding indoor-outdoor and other household or appliance type thermometers . . . . .	17	468,513	15,706	699,344	19,264
38230 57	Transmitters producing standardized electric or pneumatic analog transmission signals . . . . .	13	35,182	9,732	27,131	9,787

See footnotes at end of table.

Table 23. **Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.**

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38230 —	Process control instruments—Con.					
38230 59	Primary temperature sensors, excluding aircraft types: Thermocouples and thermocouple lead wire.....	63	(X)	210,464	(X)	'203,186
38230 60	All other types (resistance temperature detectors, radiation and optical sensors, thermistors, etc.).....	42	(X)	108,905	(X)	'100,206
	Pressure (gauge, absolute vacuum) and draft measuring instruments, excluding general-purpose, receiver-type instruments:					
38230 61	Indicating or recording controllers .....	16		107,368		99,407
38230 62	Recorders, noncontrol .....	7		8,457		3,468
	Indicators only, excluding receiver-type gauges:					
38230 20	3-inch diameter and over <sup>2</sup> .....	24		2,524		2,632
38230 21	Under 3-inch diameter <sup>2</sup> .....	17	(S)	94,237	(S)	83,494
	Transmitters producing standardized analog transmission signals:					
38230 24	Transmitters producing standardized electronic analog transmission signals <sup>2</sup> .....	33		5,089		3,872
38230 25	Transmitters producing standardized pneumatic analog transmission signals .....	6		25,044		'20,386
	Flow and liquid level measuring instruments, excluding general-purpose, receiver-type instruments:					
	Differential pressure types:					
38230 65	Indicating or recording controllers .....	11		43,187		41,453
38230 66	Recorders, noncontrol; and indicators, noncontrol....	14		51,633		56,787
	Transmitters producing standardized analog transmission signals:					
38230 27	Transmitters producing standardized electronic analog transmission signals .....	27		260,212		246,662
38230 28	Transmitters producing standardized pneumatic analog transmission signals .....	10		14,971		15,513
38230 29	Primary pressure sensors (load cells, strain gauges, etc.) .....	8		66,118		52,842
38230 68	Primary flow elements, including orifice plates, venturi tubes, flow tubes, flow nozzles, and pitot tubes .....	16		283,826		354,160
	Electromagnetic flowmeters:					
38230 03	Primary device (magnetic flow tube).....	13		54,263		40,929
38230 01	Secondary device (magnetic transmitter, recorder, indicator, or controller that receives signal directly from primary device).....	12		41,923		39,864
38230 04	Capacitance, ultrasonic, and other electronic types, including magnetic resonance, vortex-precession, and vortex-shedding type elements.....	37		196,317		194,681
38230 71	Variable area-controlling, recording, indicating, and transmitting instruments and associated primary flow elements <sup>2</sup> .....	16		599		603
38230 72	Float and displacement (controlling, recording, indicating, and transmitting instruments and associated primary flow elements) <sup>2</sup> .....	25		2,252		2,148
38230 81	Turbine and propeller: controlling, recording, indicating, and transmitting instruments and associated primary flow elements .....	10		81,749		63,801
38230 82	Mass flow (controlling, thermal): controlling, recording, indicating, and transmitting instruments and associated primary flow elements .....	11		50,043		42,915
38230 83	Other types: controlling, recording, indicating, and transmitting instruments and associated primary flow elements.....	10		91,489		88,753
38230 74	Humidity instruments (controlling, recording, indicating, and transmitting, and associated primary humidity elements, excluding home and general-purpose type) ...	14		44,892		'46,073

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38230 —	Process control instruments—Con. Continuous process instruments for on-stream gas and liquid analysis, including indicators, recorders, controllers, and analysis electrodes and cells; excluding laboratory analysis types:					
38230 75	Chromatographic analyzers .....	13	4,813	73,681	4,602	65,966
38230 76	Infrared analyzers .....	14	11,284	42,131	'11,073	'45,251
38230 77	Oxygen analyzers .....	20	25,334	56,902	23,855	55,550
38230 78	Other gas analyzers .....	29	50,981	120,207	48,500	116,768
38230 79	Ph analyzers .....	15	58,721	31,257	'55,120	'30,821
38230 80	Other liquid analyzers .....	23	74,842	66,238	'68,595	'59,175
	Instruments for all process variables not listed above (speed, weight, position, sequence, density, specific gravity, mechanical load, electrical load, and millivolts): Electrical and electronic measuring types:					
38230 06	Direct-deflecting type controllers, indicators, and recorders .....	6	3,692	9,472	4,024	9,611
38230 08	Electromechanical self-balancing electric or pneumatic controllers, indicators, recorders, and integrators .....	4	(S)	2,788	(S)	2,675
38230 85	Digital indicators .....	20	102,378	38,206	'92,076	30,708
38230 86	Transmitters producing standardized electric or pneumatic analog transmission signals .....	10	22,232	20,945	'17,784	19,490
	Mechanical measuring types:					
38230 84	Indicating or recording controllers and recorders, noncontrol .....	7	16,849	4,729	15,708	4,266
38230 89	Indicators only .....	5	87,868	12,774	'74,632	11,450
38230 90	Transmitters producing standardized electric or pneumatic analog transmission signals .....	17	289,513	74,197	'210,025	'65,330
	All other industrial process instruments:					
38230 91	Other temperature instruments .....	31	(X)	136,501	(X)	135,252
38230 92	Other flow and liquid level instruments .....	30	(X)	138,988	(X)	'155,235
38230 93	Other continuous process instruments .....	38	(X)	275,923	(X)	'266,077
38230 94	Other industrial type instruments .....	62	(X)	463,233	(X)	600,849
	Parts, supplies, accessories, other primary sensors, n.e.c., panelboards, and other equipment associated with process control instruments:					
38230 95	Primarily designed for temperature instruments .....	18	(X)	30,640	(X)	'24,464
38230 96	Primarily designed for flow and liquid level instruments .....	31	(X)	78,541	(X)	'67,452
38230 97	Primarily designed for continuous process instruments .....	28	(X)	101,107	(X)	97,836
38230 99	Primarily designed for industrial type instruments .....	35	(X)	102,042	(X)	104,928
38242 —	Integrating and totalizing meters for gas and liquids .....	32	(X)	917,017	(X)	859,114
	Gas meters, consumption registering: Diaphragm type: Positive displacements; aluminum, iron, and tin case:					
38242 22	Residential size (up to 400 cu. ft/hr of 0.64 specific gravity gas, at 0.5 inches water drop) <sup>2</sup> .....	6	2,374	113,329	2,257	110,486
38242 24	Other sizes, including commercial and industrial .....	6	127,781	38,369	105,384	33,957
38242 28	Turbine type (all sizes) .....	8	( <sup>15</sup> )	( <sup>15</sup> )	( <sup>15</sup> )	( <sup>15</sup> )
38242 29	Other gas meters, consumption registering .....	2	<sup>15</sup> 54,327	<sup>15</sup> 59,433	<sup>15</sup> '43,896	<sup>15</sup> '56,480
	Liquid meters, positive displacement with registers and counters: Water meters, consumption registering:					
38242 33	Small meters, up to and including 1 inch <sup>2</sup> .....	10	4,327	195,391	4,133	170,243
38242 35	Intermediate meters, over 1 inch, up to and including 2 inches .....	12	(S)	34,693	(S)	'34,739
38242 37	Large meters, over 2 inches .....	11	58,628	62,452	59,681	63,841
38242 41	Liquid fuel dispensing meters, excluding service station dispensing pumps .....	7	( <sup>16</sup> )	( <sup>16</sup> )	( <sup>16</sup> )	( <sup>16</sup> )
38242 98	Other liquid meters; industrial bulk plants, pipeline, batching, and treatment facilities .....	15	<sup>16</sup> 784,026	<sup>16</sup> 227,187	<sup>16</sup> 881,175	<sup>16</sup> 230,975
38242 99	Parts, components, and accessories for gas and liquid meters (sold separately) .....	32	(X)	186,163	(X)	158,393

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38243 —	Counting devices, excluding motor vehicle instruments . . . . .	6	(X)	369,964	(X)	354,864
38243 21	Mechanical input . . . . .	10	2,299	30,734	2,514	32,804
38243 23	Electrical input <sup>2</sup> . . . . .	15	1,486	37,431	1,649	39,842
38243 25	Electronic input . . . . .	16	637,432	59,822	811,338	71,188
38243 85	All other counting devices not specified above, including toll meters, fare collection equipment (systems), and parking lot systems, but excluding parking meters. . . . .	13	(X)	234,196	(X)	206,245
38243 88	Components and parts for counting devices (except parking meters, sold separately) . . . . .	6	(X)	7,781	(X)	4,785
38244 —	Motor vehicle instruments . . . . .	18	(X)	2,194,223	(X)	2,091,950
	Speedometers (speedometers, including odometers, are classified as speedometers) . . . . .	11	(X)	23,752	(X)	23,806
38244 21	Tachometers . . . . .	11	(X)	23,261	(X)	28,958
38244 31	Odometers (speedometers, including odometers, are classified as speedometers) . . . . .	5	(X)	(D)	(X)	(D)
38244 41	Fuel level gauges . . . . .	7	(X)	(17)	(X)	(17)
38244 45	Water temperature gauges . . . . .	9	(X)	1741,870	(X)	17 36,081
38244 51	Ammeters . . . . .	9	(X)	(D)	(X)	(D)
38244 55	Oil pressure gauges . . . . .	6	(X)	3,870	(X)	2,844
38244 60	Instrument panels, including cluster modules . . . . .	13	(X)	2,022,124	(X)	1,911,691
38244 99	Other motor vehicle instruments . . . . .	18	(X)	60,889	(X)	78,053
38251 —	Integrating instruments, electrical . . . . .	10	(X)	447,279	(X)	440,278
	Ac watt-hour meters:					
38251 12	Single phase <sup>2</sup> . . . . .	6	4,673	116,727	4,456	113,437
38251 15	Polyphase . . . . .	8	(S)	36,882	(S)	34,691
38251 35	Demand meters (kW and kVA), combined watt-hour and demand meters (single phase and polyphase), and combined watt-hour and time switch meters . . . . .	10	(X)	124,132	(X)	(18)
38251 51	Other electrical integrating meters, including dc watt-hour meters, ampere-hour meters, and other miscellaneous integrating instruments not included in the above classifications . . . . .	8	(X)	72,117	(X)	18 195,388
38251 61	Parts and accessories for electric integrating meters, including meter mountings and registers (sold separately) . . . . .	10	(X)	97,421	(X)	96,762
38252 —	Test equipment for testing electrical, radio and communication circuits, and motors . . . . .	378	(X)	8,838,247	(X)	7,582,010
	Voltage, current, and resistance measuring equipment (except multimeters):					
	Electronic:					
38252 20	Digital . . . . .	28	(X)	293,386	(X)	276,312
38252 21	Analog . . . . .	27	(X)	29,063	(X)	31,506
38252 22	Electrical, excluding panel meters . . . . .	16	(X)	43,182	(X)	45,043
	Multimeters:					
38252 23	Electronic, digital and analog . . . . .	14	(X)	(19)	(X)	(19)
38252 30	Electrical . . . . .	5	(X)	19140,558	(X)	19124,528
	Power and energy measuring equipment:					
	Electronic:					
38252 25	Analog . . . . .	10	(X)	5,989	(X)	5,827
38252 26	Digital . . . . .	18	(X)	88,324	(X)	91,286
38252 27	Electrical power measuring equipment, excluding electrical integrating instruments (sold separately) . . . . .	4	(X)	4,654	(X)	4,425
	Frequency counters, timers, and other frequency and time measuring equipment, excluding standards:					
38252 31	Universal counters with time interval measuring capability . . . . .	7	(X)	(20)	(X)	(20)
38252 33	Other frequency counters . . . . .	7	(X)	2020,305	(X)	2016,501
38252 34	Frequency meters . . . . .	6	(X)	(21)	(X)	(21)
38252 39	Other frequency counting and time measuring equipment . . . . .	9	(X)	2190,779	(X)	2185,747
	Waveform measuring and/or analyzing equipment:					
38252 13	Oscilloscopes and plug-in accessories . . . . .	7	(X)	(22)	(X)	(22)
38252 18	Spectrum analyzers . . . . .	7	(X)	88,088	(X)	84,180
38252 16	Other waveform measuring and analyzing equipment . . . . .	22	(X)	22642,438	(X)	22562,100

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38252 —	Test equipment for testing electrical, radio, and communication circuits, and motors—Con.					
	Signal generating equipment:					
38252 56	Audio .....	15	(X)	12,059	(X)	13,899
38252 58	RF (over 20 KHz to 890 MHz) .....	15	(X)	( <sup>23</sup> )	(X)	( <sup>23</sup> )
38252 59	Microwave (890 MHz and above) .....	13	(X)	<sup>23</sup> 450,321	(X)	<sup>23</sup> 396,896
	Field strength and intensity measuring equipment, including RFI measuring equipment:					
38252 91	Electronic .....	13	(X)	(D)	(X)	(D)
38252 92	Electrical field measuring equipment .....	3	(X)	(D)	(X)	(D)
	Impedance and standing wave ratio measuring equipment (transfer function measuring equipment):					
38252 93	Electronic impedance and related measuring equipment .....	11	(X)	19,572	(X)	21,468
38252 94	Standing wave measuring equipment (slotted lines, sliding shorts, reflectometers, and other SWR equipment) .....	6	(X)	12,051	(X)	16,385
38252 97	X-Y plotters (recorders), electronic .....	5	(X)	3,985	(X)	'3,309
	Automatic test and measuring equipment:					
38252 44	Combination and/or group test sets .....	43	(X)	1,164,393	(X)	'1,110,868
	Component part test sets:					
38252 45	Electron tube test equipment .....	2	(X)	(D)	(X)	(D)
	Semiconductor component test equipment:					
38252 61	Memory .....	17	(X)	236,014	(X)	151,171
38252 63	Linear .....	11	(X)	219,467	(X)	149,534
38252 65	Microprocessor .....	9	(X)	463,247	(X)	246,220
38252 67	Other semiconductor component test equipment .....	39	(X)	1,053,762	(X)	735,214
38252 69	Circuit board loaded test equipment .....	22	(X)	273,998	(X)	222,619
38252 47	Other component part test sets and equipment .....	20	(X)	496,095	(X)	'377,788
38252 48	Equipment and subassembly test equipment, n.e.c., including disc drive testers, and power supply testers .....	23	(X)	192,375	(X)	'173,764
	Standards and calibration equipment for test measuring equipment, including laboratory types (metered benchtop, rack mountable, or plug-in equipment):					
38252 72	Electronic .....	33	(X)	133,408	(X)	102,053
38252 74	Electrical .....	8	(X)	97,003	(X)	'55,418
	Analyzers for testing characteristics of internal-combustion engines, excluding aircraft:					
38252 37	Portable .....	6	(X)	( <sup>24</sup> )	(X)	( <sup>24</sup> )
38252 38	Other .....	5	(X)	<sup>24</sup> 227,087	(X)	<sup>24</sup> '240,412
	Communications test equipment, n.e.c.:					
38252 81	Network analyzers .....	19	(X)	463,373	(X)	366,546
38252 83	Cable backplane and other continuity testers .....	13	(X)	43,396	(X)	31,680
38252 85	Fiber optics test equipment (OTDR, optical S/N meters, etc.) .....	10	(X)	102,504	(X)	118,249
38252 87	Other communications test, monitoring, and control equipment (except microwave) .....	43	(X)	404,259	(X)	365,970
38252 52	Microwave test equipment, n.e.c. (1,300 MHz and above) .....	10	(X)	29,423	(X)	26,978
	Logic test, development, and analysis equipment:					
38252 01	Logic analyzers, and similar logic state, timing, and signature analyzers .....	5	(X)	( <sup>25</sup> )	(X)	( <sup>25</sup> )
38252 03	Microprocessor development systems .....	6	(X)	<sup>25</sup> 198,917	(X)	<sup>25</sup> 243,160
38252 05	Pulse, function, and data generators and similar metered frequency synthesizers .....	11	(X)	73,657	(X)	91,763
38252 08	Other field service test and measurement equipment, logic probes, clips, and pulsters .....	7	(X)	31,089	(X)	'24,699
38252 02	Other measuring and checking instruments for testing electrical, radio, and communication circuits, and motors .....	33	(X)	( <sup>26</sup> )	(X)	'331,763
38252 19	Other analyzing instruments for checking electrical quantities .....	9	(X)	<sup>26</sup> 546,697	(X)	175,964
38252 99	Parts and components for test equipment for testing electrical, radio, and communication circuits, and motors (sold separately) .....	45	(X)	215,701	(X)	249,425

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38253 — 38253 08	Instruments to measure electricity . . . . .	4	(X)	557,149	(X)	554,443
38253 10	Digital panel meters (DPM's) between 0.05 percent and 1 percent, plus or minus one-digit accuracy, excluding precision DVM's and electronic counters . . . . .	23	572,624	88,169	489,414	79,620
38253 12	Analog solid state panel meters (generally of plus or minus 2-percent accuracy) with LED, LCD, or neon gas discharge display . . . . .	6	34,283	5,276	28,323	4,734
38253 13	Panel types other than ruggedized or sealed (generally of 2-percent accuracy): Ac, including moving iron vane and dynamometer types . . . . .	11	302,705	6,907	298,309	6,680
38253 11	Dc, including rectifier- and self-contained thermocouple types <sup>2</sup> . . . . .	13	1,149	26,964	1,124	24,711
38253 14	Panel types ruggedized or sealed (generally of 2-percent accuracy) . . . . .	8	34,578	7,708	43,286	7,074
38253 19	Panel types with control or signal initiating means, including instrument relays . . . . .	6	105,965	7,750	108,115	7,825
38253 23	All other panel type instruments, including ammeters and voltmeters for motor vehicles <sup>2</sup> . . . . .	12	5,402	57,502	4,772	46,739
38253 25	Switchboard instruments that are generally of 1-percent accuracy: Ac, including moving iron vane and dynamometer types . . . . .	2	( <sup>27</sup> )	( <sup>27</sup> )	( <sup>27</sup> )	( <sup>27</sup> )
38253 27	Dc, including rectifier and thermocouple types . . . . .	4	<sup>27</sup> 28,807	<sup>27</sup> 3,400	<sup>27</sup> 31,838	<sup>27</sup> 3,758
38253 24	Elapsed time meters (with and without reset) . . . . .	9	1,032,199	33,427	910,336	30,371
38253 50	Portable instruments that are generally capable of accuracies within plus or minus 2 percent of full scale indication, and can be enclosed in a case so that they can be moved and used at various locations, and that are an end product . . . . .	17	386,157	36,515	384,416	35,509
38253 60	Electrical recording instruments (portable and for panel mounting): Direct deflecting (direct acting) (except temperature calibrated instruments) . . . . .	4	19,985	3,502	21,613	3,552
38253 72	Oscillographic recorders, pen or stylus, and light beam type . . . . .	6	(X)	( <sup>28</sup> )	(X)	( <sup>28</sup> )
38253 74	Other electrical recording instruments . . . . .	24	(X)	<sup>28</sup> 189,978	(X)	<sup>28</sup> 213,162
38253 75	Parts and accessories for indicating and recording instruments: Transducers for volts, amperes, watts, vars, frequency, temperature, and power factor . . . . .	18	(X)	43,077	(X)	44,086
38253 76	Tachometer generators (except aerospace types) . . . . .	4	(X)	( <sup>29</sup> )	(X)	( <sup>29</sup> )
38260 —	Other, including instrument shunts . . . . .	16	(X)	<sup>29</sup> 46,974	(X)	<sup>29</sup> 46,622
38260 01	Analytical and scientific instruments (except optical) . . . . .	267	(X)	5,689,516	(X)	5,534,036
38260 03	Electrochemical instruments: Ph electrodes and meters . . . . .	20	(X)	50,631	(X)	46,571
38260 04	Ion selective electrodes and meters . . . . .	13	(X)	36,656	(X)	27,350
38260 05	Electrophoresis instruments . . . . .	18	(X)	90,262	(X)	97,099
38260 07	Other (except process type), including photometers . . . . .	12	(X)	13,157	(X)	12,911
38260 08	Chromatographic instruments: Gas . . . . .	17	(S)	( <sup>30</sup> )	(S)	( <sup>30</sup> )
38260 09	Liquid . . . . .	25	(S)	389,126	(S)	454,000
38260 24	Other, including paper, gel, and thin layer . . . . .	4	(X)	<sup>30</sup> 276,332	(X)	<sup>30</sup> 255,858
38260 25	Spectrophotometric instruments: Atomic absorption . . . . .	3	(X)	( <sup>31</sup> )	(X)	( <sup>31</sup> )
38260 27	Optical emission, including spark, arc, and glow, spectrographs, and all other (except ICP) . . . . .	7	(X)	( <sup>31</sup> )	(X)	( <sup>31</sup> )
	Optical emission, including laser excited source, which includes laser microprobe source emission, laser source Raman, and laser microprobe source Raman spectrometers . . . . .	4	(X)	( <sup>31</sup> )	(X)	( <sup>31</sup> )

See footnotes at end of table.



Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38260 —	Analytical and scientific instruments (except optical)—Con. Spectrophotometric instruments—Con.					
38260 28	Optical emission with inductively coupled plasma, ICP..	4	(X)	<sup>31</sup> 238,759	(X)	<sup>31</sup> 214,085
38260 30	Infrared, including Fourier transfer methods .....	20	(X)	257,093	(X)	<sup>1</sup> 246,767
38260 31	Ultraviolet, visible and colorimeters .....	21	(X)	182,337	(X)	<sup>1</sup> 171,964
38260 33	Fluorescent instruments, including fluorometers (except chemicals) .....	11	(X)	86,340	(X)	76,443
38260 35	Color measuring devices .....	8	(X)	88,211	(X)	98,028
38260 36	Other, including vacuum ultraviolet, Raman, light scattering reflectors, helium glow, and light measuring .....	13	(X)	34,853	(X)	38,646
38260 37	Thermal analysis instruments, including thermogravimetric analyzers (TGA), quantitative thermal analyzers (QTA) and differential thermal analyzers (DTA) .....	10	(X)	77,798	(X)	79,495
38260 38	Nuclear magnetic resonance spectrometers, including electron paramagnetic spin types (EP) .....	3	( <sup>32</sup> )	( <sup>32</sup> )	( <sup>32</sup> )	( <sup>32</sup> )
38260 39	Microscopes, scanning type, including electron and proton .....	7	732	87,909	<sup>1</sup> 596	70,034
38260 53	Particle beam excitation instruments, including electron microprobes, augers, energy ion spectrometers, secondary ion mass spectrometers (SIMS), and ion microprobes .....	5	<sup>32</sup> 437	<sup>32</sup> 105,053	<sup>32</sup> 390	<sup>32</sup> 116,717
38260 55	Photon excitation analyzers, including: X-ray fluorescence, simultaneous; X-ray fluorescence, sequential; X-ray fluorescence, sequential with diffraction; X-ray fluorescence, diffraction; X-ray diffraction; and energy dispersive systems (EDS's) .....	12	3,142	84,087	2,160	<sup>1</sup> 79,083
38260 61	Mass spectroscopy instrumentation .....	17	(X)	305,450	(X)	235,262
	Clinical laboratory instrumentation, including instruments used in the clinical laboratory for measuring, analyzing, and processing clinical specimens .....	(NA)	(X)	1,005,035	(X)	918,513
38260 71	Chemistry (measure and identify substances, e.g., metabolites, enzymes, and drugs) .....	11	11,599	253,230	<sup>1</sup> 10,616	<sup>1</sup> 184,694
38260 72	Hematology (measure and identify substances or cells contained in blood or substances influencing the development and clotting of blood, e.g., cell counting coagulation factors) .....	7	10,575	244,175	7,465	299,228
38260 73	Microbiology (enumerate or identify pathogenic organisms or measure their susceptibility to antimicrobial agents) .....	2	( <sup>33</sup> )	( <sup>33</sup> )	( <sup>33</sup> )	( <sup>33</sup> )
38260 74	Histology (process tissue and cells, e.g., tissue processors and cell stainers) .....	2	<sup>33</sup> 195	<sup>33</sup> 2,096	<sup>33</sup> 162	<sup>33</sup> 1,266
38260 75	Blood bank and immunology (process blood and specimens for testing; measure and identify, using immunoassay, substances in clinical specimens) .....	7	14,192	377,425	<sup>1</sup> 13,039	<sup>1</sup> 297,689
38260 76	Other clinical laboratory instrumentation not specified above .....	11	70,949	128,109	<sup>1</sup> 61,026	135,636
38260 78	Organic elemental analysis instruments, including carbon, hydrogen, nitrogen, oxygen, and sulphur .....	16	21,584	93,088	21,621	84,995
38260 92	Amino acid, protein, and/or peptide analyzers, including chromatographic type .....	6	534	25,489	<sup>1</sup> 392	<sup>1</sup> 24,275
38260 93	Gas detectors .....	21	62,100	53,089	60,672	<sup>1</sup> 51,645
38260 94	Other analytical and scientific instruments, n.e.c., including molecular weight, monochrometers (analytical type), nephelometers (except meteorological), osmometers, particle size analyzers, photo multipliers, surface area analyzers, turbidometers, and breatholyzers .....	114	(X)	825,496	(X)	<sup>1</sup> 838,325
38260 98	Parts, components, and accessories for analytical and scientific instruments (sold separately), including photo tubes, thermal conductivity sensors, and thermopiles .....	118	(X)	1,283,265	(X)	<sup>1</sup> 1,295,970

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38271 —	Sighting, tracking, and fire control equipment, optical type ..	23	(X)	659,330	(X)	652,105
38271 01	Made from lenses, prisms, etc., produced in the same plant.....	15	(X)	158,561	(X)	172,896
38271 02	Made from purchased lenses, prisms, etc. ....	23	(X)	473,490	(X)	455,050
38271 99	Parts and accessories .....	11	(X)	27,279	(X)	24,159
38274 —	Optical instruments and lenses .....	22	(X)	1,749,051	(X)	1,596,728
38274 01	Binoculars, prismatic and nonprismatic, and terrestrial and celestial telescopes .....	11	(X)	86,280	(X)	81,670
38274 03	Other astronomical instruments, excluding radio astronomy.....	4	(X)	( <sup>34</sup> )	(X)	( <sup>34</sup> )
38274 09	Parts and accessories, including mountings, for binoculars, optical telescopes and other astronomical equipment.....	12	(X)	<sup>34</sup> 21,942	(X)	<sup>34</sup> 15,023
38274 12	Optical test and inspection equipment, including standard sources, modulators, optical comparators, and interferometers (except optical microscopes) .....	38	(X)	144,279	(X)	<sup>r</sup> 110,299
38274 15	Optical microscopes .....	9	(X)	34,866	(X)	34,010
38274 17	Optical components: Filters, including parts and accessories thereof .....	33	(X)	75,125	(X)	74,734
38274 21	Lenses (except ophthalmic focus lenses): Unmounted lenses .....	41	(X)	116,167	(X)	109,465
38274 22	Mounted lenses: Photographic lenses .....	7	(X)	3,637	(X)	( <sup>35</sup> )
38274 23	Other mounted lenses .....	20	(X)	224,267	(X)	<sup>35</sup> 172,215
38274 29	Other (prisms, mirrors, etc.) .....	49	(X)	131,634	(X)	117,061
38274 59	Other optical instruments, including optical alignment and display instruments; excluding analytical instruments and binoculars and astronomical instruments listed above, and sighting and fire control equipment.....	49	(X)	696,799	(X)	696,375
38274 39	Parts and accessories for other optical microscopes.....	8	(X)	15,673	(X)	17,283
38274 49	Parts and accessories for other optical instruments .....	22	(X)	198,382	(X)	168,593
38291 —	Aircraft engine instruments (except flight) .....	47	(X)	427,726	(X)	<sup>r</sup> 430,380
38291 45	Temperature sensors, transmitters, and displays .....	22	(X)	104,200	(X)	86,289
38291 46	Pressure ratio sensors, displays, and controls .....	6	(X)	( <sup>36</sup> )	(X)	( <sup>36</sup> )
38291 47	Pressure and vacuum sensors, transmitters, and displays.....	11	(X)	<sup>36</sup> 72,007	(X)	<sup>36</sup> 80,092
38291 58	Fuel and oil flow rate sensors, transmitters, and displays, including mixture controls.....	11	(X)	27,458	(X)	<sup>r</sup> 31,791
38291 60	Fuel and oil quantity sensors, transmitters, and displays, including densitometers .....	11	(X)	84,454	(X)	<sup>r</sup> 89,571
38291 62	Tachometer generators and indicators .....	11	(X)	10,806	(X)	<sup>r</sup> 11,433
38291 98	All other not specified above .....	17	(X)	120,738	(X)	<sup>r</sup> 125,614
38291 99	Parts and components for aircraft engine instruments, (except flight (sold separately) .....	8	(X)	8,063	(X)	<sup>r</sup> 5,590
38292 —	Physical properties testing and inspection equipment and kinematic testing and measuring equipment .....	33	(X)	1,382,158	(X)	1,199,265
38292 32	Physical properties testing equipment, including hardness, tensile, stress, strain, abrasion, strength, torsion, wear, and similar testing equipment; including components and parts sold separately: For testing of metals.....	29	(X)	315,359	(X)	254,878
38292 34	Other .....	53	(X)	266,709	(X)	<sup>r</sup> 246,029
38292 39	Parts for physical properties testing equipment, sold separately.....	28	(X)	26,255	(X)	24,792

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38292 —	Physical properties testing and inspection equipment and kinematic testing and measuring equipment—Con.					
	Physical properties inspection equipment, including flaw detection, thickness measuring, and similar inspection equipment; including components and parts (sold separately):					
38292 52	For testing of metals.....	25	(X)	194,790	(X)	159,383
38292 54	Measuring and checking flow of fluids.....	11	(X)	47,838	(X)	40,167
38292 56	Other.....	39	(X)	268,517	(X)	220,993
38292 58	Parts for physical properties inspection equipment, sold separately.....	20	(X)	52,749	(X)	36,049
38292 90	Kinematic testing and measuring equipment, including vibration, acceleration, and other motion testing equipment.....	33	(X)	204,252	(X)	211,268
38292 98	Parts for kinematic testing and measuring equipment, sold separately.....	7	(X)	5,689	(X)	5,706
38294 —	Nuclear radiation detection and monitoring instruments.....	11	(X)	491,834	(X)	489,103
38294 02	Radiation detecting elements, including ion chambers.....	19		170,461	148,637	85,901
38294 04	Solid state detectors.....	7		20,556	23,905	34,561
38294 06	Nuclear monitoring instruments, including environmental, personal dosimetry, and medical monitors, both stationary and portable types.....	17	(X)	91,684	(X)	97,050
38294 09	Sample and flow counting systems, manual and automatic.....	12	(X)	26,391	(X)	31,440
38294 19	Scalers.....	7	( <sup>37</sup> )	( <sup>37</sup> )	( <sup>37</sup> )	( <sup>37</sup> )
38294 21	Special amplifiers for nuclear applications.....	4		<sup>37</sup> 9,834	<sup>37</sup> 10,259	<sup>37</sup> 7,047
	Pulse analyzers, including nuclear spectrometers:					
38294 22	Single channel pulse height analyzers.....	7	(S)	( <sup>38</sup> )	3,086	3,225
38294 23	Multichannel pulse height analyzers.....	4	(S)	<sup>38</sup> 8,519	1,318	5,064
38294 25	Count rate meters.....	11		8,440	4,555	9,003
38294 29	Measurement and control devices using beta, gamma, or neutron gauge technology.....	12	(X)	96,788	(X)	104,230
38294 30	Nuclear power supplies.....	6	(X)	( <sup>39</sup> )	(X)	7,032
38294 32	Neutron and photon activation analysis systems.....	5	(X)	3,096	(X)	5,629
38294 34	Nuclear instrument modules, n.e.c.....	11	(X)	<sup>39</sup> 43,747	(X)	35,884
38294 39	Other nuclear radiation detection and monitoring instruments.....	11	(X)	46,213	(X)	45,592
38294 98	Parts and components for nuclear radiation detection and monitoring instruments, sold separately.....	14	(X)	22,788	(X)	21,637
38295 —	Commercial, geophysical, meteorological, and general-purpose instruments.....	47	(X)	1,347,632	(X)	1,343,985
38295 20	Barometers and barographs, aneroid and mercurial types, including recorders, wall, pendant, meteorological, hygrothermographs, and barometer-thermometer-humidity combinations.....	15	(X)	11,843	(X)	9,741
38295 21	Hydrometers, glass, all types, including thermohydrometers <sup>2</sup> .....	6		213	6,445	256
	Liquid-in-glass thermometers:					
38295 22	Engraved (etched) stem, thermoregulators, deep-sea reversing, laboratory, encased glass, ASTM standards, pocket case, and max-min registering (except clinical thermometers).....	14	(X)	7,954	(X)	9,208
38295 23	Threaded and flanged types, fixed and adjustable angle, inline and duct installations, for process, food, air-conditioning, and refrigeration installations <sup>2</sup> .....	11		529	8,945	513
38295 24	Household and commercial thermometers such as wall, outdoor, domestic science, cupcase, filled systems, and indoor-outdoor <sup>2</sup> .....	10		( <sup>40</sup> )	( <sup>40</sup> )	( <sup>40</sup> )
38295 34	Clinical (fever) thermometers, including digital <sup>2</sup> .....	1		<sup>40</sup> 8,405	<sup>40</sup> 15,389	<sup>40</sup> 11,633
						<sup>40</sup> 18,108

See footnotes at end of table.

Table 23. **Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.**

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
38295 —	Commercial, geophysical, meteorological, and general-purpose instruments—Con. Bimetal thermometers:					
38295 25	Threaded and flanged types, for pipeline and duct installations, including general and pocket test <sup>2</sup> . . . . .	20	1,328	31,929	1,399	28,733
38295 26	Domestic science, commercial general test, indoor, outdoor, desk models, oven, and refrigerator <sup>2</sup> . . . . .	12	7,035	24,657	6,317	24,246
38295 28	Humidity indicating and recording instruments such as bi-hygroscopic and hygroscopic element, indicators, psychrometers, wet and dry bulb, hygrographs, and indicating hygrometers . . . . .	17	(X)	10,893	(X)	9,714
38295 29	Other thermometers (infrared, meteorological, commercial, and industrial) . . . . .	16	(X)	41,627	(X)	34,247
38295 51	Meteorological electronics equipment and radio astronomy equipment (automatic weather stations and weather tracking equipment, ceilometers, transitometers, space satellite meteorological systems, and specialized meteorological telemetering equipment) . . . . .	22	(X)	229,426	(X)	266,585
38295 31	Other meteorological instruments, including speed and direction instruments, rain gauges, thermographs, and parts, sold separately . . . . .	17	(X)	35,690	(X)	31,657
38295 40	Seismic instruments . . . . .	14	(X)	<sup>b</sup> 237,918	(X)	249,189
38295 45	All other geophysical instruments and equipment . . . . .	22	(X)	236,832	(X)	<sup>f</sup> 236,100
38295 33	Other commercial and industrial instruments (except aircraft), including compasses, altimeters, test equipment for hydraulic and pneumatic systems and controls, and environmental gas detectors, sold separately . . . . .	47	(X)	437,569	(X)	403,931
38295 39	Parts and accessories for meteorological and commercial and industrial instruments . . . . .	18	(X)	10,515	(X)	<sup>g</sup> 7,380
38296 —	Surveying and drafting instruments and associated equipment . . . . .	32	(X)	346,314	(X)	324,279
38296 11	Surveying instruments, including alidades, transits, plumb bobs, sextants, theodolites, surveyors, compasses, surveyor's levels, and tapes . . . . .	15	(X)	272,910	(X)	248,444
38296 19	Parts and components for surveying instruments, sold separately . . . . .	5	(X)	6,021	(X)	<sup>h</sup> 8,390
38296 21	Drafting instruments and machines, manual and automatic, drafting tables, plotting instruments, slide rules, T-squares, drafting templates, rules, etc. . . . .	13	(X)	59,981	(X)	59,833
38296 29	Parts and components for drafting instruments and machines, sold separately . . . . .	1	(X)	<sup>(41)</sup>	(X)	<sup>(41)</sup>
38296 31	Photogrammetric and geodetic equipment, excluding cameras . . . . .	2	(X)	<sup>(41)</sup>	(X)	<sup>(41)</sup>
38296 39	Parts and components for photogrammetric and geodetic equipment, sold separately . . . . .	2	(X)	<sup>41</sup> 7,402	(X)	<sup>41</sup> 7,612

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. <sup>f</sup>Revised by 5 percent or more from previously published data. S Does did not meet publication standards. X Not applicable.

<sup>1</sup>“Value” for product codes 34918 13 and 34918 14 are combined with product code 34918 17 to avoid disclosing data for individual companies.

<sup>2</sup>Quantity for this product code is in thousands of units.

<sup>3</sup>Product codes 34919 59 and 34919 61 are combined to avoid disclosing data for individual companies.

<sup>4</sup>In 1995, “Value” for product codes 38121 13 and 38121 15 are combined to avoid disclosing data for individual companies.

<sup>5</sup>“Value” for product codes 38121 25 and 38121 26 are combined to avoid disclosing data for individual companies.

<sup>6</sup>In 1995, “Value” for product codes 38122 49 and 38122 51 are combined to avoid disclosing data for individual companies.

<sup>7</sup>Product codes 38210 11 and 38210 13 are combined to avoid disclosing data for individual companies.

<sup>8</sup>Product codes 38210 17 and 38210 19 are combined to avoid disclosing data for individual companies.

<sup>9</sup>In 1994, “Value” for product codes 38210 42 and 38210 98 are combined to avoid disclosing data for individual companies.

<sup>10</sup>In 1994, “Value” for product codes 38210 81 and 38210 88 are combined to avoid disclosing data for individual companies.

<sup>11</sup>Product codes 38220 35 and 38220 40 are combined to avoid disclosing data for individual companies.

<sup>12</sup>Product codes 38220 60 and 38220 65 are combined to avoid disclosing data for individual companies.

<sup>13</sup>“Value” for product codes 38230 40 and 38230 41 are combined to avoid disclosing data for individual companies.

<sup>14</sup>“Value” for product codes 38230 47 and 38230 48 are combined to avoid disclosing data for individual companies.

**Table 23. Quantity and Value of Shipments of Selected Instruments and Related Products: 1995 and 1994—Con.**

- <sup>15</sup>Product codes 38242 28 and 38242 29 are combined to avoid disclosing data for individual companies.
- <sup>16</sup>Product codes 38242 41 and 38242 98 are combined to avoid disclosing data for individual companies.
- <sup>17</sup>“Value” for product codes 38244 41 and 38244 45 are combined to avoid disclosing data for individual companies.
- <sup>18</sup>In 1994, “Value” for product codes 38251 35 and 38251 51 are combined to avoid disclosing data for individual companies.
- <sup>19</sup>“Value” for product codes 38252 23 and 38252 30 are combined to avoid disclosing data for individual companies.
- <sup>20</sup>“Value” for product codes 38252 31 and 38252 33 are combined to avoid disclosing data for individual companies.
- <sup>21</sup>“Value” for product codes 38252 34 and 38252 39 are combined to avoid disclosing data for individual companies.
- <sup>22</sup>“Value” for product codes 38252 13 and 38252 16 are combined to avoid disclosing data for individual companies.
- <sup>23</sup>“Value” for product codes 38252 58 and 38252 59 are combined to avoid disclosing data for individual companies.
- <sup>24</sup>“Value” for product codes 38252 37 and 38252 38 are combined to avoid disclosing data for individual companies.
- <sup>25</sup>“Value” for product codes 38252 01 and 38252 03 are combined to avoid disclosing data for individual companies.
- <sup>26</sup>In 1995, “Value” for product codes 38252 02 and 38252 19 are combined to avoid disclosing data for individual companies.
- <sup>27</sup>Product codes 38253 23 and 38253 25 are combined to avoid disclosing data for individual companies.
- <sup>28</sup>“Value” for product codes 38253 60 and 38253 72 are combined to avoid disclosing data for individual companies.
- <sup>29</sup>“Value” for product codes 38253 75 and 38253 76 are combined to avoid disclosing data for individual companies.
- <sup>30</sup>“Value” for product codes 38260 07 and 38260 09 are combined to avoid disclosing data for individual companies.
- <sup>31</sup>“Value” for product codes 38260 24, 38260 25, 38260 27, and 38260 28 are combined to avoid disclosing data for individual companies.
- <sup>32</sup>Product codes 38260 38 and 38260 53 are combined to avoid disclosing data for individual companies.
- <sup>33</sup>Product codes 38260 73 and 38260 74 are combined to avoid disclosing data for individual companies.
- <sup>34</sup>“Value” for product codes 38274 03 and 38274 09 are combined to avoid disclosing data for individual companies.
- <sup>35</sup>In 1994, “Value” for product codes 38274 22 and 38274 23 are combined to avoid disclosing data for individual companies.
- <sup>36</sup>“Value” for product codes 38291 46 and 38291 47 are combined to avoid disclosing data for individual companies.
- <sup>37</sup>Product codes 38294 19 and 38294 21 are combined to avoid disclosing data for individual companies.
- <sup>38</sup>In 1995, “Value” for product codes 38294 22 and 38294 23 are combined to avoid disclosing data for individual companies.
- <sup>39</sup>In 1995, “Value” for product codes 38294 30 and 38294 34 are combined to avoid disclosing data for individual companies.
- <sup>40</sup>Product codes 38295 24 and 38295 34 are combined to avoid disclosing data for individual companies.
- <sup>41</sup>“Value” for product codes 38296 29, 38296 31, and 38296 39 are combined to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.

Table 24. Shipments, Imports and Exports of Selected Instruments and Related Products: 1995

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value of f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value) <sup>2</sup>
34918 01-04, 07-09	Pneumatic actuated automatic valves . . . . .	540,665	46,851	45,562
34918 11-14, 17-18, 21, 23	All other control valves, including electric and electrohydraulic . . . . .	337,563	295,529	373,727
34918 25, 30, 35, 41, 45, 48	Self-generating power-actuated regulator valves . . . . .	916,444	89,786	212,817
34919 56, 58-59, 61, 79	Solenoid-operated valves (except nuclear and fluid transfer) . . . . .	451,797	119,000	408,031
38121 01	Compasses (magnetic and gyroscopic) . . . . .	204,556	52,095	24,111
38121 08, 10, 12-13, 15, 18, 20-21, 23, 25-26, 28, 61, 63-64, 80, 85, 89, 38122 11, 13, 15	Search, detection, aeronautical, nautical, and navigational and guidance systems, equipment, and instruments, n.e.c. (except aircraft engine instruments) . . . . .	4,508,267	543,638	255,887
38122 17, 19, 21, 23, 25, 27, 29, 31, 33	Radar systems and equipment . . . . .	6,213,136	333,437	76,704
38122 61	Radio navigational aid receivers and displays . . . . .	459,265	214,500	129,345
38122 75	Automatic pilots . . . . .	181,140	64,379	12,705
38122 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 63, 65, 67, 69, 71, 73, 77, 79, 81, 83	Sonar search, detection, tracking, and communication systems and equipment, including ASW (sonar telephone, communication equipment, depth finding, fire control, fusing guidance, hydrophones, mapping, sonabuys, navigation, sonar fish finders, sonar range instrumentation, etc.) . . . . .	15,318,301	99,827	60,000
38220 21-22, 75	Temperature responsive automatic controls (thermostats) . . . . .	716,088	104,665	183,903
38220 25, 30, 35, 40, 50, 60, 65-66, 74, 81	Pressure responsive automatic, hydraulic automatic, pneumatic automatic, and automatic controls, n.e.c. . . . .	1,154,375	990,532	839,175
38220 98	Parts and components for automatic controls (sold separately) . . . . .	213,709	(NA)	(NA)
38230 00	Process control instruments . . . . .	6,299,091	397,913	493,578
38242 22, 24, 28, 29	Gas meters, consumption registering (except parts) . . . . .	211,131	20,416	5,461
38242 33, 35, 37, 41, 98	Liquid meters (except parts) . . . . .	519,723	54,777	4,941
38242 99	Parts, components, and accessories for gas and liquid meters, sold separately . . . . .	186,163	71,335	26,448
38243 21, 23, 25, 85, 38244 00, 38253 00, 38291 00	Counting devices, n.e.c., including taxi meters and parts, parking meters and parts, and motor vehicle instruments . . . . .	3,541,281	276,948	938,461
38251 00	Electricity meters . . . . .	447,279	34,020	3,463
38252 20-22	Voltage, current, and resistance measuring equipment (except multimeters) . . . . .	365,631	249,304	99,137
38252 25-27	Power and energy testing equipment . . . . .	98,967	(NA)	(NA)
38252 37-38	Analyzers for testing characteristics of internal-combustion engines (except aircraft) . . . . .	227,087	148,637	83,194
38252 56, 58, 59	Signal generating equipment . . . . .	462,380	96,056	30,542
38252 01-03, 05, 12-13, 16, 18, 23, 30-31, 33-34, 39, 44-45, 47-48, 52, 61, 63, 65, 67, 69, 72, 74, 81, 83, 85, 87, 91-94	Test equipment for testing multimeters, electrical, radio, and communication circuits, and motors, n.e.c. . . . .	6,890,695	1,017,822	167,851
38210 00, 38260 00	Laboratory, analytical, and scientific instruments . . . . .	7,517,936	(NA)	(NA)

See footnotes at end of table.

Table 24. Shipments, Imports and Exports of Selected Instruments and Related Products: 1995—Con.

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value of f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value) <sup>2</sup>
38271 00	Sighting, tracking, and fire-control equipment, optical type . . . . .	659,330	13,112	83,717
38274 01, 03, 09	Binoculars and astronomical instruments and parts and accessories . . . . .	108,222	76,134	225,223
38274 12, 17, 21-23, 29, 39, 49, 59	Optical instruments and lenses, n.e.c. . . . .	1,605,963	389,273	78,456
38274 15	Microscopes, optical . . . . .	34,866	(NA)	(NA)
38292 00	Physical properties testing and inspection equipment, and kinematic testing and measuring equipment . . . . .	1,382,158	592,748	60,894
38294 00	Nuclear radiation detection and monitoring instruments, and equipment . . . . .	491,834	270,428	32,342
38295 34	Liquid-in-glass thermometers, clinical . . . . .	( <sup>3</sup> )	2,325	2,408
38295 22-24	Liquid-in-glass thermometers, n.e.c. . . . .	<sup>3</sup> 32,288	11,345	9,532
38295 25-26, 29	Thermometers (except liquid-in-glass type) . . . . .	56,586	(NA)	(NA)
38295 45	Geophysical instruments and equipment . . . . .	236,832	146,281	33,397
38295 40	Seismic instruments . . . . .	237,918	11,512	8,582
38295 20, 28, 51, 31	Commercial, geophysical, meteorological, and general-purpose instruments, n.e.c. . . . .	287,852	177,481	92,661
38296 11, 19	Surveying instruments (except photogrammetrical and geodetic equipment) . . . . .	278,931	62,383	62,092
38296 21	Drafting instruments and machines, manual and automatic . . . . .	59,981	35,263	225,579

NA Not available. n.e.c. Not elsewhere classified.

<sup>1</sup>Source: Bureau of the Census report, EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report, IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Products have been combined to avoid disclosing data for individual companies.**HISTORICAL NOTE**

Data on selected instruments and related products have been collected by the Bureau of the Census since 1961. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Indrek Grabbi, 301-457-4772.

## ELECTROMEDICAL EQUIPMENT AND IRRADIATION EQUIPMENT (INCLUDING X-RAY) (MA38R)

### INTRODUCTION

These data cover manufacturers of electromedical and irradiation equipment (including X-ray), except very small firms (generally less than 20 employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies.

The statistics were collected by mail on Bureau of the Census annual Form MA38R, Electromedical Equipment and Irradiation Equipment (Including X-ray). The survey panel includes all known producers of these products, except the very small firms excluded from the scope of the survey. Approximately 274 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of electromedical and irradiation equipment increased by 4.5 percent to

\$9.6 billion, from the 1994 level of \$9.2 billion. X-ray and other irradiation equipment increased 6.7 percent from its 1994 level. Electromedical equipment increased 3.7 percent to \$6.9 billion, from the 1994 level of \$6.7 billion.

### EXPLANATION OF TERMS

**Research and development.** Dollar shipments reflect income from development, design, and engineering services performed by the reporting plant in connection with the manufacture of the products shipped, whether included in a single production contract, or contracted for separately, but intended as preparation for the manufacture of the specific products.

Table 25. Value of Shipments of Electromedical and Irradiation Equipment by Class of Product: 1990 to 1995

[Value in millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990
38440	X-ray and other irradiation equipment. . . . .	2,623.2	2,458.2	2,480.0	2270.2	2,205.2	1,870.4
38450	Electromedical equipment. . . . .	6,999.6	6,752.1	6,222.0	6273.1	5,673.8	4,849.6



Table 26. Quantity and Value of Shipments of Electromedical and Irradiation Equipment: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
	Medical diagnostic equipment.....	274	(X)	9,622,837	(X)	9,210,342
	X-ray equipment:					
38440 02	Digital radiography equipment .....	4	971	66,831	774	<sup>1</sup> 62,591
38440 03	Computerized axial tomography (CT or CAT scan) .....	7	(S)	<sup>(1)</sup>	(S)	<sup>(1)</sup>
38440 09	Dental and conventional <sup>2</sup> .....	13	16,049	447,022	17,593	<sup>1</sup> 473,813
38440 11	All other medical diagnostic X-ray equipment .....	15	(X)	<sup>1</sup> 837,056	(X)	<sup>1</sup> 787,206
38440 06	Nuclear medicine equipment (all equipment used for nuclear in vivo studies) .....	9	1,116	337,244	1,101	314,987
38450 18	Magnetic resonance imaging (MRI) equipment .....	7	1,744	624,991	(S)	<sup>(3)</sup>
38450 17	Ultrasound scanning devices .....	11	8,981	772,314	8,558	<sup>1</sup> 750,474
38450 11	Electrocardiograph (EKG) .....	15	49,711	215,714	<sup>1</sup> 45,345	<sup>1</sup> 211,033
38450 13	Electroencephalograph (EEG) and electromyograph (EMG) <sup>2</sup> .....	8	(S)	<sup>(4)</sup>	(S)	<sup>(3)</sup>
38450 21	Audiological equipment .....	7	(X)	11,403	(X)	<sup>1</sup> 10,346
38450 23	Endoscopic equipment (bronchoscope, cystoscope, proctosigmoidoscope, colonoscope, etc.) .....	6	(S)	24,756	(S)	19,908
38450 25	Respiratory analysis equipment .....	6	4,792	46,009	3,592	38,658
38450 29	All other medical diagnostic equipment .....	26	(X)	<sup>4</sup> 157,650	(X)	<sup>3</sup> 784,074
	Patient monitoring equipment:					
38450 51	Intensive care/coronary care units, including component modules such as temperature, blood pressure, and pulse .....	27	(X)	536,937	(X)	509,866
38450 53	Prenatal monitoring .....	6	(X)	<sup>(5)</sup>	(X)	<sup>1</sup> 123,354
38450 55	Respiratory monitoring .....	7	(X)	<sup>5</sup> 177,903	(X)	<sup>1</sup> 15,118
38450 57	All other patient monitoring .....	35	(X)	500,264	(X)	711,918
	Medical therapy equipment:					
38450 43	Ultrasound therapy .....	7	(X)	9,234	(X)	<sup>1</sup> 12,090
38450 31	Pacemakers .....	10	203,879	639,039	161,158	562,366
38450 33	Defibrillators .....	13	46,459	439,298	51,715	476,779
38450 39	Dialyzers, including machines and equipment .....	4	(X)	301,749	(X)	236,180
38450 41	Medical laser equipment .....	20	(X)	464,569	(X)	430,028
38440 32	Radiation therapy (linear accelerators, X-ray, cobalt 60, brachetherapy) .....	7	(X)	<sup>(6)</sup>	(X)	<sup>(6)</sup>
38450 49	All other medical therapy equipment <sup>2</sup> .....	34	(X)	480,806	(X)	470,411
	All other irradiation and electromedical equipment:					
38440 13	Industrial and scientific X-ray equipment .....	18	1,827	138,757	<sup>1</sup> 1,669	<sup>1</sup> 129,539
38440 21	X-ray tubes (sold separately) .....	11	42,186	360,714	<sup>1</sup> 40,587	<sup>1</sup> 301,890
38440 23	Other nonmedical irradiation equipment, including gamma- and beta-ray equipment, n.e.c. ....	5	(X)	17,392	(X)	13,840
38440 27	Parts and accessories for X-ray equipment and other nonmedical irradiation equipment, n.e.c. ....	26	(X)	<sup>6</sup> 418,172	(X)	<sup>6</sup> 374,348
	Surgical systems:					
38450 35	Electrosurgical equipment .....	16	(X)	336,768	(X)	<sup>1</sup> 280,117
38450 71	Heart-lung machines, excluding iron lungs .....	3	(S)	<sup>(7)</sup>	(S)	<sup>(7)</sup>
38450 73	Blood flow systems .....	10	(X)	<sup>7</sup> 292,563	(X)	<sup>7</sup> 262,848
38450 75	All other surgical support systems .....	12	(X)	328,285	(X)	288,896
38450 83	Other electromedical equipment (except diagnostic and therapeutic), n.e.c. ....	11	(X)	37,319	(X)	<sup>1</sup> 31,473
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ...	41	(X)	602,078	(X)	<sup>1</sup> 526,191

n.e.c. Not elsewhere classified. <sup>1</sup>Revised by 5 percent or more from previously published data. S Does not meet publication standards. X Not applicable.

<sup>1</sup>Product codes 38440 03 and 38440 11 are combined to avoid disclosing data for individual companies.

<sup>2</sup>For 1995, product is revised: "Conventional" combined with "Dental"; "Electromyograph (EMG)" combined with "Electroencephalograph (EEG)"; "Diathermy apparatus, and Extracorporeal lithotripters" combined with "All other medical therapy equipment."

<sup>3</sup>In 1994, "Value" for product codes 38450 13, 38450 18, and 38450 29 is combined to avoid disclosing data for individual companies.

<sup>4</sup>In 1995, "Value" for product codes 38450 13 and 38450 29 is combined to avoid disclosing data for individual companies.

<sup>5</sup>In 1995, "Value" for product codes 38450 53 and 38450 55 is combined to avoid disclosing data for individual companies.

<sup>6</sup>Product code 38440 32 is combined with product code 38440 27 to avoid disclosing data for individual companies.

<sup>7</sup>Product code 38450 71 is combined with product code 38450 73 to avoid disclosing data for individual companies.

Table 27. Shipments, Exports, and Imports of Electromedical and Irradiation Equipment: 1995

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>1</sup>	Imports for consumption (value) <sup>2</sup>
38440 02	Digital radiography equipment .....	66,831	535,810	727,116
38440 03	Computerized axial tomography (CT or CAT SCAN) .....	(D)	83,780	10,879
38440 13	Industrial and scientific X-ray equipment .....	138,757	70,646	54,140
38440 21	X-ray tubes sold separately .....	360,714	163,040	83,868
38440 27	Parts and accessories for X-ray equipment and other nonmedical irradiation equipment, n.e.c. ....	(S)	270,054	202,954
38440 23	Nonmedical irradiation equipment, including gamma- and beta-ray equipment, n.e.c. ....	17,392	19,794	6,803
38450 11	Electrocardiograph (EKG), diagnostic .....	235,669	65,670	22,137
38450 13	Electroencephalographs (EEG's) and electromyographs (EMG) .....	(D)	15,436	7,572
38450 17	Ultrasound scanning devices, n.e.c. ....	772,314	301,166	62,192
38450 31	Pacemakers, therapeutic .....	639,039	159,082	12,814
38450 18, 21, 23	Diagnostic electromedical equipment, n.e.c. ....	661,150	814,015	489,188
38450 33	Therapeutic electromedical equipment, n.e.c. ....	439,298	173,453	40,364
38450 71, 73	Electromedical equipment and irradiation equipment, including X-ray, n.e.c. ....	292,563	287,391	295,160
38450 39	Dialyzers, machines and equipment .....	301,749	67,836	32,763
38450 51	Patient monitoring equipment .....	536,937	276,785	33,103
38450 43	Therapeutic ultrasound equipment .....	9,234	24,399	2,483
38450 35	Electrosurgical equipment .....	336,768	287,403	36,268
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c. ....	563,660	619,742	391,617

D Withheld to avoid disclosing data from individual companies. n.e.c. Not elsewhere classified. S Does not meet publication standards.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

## HISTORICAL NOTE

Data on selected electronic and associated products have been collected by the Bureau of the Census since 1961 on survey MA36N, Selected Electronics and Associated Products. In 1985, survey MA36N was divided into three annual surveys: MA36P, Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment; MA36Q, Semiconductors, Printed Circuit Boards, and Other Electronic Components; and MA38R, (formerly MA36R), Electromedical Equipment and

Irradiation Equipment (Including X-ray). Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Chris Blackburn, 301-457-4817.

## Chapter 8. Consumer Durables

### ELECTRIC HOUSEWARES AND FANS (MA36E)

#### INTRODUCTION

These data cover manufacturers of electric housewares and fans in the United States. These statistics were collected by mail on Bureau of the Census annual Form MA36E, Electric Housewares and Fans. The survey panel includes all known manufacturers of electric housewares and fans, approximately 95 companies.

#### SUMMARY OF FINDINGS

In 1995, manufacturers' shipments of electric fans totaled \$528.0 million, a 4.8-percent decrease from the 1994 value of shipments of \$554.7 million. The 1995 value of shipments of small household electric appliances totaled \$2.0

billion, a decrease of 1.6 percent from the 1994 total. Shipments of parts and attachments decreased 15.3 percent, from \$119.9 million in 1994 to \$101.5 million in 1995.

#### EXPLANATION OF TERMS

See the Introduction for an explanation of terms.

Table 1. Value of Shipments of Electric Housewares and Fans by Class of Product: 1986 to 1995

[Millions of dollars]

Year	Electric fans (except industrial type)	Small household electric appliances	Parts and attachments for electric housewares and fans
1995 .....	528.0	2,015.8	101.5
1994 .....	554.7	2,049.1	119.9
1993 .....	494.1	1,945.0	136.5
1992 .....	511.4	1,985.0	142.7
1991 .....	409.6	1,720.8	98.7
1990 .....	482.0	1,778.7	104.3
1989 .....	531.5	1,914.9	128.1
1988 .....	526.1	2,004.5	106.4
1987 .....	492.5	1,810.3	172.4
1986 .....	473.1	1,945.3	196.4

Table 2. Quantity and Value of Shipments of Electric Housewares and Fans by Product: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36341 —	Electric fans (except industrial) . . . . .	19	23,738,509	527,951	24,263,503	554,688
36341 71	Window (household) permanent, portable, and roll-abouts . . . . .	6	7,640,380	112,820	7,435,367	114,168
36341 91	Ceiling (paddle) fans . . . . .	6	<sup>b</sup> 1,264,270	<sup>b</sup> 78,389	<sup>b</sup> 1,410,454	<sup>b</sup> 86,467
36341 97	All other electric fans (except industrial), including electric range hoods, oven hoods, ventilating, and exhaust fans . . . . .	14	14,833,859	336,742	15,417,682	354,053
36345 —	Small electric household appliances (except fans) . .	74	(X)	2,015,785	(X)	2,049,067
	Electrothermal type . . . . .	58	(X)	1,418,898	(X)	1,467,554
36345 11	Broilers . . . . .	5	401,331	13,514	418,146	13,858
	Coffee makers:					
36345 18	Drip type . . . . .	5	4,770,390	88,956	5,921,064	118,043
36345 19	Percolator or vacuum type . . . . .	6	1,011,196	16,910	1,188,911	18,724
36345 21	Urn type . . . . .	4	858,289	27,213	953,082	28,853
36345 23	Deep fat fryers, excluding covers and controls shipped separately . . . . .	6	2,143,258	31,854	2,515,202	36,029
36345 24	Ovens, including toaster ovens and roasters (with or without broiler attachments) . . . . .	12	<sup>a</sup> 4,774,907	<sup>a</sup> 176,499	<sup>a</sup> 5,146,939	<sup>a</sup> 200,142
36345 29	Hot plates and disc stoves, 1650 watts and less (except built-in units) . . . . .	5	1,117,460	15,046	1,235,415	16,999
36345 39	Waffle irons, sandwich grills, griddles, and combinations . . . . .	11	3,269,348	71,970	3,434,946	72,168
36345 42	Frying pans and skillets, excluding covers and controls shipped separately . . . . .	8	2,713,453	59,042	2,968,010	63,823
	Air space heaters:					
	Portable room heaters:					
36345 43	Fan-forced type . . . . .	14	2,646,774	64,754	2,829,082	70,611
36345 44	Other than fan-forced type (convector, radiant, etc.) . . . . .	11	795,935	26,994	850,971	28,723
	For fixed installation, all types:					
36345 45	Baseboard, excluding glass panel type . . . . .	7	1,031,816	24,391	1,090,234	25,254
36345 47	Other than baseboard, excluding warm air furnaces . . . . .	6	<sup>b</sup> 1,140,320	<sup>a</sup> 64,932	<sup>a</sup> 1,292,763	<sup>a</sup> 68,660
36345 50	Electric irons . . . . .	2	(D)	(D)	(D)	(D)
36345 86	Electric bed coverings, including sheets, mattress covers, comforters, and blankets . . . . .	3	(D)	(D)	(D)	(D)
36345 87	Electric heating pads, including foot warmers . . . . .	6	<sup>b</sup> 1,486,901	<sup>b</sup> 18,994	<sup>b</sup> 1,353,558	<sup>b</sup> 17,233
36345 96	Portable humidifiers, including vaporizers . . . . .	8	5,218,293	75,604	4,442,111	65,123
36345 97	Other small electrothermal food processing appliances, including such items as pressure cookers, automatic saucepans, toasters, casseroles, chafing dishes, and crockpots; excluding covers and controls shipped separately . . . . .	12	19,672,173	322,273	19,774,724	313,959
36345 98	Other small electrothermal household appliances, including such items as immersion heaters, faucet attachments, water heaters, steam radiators, warming trays, food warmers, bottle warmers, hair curlers, curling irons, hair dryers, etc.; excluding covers and controls shipped separately . . . . .	14	7,280,521	137,095	7,434,936	125,310
	Electromechanical type, including cordless . . . . .	29	(X)	596,887	(X)	581,513
	Household food mixers, including value of standard attachments sold with mixers:					
36345 71	Hand (portable) . . . . .	4	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>
36345 75	Stand type . . . . .	3	<sup>1</sup> 2,591,561	<sup>1</sup> 161,445	<sup>1</sup> 2,743,859	<sup>1</sup> 158,834
36345 76	Blenders (liquefiers) . . . . .	5	6,344,887	128,582	4,594,799	94,156
36345 83	Household food processors, including food choppers, slicers, and shredders . . . . .	8	2,636,010	46,688	<sup>b</sup> 1,197,616	<sup>a</sup> 30,559

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Electric Housewares and Fans by Product: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36345 —	Small electric household appliances (except fans)—Con.					
36345 84	Electromechanical type, including cordless—Con.					
36345 90	Household food preparation appliances, (except food mixers and food processors), including drink mixers, whippers, juicers, grinders, ice crushers, and coffee grinders. . . .	10	<sup>b</sup> 1,838,633	<sup>b</sup> 52,125	<sup>b</sup> 1,629,758	<sup>a</sup> 48,018
36345 95	Portable air purifiers and portable dehumidifiers. . . . .	7	123,210	2,645	<sup>b</sup> 105,710	<sup>b</sup> 2,461
36349 —	Other small electromechanical appliances, including knives, knife sharpeners, scissors, toothbrushes, vibrators, electric razors, dry shavers, and can openers . . . . .	16	8,967,830	205,402	12,885,736	247,485
36349 13	Parts and attachments for small household electric appliances . . . . .	29	(X)	101,481	(X)	119,870
36349 18	Electrothermal in operation (value only) . . . . .	13	(X)	70,503	(X)	86,596
36349 89	Electromechanical in operation (value only) . . . . .	10	(X)	11,311	(X)	11,979
	Other (value only) . . . . .	7	(X)	19,667	(X)	21,295

D Withheld to avoid disclosing data for individual companies. X Not applicable.

<sup>1</sup>Product code 36345 71 is included with product code 36345 75 to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Electric Housewares and Fans: 1995

[Quantity in number of units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3 4</sup>	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value
Electric fans (except industrial and electric range hoods and oven hoods) . . . . .	23,738,509	527,951	1,236,973	41,405	37,226,107	727,868
Coffee makers . . . . .	6,639,875	133,079	861,307	24,312	16,326,261	247,460
Air space heaters, portable and fixed installation types . . . . .	5,614,845	181,071	(NA)	20,342	4,699,174	91,993
Standard household electric irons . . . . .	(D)	(D)	728,527	8,837	15,218,530	156,312
Electric bed coverings . . . . .	(D)	(D)	135,405	5,508	5,360	119
Electrothermal household appliances, n.e.c. . . . .	48,077,645	921,891	3,341,446	131,438	96,170,133	613,741
Electromechanical household food mixers (except blenders) . . . . .	( <sup>5</sup> )	( <sup>5</sup> )	(NA)	(NA)	8,400,950	55,748
Electromechanical household food mixers . . . . .	<sup>5</sup> 2,591,561	<sup>5</sup> 161,445	1,670,257	47,236	(NA)	(NA)
Household blenders and liquefiers . . . . .	6,344,887	128,582	(NA)	(NA)	4,459,193	59,466
Household food preparation appliances, including food processors (except food mixers) . . . . .	4,474,643	98,813	314,242	19,317	8,743,430	101,484
Electromechanical portable air purifiers, and portable dehumidifiers . . . . .	123,210	2,645	145,794	8,745	1,562,010	30,230
Small electromechanical appliances, n.e.c. . . . .	8,967,830	205,402	2,883,422	106,932	14,905,884	115,935

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified.

<sup>1</sup>For a comparison of SIC-based codes with Schedule B export numbers and HTSUSA imports, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. General Imports for Consumption*.

<sup>4</sup>Dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States.

<sup>5</sup>Manufacturers' shipments for "Electromechanical household food mixers (except blenders)" and "Electromechanical household food mixers" are combined to avoid disclosing data for individual companies.

**HISTORICAL NOTE**

Data on electric housewares and fans have been collected by the Bureau of the Census since 1962. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Vera Harris-Bourne, 301-457-1604.

## MAJOR HOUSEHOLD APPLIANCES (MA36F)

### INTRODUCTION

These data cover manufacturers of major household appliances and parts in the United States. These statistics were collected by mail on Bureau of the Census annual Form MA36F, Major Household Appliances. The survey panel includes all known manufacturers of major household appliances, approximately 102 companies.

### SUMMARY OF FINDINGS

In 1995, manufacturers' shipments of major household appliances totaled \$14.3 billion, a 1-percent decrease from \$14.4 billion in 1994. Shipments of household cooking

equipment, including parts and accessories, totaled \$3.4 billion in 1995, a 2-percent increase from the 1994 value of \$3.3 billion. The value of household refrigerators and freezers, including parts and attachments, decreased 2 percent, from \$5.0 billion in 1994 to \$4.8 billion in 1995. Shipments for household laundry equipment and parts decreased 8 percent, from \$3.4 billion in 1994 to \$3.1 billion in 1995. The value of shipments of household appliances, not elsewhere classified, decreased 2 percent, from \$1.6 billion in 1994 to \$1.5 billion in 1995.

### EXPLANATION OF TERMS

See the Introduction for an explanation of terms.

**Table 4. Value of Shipments of Major Household Appliances by Class of Products: 1985 to 1995**

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
36311	Electric household ranges, ovens, and surface cooking units, equipment, and parts .....	1,775.2	1,791.1	1,731.3	1,619.8	1,614.9	1,659.8	1,767.6	1,809.2	1,963.9	1,928.0	2,033.6
36313	Gas household ranges, ovens, and surface cooking units, equipment, and parts .....	666.0	649.6	621.5	599.6	609.5	739.4	710.0	648.5	666.5	667.8	585.6
36314	Other household ranges, and cooking equipment and outdoor cooking equipment, including parts and accessories .....	942.6	872.7	786.1	750.0	657.4	581.1	560.3	577.0	533.5	465.6	484.0
36321	Household refrigerators, including combination refrigerator-freezers .....	14,752.2	14,882.1	14,310.3	13,937.6	3,362.7	3,208.1	3,522.5	3,329.7	3,017.3	2,854.2	2,613.7
36322	Food freezers, complete units, for freezing and/or storing frozen food (household type) .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	277.4	226.6	226.1	252.7	228.0	230.7	251.4
36323	Parts and attachments for household refrigerators and freezers .....	88.8	84.7	73.7	78.7	127.9	134.0	131.0	136.4	75.5	105.4	88.1
36330	Household laundry machines and parts .....	3,095.4	3,361.4	3,389.4	2,961.7	2,919.0	2,924.5	2,980.5	2,887.8	2,790.4	2,817.7	2,522.9
36391	Water heaters, electric .....	514.6	516.4	473.4	401.0	446.7	433.8	417.3	398.0	382.7	383.2	383.8
36392	Water heaters (except electric) .....	986.0	748.8	700.0	586.5	616.1	577.2	569.9	543.6	523.6	518.3	474.2
36395	Household appliances, n.e.c., and parts .....	1,586.0	1,624.3	1,305.6	1,276.5	1,170.8	1,185.5	1,238.6	1,274.9	1,286.0	1,110.2	1,127.7

n.e.c. Not elsewhere classified.

<sup>1</sup>For the years 1992 through 1995, product codes 36321 and 36322 are combined to avoid disclosing data for individual companies.

Table 5. Quantity and Value of Shipments of Major Household Appliances: 1995 and 1994

[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36311 —	Major household appliances .....	102	(X)	14,318.0	(X)	14,446.4
	Electric ranges, ovens, and surface cooking units, equipment, and parts .....	20	6,442.5	1,775.2	7,245.7	1,791.1
	Free-standing ranges (widths are based on outside dimensions):					
36311 11	Under 23 (58.4 cm) inches in width, all types, including apartment house type .....	5	113.9	20.3	118.3	20.7
36311 17	23 (58.4 cm) inches up to and including 32 (81.3 cm) inches in width .....	8	12,727.1	1,850.0	2,782.1	824.8
36311 35	33 (83.8 cm) inches and over in width, all types .....	3	( <sup>1</sup> )	( <sup>1</sup> )	4.2	2.0
	Other than free-standing:					
	Built-in ranges:					
	Built-in ovens:					
36311 53	Single oven .....	7	303.0	153.0	272.9	106.7
36311 55	Two ovens .....	4	101.9	83.6	97.9	68.9
36311 61	Surface cooking tops .....	8	365.1	98.4	414.2	82.2
36311 65	Drop-in ranges .....	6	117.4	64.4	124.7	51.2
36311 73	Microwave ranges and ovens, including combination microwave/electric ranges and built-in ovens that utilize microwave and electrothermal energy in one or more of the oven cavities .....	6	58.4	57.4	80.9	55.5
36311 74	Microwave ovens, including counter top, built-in, and wall or cabinet-hung ovens .....	5	2,652.2	301.3	3,350.5	422.8
36311 79	Other electric and electronic ranges and ovens not listed above .....	-	(X)	-	(X)	-
36311 20	Parts and accessories for household electric ranges and ovens such as burners, rotisseries, oven racks, and broiler pans (sold separately) .....	17	(X)	145.4	(X)	156.3
36313 —	Gas household ranges, ovens, and surface cooking units, equipment, and parts .....	18	2,081.0	666.0	2,158.4	649.6
	Standard type, free-standing:					
36313 11	Over 32 (81.3 cm) inches cooking top and oven .....	7	61.7	41.2	57.2	34.9
36313 13	Over 24 (61 cm) inches to 32 (81.3 cm) inches cooking top and oven .....	7	1,179.6	359.8	1,301.2	364.7
36313 15	Apartment ranges, 24 (61 cm) inches cooking top and under .....	4	212.6	40.9	178.3	32.2
36313 17	Standard type, for built-in installation (built-in or stack-on oven broiler unit) .....	4	(D)	(D)	(D)	(D)
36313 19	Surface cooking tops (one or more burners) .....	8	252.6	69.4	211.9	56.1
36313 22	Nonstandard types, including wall hung, slide-in, or drop-in .....	7	308.6	76.6	342.4	88.5
36313 39	Other gas household ranges, ovens, hot plates, and surface cooking units, not listed above .....	3	(D)	(D)	(D)	(D)
36313 20	Parts and accessories for gas household ranges and ovens such as burners, rotisseries, oven racks, and broiler pans (sold separately) .....	14	(X)	46.1	(X)	40.7
36314 —	Other household ranges and cooking equipment (except gas and electric) and outdoor cooking equipment, including parts and accessories .....	26	11,943.4	942.6	12,329.8	872.7
	Barbecuers, grills, stoves, braziers, etc., for outdoor cooking and other cooking:					
	Portable units:					
36314 22	Gas fuel or both gas and other fuel .....	12	<sup>a</sup> 5,381.7	<sup>a</sup> 560.5	5,674.4	524.9
36314 24	Solid fuel (charcoal, wood, coal, etc.) .....	9	<sup>a</sup> 5,070.0	<sup>a</sup> 127.3	5,599.0	129.1
36314 26	Liquid fuel (oil, kerosene, etc.) .....	5	910.2	105.5	801.1	87.8
36314 28	All other outdoor and other cooking equipment .....	10	581.4	<sup>a</sup> 32.3	<sup>f</sup> 255.3	<sup>f</sup> 25.0
36314 20	Parts and accessories for outdoor and other cooking equipment (sold separately) .....	16	(X)	117.0	(X)	105.9

See footnotes at end of table.



Table 5. Quantity and Value of Shipments of Major Household Appliances: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36321 —	Major household appliances—Con. Household refrigerators, including combination refrigerator-freezers . . . . .	15	<sup>2</sup> 11,062.2	<sup>2</sup> 4,752.2	<sup>2</sup> 11,287.4	<sup>2</sup> 4,882.1
	Compression type, fitted with separate external doors, including all combinations with two or more external doors:					
36321 02	9.4 cu. ft. and under (under 269 liters) . . . . .	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36321 09	9.5 to 13.4 cu. ft. (269 liters but under 382 liters) . . . . .	3	<sup>3</sup> 235.9	<sup>3</sup> 60.7	<sup>3</sup> 270.9	<sup>3</sup> 72.0
36321 12	13.5 to 15.4 cu. ft. (382 liters but under 438 liters) . . . . .	4	1,506.3	465.5	1,520.7	482.3
36321 14	15.5 to 17.4 cu. ft. (438 liters but under 495 liters) . . . . .	5	679.3	214.1	693.9	229.9
36321 19	17.5 to 19.4 cu. ft. (495 liters but under 552 liters) . . . . .	6	2,327.4	927.8	2,289.8	932.4
36321 24	19.5 to 21.4 cu. ft. (552 liters but under 608 liters) . . . . .	7	1,572.3	829.9	1,557.4	813.5
36321 25	21.5 to 24.4 cu. ft. (608 liters but under 693 liters) . . . . .	6	1,705.1	1,405.9	1,864.5	1,524.2
36321 28	24.4 cu. ft. and over (693 liters and over) . . . . .	4	229.3	269.2	230.2	237.8
	Compression type, fitted with only one external door:					
36321 63	6.4 cu. ft. and under (under 184 liters) . . . . .	7	881.6	124.3	853.5	115.2
36321 64	6.5 cu. ft. and over (184 liters and over) . . . . .	4	(D)	(D)	(D)	(D)
36321 80	Other household refrigerators . . . . .	3	(D)	(D)	(D)	(D)
36322 —	Food freezers, complete units, for freezing and/or storing frozen food (household type) . . . . .	5	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36322 05	Upright type freezers . . . . .	5	(D)	(D)	(D)	(D)
36322 50	Chest type freezers . . . . .	2	(D)	(D)	(D)	(D)
36323 —	Parts and attachments for household refrigerators and freezers, excluding compressors and condensing units and ice-making machines . . . . .	17	(X)	88.8	(X)	84.7
36330 —	Household laundry machines (household type defined as having dry linen capacity not exceeding 10 kg (22 lb)) . . . . .	5	11,728.9	3,095.4	12,112.7	3,361.4
	Washing machines, mechanical (electric):					
36330 11	Coin-operated . . . . .	4	227.9	95.4	219.7	91.4
36330 31	Noncoin-operated . . . . .	5	6,378.0	1,742.3	6,599.6	1,923.4
36330 37	Other washing machines, including machines with built-in centrifugal drier and gasoline driven . . . . .	3	270.1	155.2	281.2	160.2
	Dryers, mechanical (incorporating heat):					
36330 51	Gas (noncoin-operated) . . . . .	5	1,187.6	298.8	1,219.0	312.4
36330 55	Electric (noncoin-operated) . . . . .	5	3,545.2	758.6	3,679.2	832.3
36330 15	Coin-operated . . . . .	4	120.0	45.0	114.0	41.8
36330 59	Other drying equipment (not incorporating heat), including centrifugal wringers and spinners . . . . .	-	-	-	-	-
	Parts, accessories, and attachments for household laundry equipment (sold separately) . . . . .	9	(X)	160.2	(X)	<sup>1</sup> 162.6
36330 96	For household washing machines . . . . .	8	(X)	151.9	(X)	<sup>1</sup> 151.0
36330 97	For household drying machines . . . . .	4	(X)	8.3	(X)	11.6
36391 —	Water heaters, electric (for permanent installation) . . . . .	11	4,080.9	514.6	4,021.2	516.4
	Storage type:					
36391 11	34 gallons and under (under 132 liters) . . . . .	8	1,012.5	116.0	<sup>1</sup> 991.1	<sup>1</sup> 109.9
36391 12	35 to 44 gallons (132 liters but under 170 liters) . . . . .	8	1,421.7	170.1	1,376.7	169.4
36391 14	45 to 54 gallons (170 liters but under 208 liters) . . . . .	7	1,109.2	147.6	<sup>1</sup> 1,090.6	<sup>1</sup> 145.7
36391 15	55 gallons and over (208 liters and over) . . . . .	8	291.7	57.7	<sup>1</sup> 314.7	<sup>1</sup> 59.3
36391 98	Other types, including circulating and portable storage . . . . .	7	245.8	23.3	248.1	<sup>b</sup> 32.1

See footnotes at end of table.

Table 5. Quantity and Value of Shipments of Major Household Appliances: 1995 and 1994—Con.

[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36392 —	Major household appliances—Con.					
	Water heaters (except electric).....	15	4,374.6	986.0	4,841.8	748.8
	Direct-fired water heaters:					
36392 12	Gas .....	10	4,234.8	953.6	4,682.9	715.4
36392 24	Oil .....	4	<sup>b</sup> 32.2	<sup>b</sup> 11.6	28.1	9.9
36392 52	Indirect water heaters, including storage, cast or coil type (less tank); tanks (with or without generator coils); generator coils with tank collar (sold without tank); and instantaneous.....	8	107.5	20.8	130.7	23.5
36395 —	Other household type appliances and parts, n.e.c. ....	17	12,551.4	1,586.0	<sup>r</sup> 11,809.9	1,624.3
	Dishwashing machines:					
36395 12	Portable type, including convertible type ...	2	(D)	(D)	(D)	(D)
36395 14	Built-in type.....	3	3,981.3	1,020.2	4,448.1	1,081.6
36395 63	Floor-waxing, polishing, scrubbing, and shampooing machines (for household use only).....	4	(D)	(D)	(D)	(D)
36395 71	Food waste disposers (all sizes, of the electromechanical, comminutor type, operating in conjunction with household plumbing systems of the type generally used in residences).....	3	(D)	(D)	(D)	(D)
36395 72	Household trash compactors .....	3	(D)	(D)	(D)	(D)
36395 60	Other major household appliances, n.e.c. ....	2	(D)	(D)	(D)	(D)
	Parts for other household appliances, n.e.c.:					
36395 91	For electric water heaters (value only) .....	6	(X)	23.7	(X)	<sup>r</sup> 23.4
36395 92	For nonelectric water heaters (value only) ..	5	(X)	17.5	(X)	15.9
36395 93	For dishwashing machines (value only) .....	5	(X)	40.9	(X)	37.7
36395 97	For other major household appliances, n.e.c. (value only) .....	4	(X)	(D)	(X)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. <sup>r</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>In 1995, product code 36311 35 is included with product code 36311 17 to avoid disclosing data for individual companies.

<sup>2</sup>Product code 36322 00 is included with product code 36321 00 to avoid disclosing data for individual companies.

<sup>3</sup>Product code 36321 02 is included with product code 36321 09 to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.

Table 6. Shipments, Exports, and Imports of Major Household Appliances: 1995

[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3 4</sup>	
		Quantity	Value	Quantity	Value	Quantity	Value
36311 11, 17, 35, 53, 55, 61, 65	Electric ranges, ovens, and surface cooking units . . . . .	3,728.3	1,269.6	78.8	42.7	3,284.0	263.2
36311 73-74, 79	Microwave ovens . . . . .	2,710.6	358.7	305.6	48.3	7,689.5	659.0
36311 20	Parts and accessories for electric ranges and ovens . . . . .	(X)	145.4	(X)	-	(X)	140.6
36313 11, 13, 15, 17, 19, 22, 39	Gas ranges, ovens, and surface cooking units . . . . .	2,081.0	619.9	143.3	45.5	1,179.3	258.7
36313 20	Parts and accessories for gas ranges and ovens and other cooking equipment . . . . .	(X)	46.1	(X)	15.0	(X)	65.8
36314 22	Gas fuel or both gas and other fuel . . . . .	5,381.7	560.5	400.5	37.8	-	-
36314 24	Solid fuel (charcoal, wood, coal, etc.) . . . . .	5,070.0	127.3	58.1	8.7	2,073.5	12.8
36314 26	Liquid fuel (oil, kerosene, etc.) . . . . .	910.2	105.5	411.7	20.0	33.5	0.6
36314 28	All other outdoor cooking equipment . . . . .	581.4	32.3	52.3	5.7	118.9	3.4
36321 02	Compression type refrigerators, fitted with separate external doors, including all combinations with two or more external doors: 9.4 cu. ft. and under (under 269 liters) . . . . .	( <sup>5</sup> )	( <sup>5</sup> )	40.8	17.8	91.9	14.7
36321 09	9.5 to 13.4 cu. ft. (269 liters but under 382 liters) . . . . .	<sup>5</sup> 235.9	<sup>5</sup> 60.7	24.6	6.8	54.8	14.6
36321 12, 14, 19, 24-25, 28	13.5 cu. ft. and over (382 liters and over) . . . . .	8,019.7	4,112.4	652.0	386.6	67.5	21.4
36321 63	Compression type refrigerators, fitted with one external door: 6.4 cu. ft. and under (under 184 liters) . . . . .	881.6	124.3	34.1	18.2	1,315.0	122.1
36321 64	6.5 cu. ft. and over (184 liters and over) . . . . .	(D)	(D)	309.4	167.3	877.1	92.5
36321 80	Other household refrigerators, noncompression, fitted with one external door . . . . .	(D)	(D)	142.4	35.3	80.5	29.0
36322 05	Freezers, upright type . . . . .	(D)	(D)	83.1	30.0	100.4	19.6
36322 50	Freezers, chest type . . . . .	(D)	(D)	82.1	28.0	293.1	51.7
36330 11	Fully automatic electric washing machines (coin-operated) . . . . .	227.9	95.4	20.7	7.7	4.7	3.1
36330 31	Fully automatic electric washing machines (noncoin-operated) . . . . .	6,378.0	1,742.3	800.9	232.3	670.1	38.3
36330 37	Other washing machines . . . . .	270.1	155.2	29.7	12.3	20.1	3.8
36330 51, 55	Dryers (noncoin-operated) and other drying equipment . . . . .	4,732.9	1,057.4	202.4	47.2	442.4	57.7
36330 15	Dryers (coin-operated) . . . . .	120.0	45.0	5.0	4.1	2.0	0.4
36391 11-12, 14-15	Water heaters, electric, storage type . . . . .	3,835.1	491.4	(NA)	(NA)	(NA)	(NA)
36391 98	Water heaters, electric, other . . . . .	245.8	23.3	(NA)	(NA)	(NA)	(NA)
36392 12	Water heaters, gas . . . . .	4,234.8	953.6	(NA)	(NA)	(NA)	(NA)
36392 24, 52	Water heaters, nonelectric, other than gas . . . . .	139.7	32.4	(NA)	(NA)	(NA)	(NA)
36395 12, 14	Other household appliances, n.e.c.: Dishwashing machines, household . . . . .	(D)	(D)	247.6	58.1	986.2	35.3
36395 63	Floor polishers . . . . .	(D)	(D)	47.8	9.3	14.6	2.0
36395 71	Food waste disposers . . . . .	(D)	(D)	223.2	15.3	77.2	1.5
36395 72, 60	Other major household appliances . . . . .	(D)	(D)	55.2	24.3	1,750.9	287.8
36395 91-93, 97	Parts for other major household appliances . . . . .	(X)	(D)	(X)	24.3	(X)	287.8

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. X Not applicable.

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first point of entry into the United States.

<sup>5</sup>Manufacturers' shipments for product codes 36321 02 and 36321 09 are combined to avoid disclosing data for individual companies.

Note: Detail may not add to totals because of rounding.

**HISTORICAL NOTE**

Data on major household appliances have been collected by the Bureau of the Census since 1968. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Vera Harris-Bourne, 301-457-1604.

## CONSUMER ELECTRONICS (MA36M)

### INTRODUCTION

These data cover companies engaged in the manufacture of home-type radio receivers, television sets, phonographs, high-fidelity components, and speakers in the United States. Very small firms (generally less than five employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies are excluded.

The statistics were collected by mail on Bureau of the Census annual Form MA36M, Radio and Television Receivers, Phonographs, and Related Equipment. The survey panel includes all known domestic manufacturers of these products, except the very small firms excluded from the scope of the survey. Approximately 155 companies are

included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments for consumer electronics was \$8.3 billion, an increase of 2.8 percent from the 1994 value of \$8.0 billion. The 1995 figure includes automotive audio equipment, \$739.6 million; television receivers, \$5.1 billion; other consumer audio and video equipment, \$369.0 million; and loudspeakers, microphones, kits, and public address systems, \$2.0 billion.

### EXPLANATION OF TERMS

See the Introduction for an explanation of terms.

**Table 7. Value of Shipments of Consumer Electronics by Selected Products: 1986 to 1995**

[Millions of current dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
36511	Consumer electronics . . . . .	8,251.4	8,024.2	7,299.8	7,324.8	6,494.5	6,567.3	6,659.3	5,774.6	5,478.4	5,586.2
36512	Automotive audio equipment (except speakers) . . .	739.6	779.8	630.5	607.6	340.2	307.4	322.0	248.2	463.3	601.9
36514	Household television receivers, including combinations . . . . .	5,130.5	5,018.4	4,777.1	4,865.4	4,562.0	4,642.6	4,737.7	3,986.2	3,729.3	4,000.1
36515	Other consumer audio and video equipment (except speakers) . . . . .	369.0	339.1	224.9	207.2	294.5	347.4	373.4	385.4	289.5	151.1
	Speakers, microphones, and home-type electronic kits . . . . .	2,012.4	1,886.9	1,758.3	1,644.6	1,297.8	1,269.9	1,226.5	1,154.8	996.3	833.1

Table 8. Quantity and Value of Shipments of Consumer Electronics: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
36511 —	Automotive audio equipment (except speakers) . . .	17	8,157,729	739,562	8,465,046	779,751
36511 34	AM-FM radios with tape player combinations . . .	6	3,485,240	468,177	3,243,529	427,217
36511 41	Other automotive audio equipment, including equalizers and amplifiers, excluding speakers .	13	4,672,489	<sup>a</sup> 271,385	5,221,517	<sup>a</sup> 352,534
36512 —	Household television receivers, including combinations . . . . .	13	12,220,989	5,130,453	<sup>r</sup> 13,225,124	5,018,402
36512 31	Projection television . . . . .	10	690,620	1,050,175	526,205	756,972
36512 41	Other CRT-based color television: 50 cm (19.7 inches) and under . . . . .	4	1,002,221	174,560	<sup>r</sup> 1,398,838	<sup>r</sup> 244,905
36512 51	Over 50 cm (19.7 inches) . . . . .	10	10,528,148	3,905,718	11,300,081	4,016,525
36512 61	Other household television receivers . . . . .	-	-	-	-	-
36514 —	Other consumer audio and video equipment (except speakers) <sup>1</sup> . . . . .	52	1,111,458	368,975	1,183,102	339,145
36514 61	Compact and video disc players . . . . .	7	62,661	49,887	60,344	<sup>r</sup> 45,862
36514 78	Power amplifiers, including preamplifiers . . . . .	32	295,836	113,845	245,705	100,439
36514 81	Receivers, tuners, and other consumer audio equipment incorporating radio reception. . . . .	4	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36799 07	Earphones, headsets, and phonograph cartridges, pickups, needles, and styli . . . . .	14	(X)	57,269	(X)	41,888
36514 67	Equalizers . . . . .	11	24,518	<sup>a</sup> 6,681	23,334	<sup>a</sup> 5,554
36514 83	Other consumer audio and video equipment (except speakers) . . . . .	24	<sup>2</sup> 728,443	<sup>2</sup> 198,562	<sup>2</sup> 853,719	<sup>2</sup> 187,290
36515 —	Speakers, microphones, and home-type electronic kits . . . . .	100	<sup>a</sup> 97,889,945	<sup>a</sup> 2,012,405	<sup>a</sup> <sup>r</sup> 100,496,687	<sup>a</sup> 1,886,879
36515 51	Single loudspeakers mounted in an enclosure . .	33	<sup>a</sup> 2,398,611	<sup>a</sup> 226,039	2,283,533	212,410
36515 52	Multiple loudspeakers mounted in an enclosure .	49	<sup>a</sup> 7,928,063	<sup>a</sup> 649,521	<sup>a</sup> <sup>r</sup> 8,303,412	<sup>a</sup> <sup>r</sup> 606,344
36515 53	Other loudspeakers, including unmounted speakers sold separately . . . . .	39	<sup>a</sup> 83,714,898	<sup>b</sup> 839,606	<sup>a</sup> <sup>r</sup> 86,626,004	<sup>b</sup> <sup>r</sup> 789,549
36515 55	Microphones . . . . .	15	2,970,933	151,575	2,424,136	127,754
36515 67	Home-type electronic kits designed for consumer assembly . . . . .	1	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36515 94	Public address systems, including musical instrument amplifiers . . . . .	25	<sup>3</sup> 877,440	<sup>3</sup> 145,664	<sup>3</sup> 859,602	<sup>3</sup> 150,822

- Represents zero. <sup>r</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Total for product class 36514 does not include product code 36799 07.<sup>2</sup>Product code 36514 81 is included with product code 36514 83 to avoid disclosing data for individual companies.<sup>3</sup>Product code 36515 67 is included with product code 36515 94 to avoid disclosing data for individual companies.Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.

Table 9. Shipments, Exports, and Imports of Consumer Audio and Video Electronics: 1995

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Imports for consumption <sup>2</sup>	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value <sup>3</sup>
36511 34, 41	Automotive audio equipment . . . . .	8,157,729	739,562	2,652,601	451,305	20,679,324	1,848,883
36512 31, 41, 51, 61	Household television receivers <sup>4</sup> . . . . .	12,220,989	5,130,453	-	-	13,156,194	2,633,365
36514 61, 78, 81, 67, 83	Coin-operated audio equipment, power amplifiers, audio tape recorders and players, compact and video disc players, equalizers, and other consumer audio and video equipment (except speakers) . . . . .	1,111,458	368,975	3,275,612	556,306	46,211,409	2,656,665
36515 51	Single loud speakers mounted in an enclosure . . . . .	<sup>a</sup> 2,398,611	<sup>a</sup> 226,039	7,190,382	154,500	35,232,275	279,453
36515 52	Multiple loud speakers mounted in an enclosure . . . . .	<sup>a</sup> 7,928,063	<sup>a</sup> 649,521	1,629,486	101,628	8,605,770	258,777
36515 53	Other loud speakers . . . . .	<sup>a</sup> 83,714,898	<sup>b</sup> 839,606	16,491,177	241,963	148,420,727	586,917
36515 55	Microphones . . . . .	2,970,933	151,575	(X)	62,825	24,190,792	116,275
36515 67, 94	Home-type electronic kits designed for consumer assembly and public address systems, including musical instrument amplifiers . . . . .	877,440	145,664	3,699,074	230,888	8,470,610	643,758
36799 07	Earphones, headsets, and phonograph cartridges, pickups, needles, and styli . . . . .	(X)	57,269	(X)	3,843	(X)	4,855

- Represents zero. X Not applicable.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first point of entry into the United States plus U.S. import duties.<sup>4</sup>Imports for 1994 are corrected as follows: quantity of shipments in units, 8,467,622; value of shipments in thousands of dollars, 1,136,075.Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item has been estimated. <sup>b</sup>Over 25 percent of this item has been estimated.**HISTORICAL NOTE**

Data on radio and television receivers, phonographs, and related equipment have been collected by the Bureau of the Census since 1952. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Cynthia Ramsey, 301-457-4823.

## Chapter 9. Industrial Equipment

### STEEL SHIPPING DRUMS AND PAILS (MA34K)

#### INTRODUCTION

These data cover all companies engaged in the manufacture of steel shipping drums and pails. The reconditioning of containers is excluded.

The statistics were collected by mail on Bureau of the Census annual Form MA34K, Steel Shipping Drums and Pails. The survey panel includes all known producers of steel shipping drums and pails, approximately 39 companies.

#### SUMMARY OF FINDINGS

During 1995, the value of shipments of steel pails totaled \$174.0 million, down 16.5 percent from the 1994 value of \$208.4 million. Shipments of steel drums increased by

0.3 percent, from \$682.0 million in 1994 to \$684.3 million in 1995.

#### EXPLANATION OF TERMS

**Steel pails.** Single-walled shipping containers having capacities of 12 gallons or less, in both cylindrical and tapered form, constructed of steel sheet of 29 gauge or heavier. Included are pails constructed with open tops as well as closed tops, flat and dome tops, tapered and straight sides, and lock and welded side seams.

**Steel shipping drums.** Single-walled cylindrical or bilged shipping containers, including overpacks for plastics containers, with a capacity greater than 12 gallons, and constructed of steel sheet 12 gauge and lighter.

Table 1. **Summary of Producers' Shipments of Steel Pails and Drums: 1986 to 1995**

[Quantity in thousands of units. Value in thousands of dollars]

Year	Steel pails		Steel drums	
	Number shipped	Value of products shipped	Number shipped	Value of products shipped
1995.....	92,181	173,986	33,357	684,276
1994.....	86,478	208,406	34,857	681,972
1993.....	85,899	202,460	33,474	672,948
1992.....	76,794	178,850	33,336	632,616
1991.....	72,645	180,408	33,970	668,692
1990.....	75,242	195,669	36,388	701,615
1989.....	80,693	205,834	35,966	667,024
1988.....	78,018	188,817	37,336	675,923
1987.....	78,887	189,243	38,166	640,718
1986.....	80,171	187,052	35,800	586,378

Table 2. Total Shipments of Steel Pails and Drums: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
	Steel pails.....	18	92,181	173,986	86,478	208,406
	11 1/4-inch diameter.....	(NA)	55,624	145,503	82,485	194,842
34121 01	Full removable head.....	10	46,601	116,449	71,410	<sup>a</sup> 161,624
34121 06	Tight head (standard and dome top).....	9	9,023	29,054	11,075	33,218
34121 11	14-inch diameter.....	6	<sup>a</sup> 561	<sup>a</sup> 4,159	773	<sup>r</sup> 5,454
34121 13	All other diameters.....	6	35,996	24,324	3,220	8,110
	Steel drums and barrels.....	28	33,357	684,276	34,857	681,972
	14-inch diameter, all gauges.....	(NA)	2,390	24,257	2,037	20,565
34122 01	Tight head.....	6	288	4,062	<sup>r</sup> 258	<sup>r</sup> 3,328
34122 03	Open head, full or partial.....	10	<sup>a</sup> 2,102	<sup>a</sup> 20,195	<sup>r</sup> 1,779	<sup>r</sup> 17,237
	All other (except 14-inch diameter).....	(NA)	30,967	660,019	32,820	661,407
	20 gauge and heavier.....	(NA)	27,509	610,170	29,440	616,047
	50 gallon and larger, 18 gauge and heavier.....	(NA)	11,099	272,062	11,957	271,327
34122 05	Tight head.....	21	<sup>a</sup> 6,910	<sup>a</sup> 159,013	<sup>a</sup> 7,387	<sup>a</sup> 161,626
34122 07	Open head.....	23	<sup>a</sup> 4,189	<sup>a</sup> 113,049	<sup>b</sup> 4,570	<sup>a</sup> 109,701
	50 gallon and larger, 19 and 20 gauge, including 20/18.....	(NA)	15,394	316,806	16,396	321,532
34122 09	Tight head.....	21	<sup>a</sup> 11,075	<sup>a</sup> 227,820	<sup>a</sup> 12,048	<sup>a</sup> 233,449
34122 11	Open head.....	23	<sup>a</sup> 4,319	<sup>a</sup> 88,986	<sup>a</sup> 4,348	<sup>a</sup> 88,083
34122 13	30 to 49 gallon.....	14	<sup>a</sup> 718	<sup>a</sup> 16,224	<sup>r</sup> 757	<sup>a</sup> 17,322
34122 15	Under 30 gallon.....	9	<sup>a</sup> 298	<sup>a</sup> 5,078	<sup>r</sup> 330	<sup>r</sup> 5,866
	Lighter than 20 gauge.....	(NA)	<sup>b</sup> 3,458	<sup>a</sup> 49,849	3,380	45,360

NA Not available. <sup>r</sup>Revised by 5 percent or more from previously published data.Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item is estimated. <sup>b</sup>26 to 50 percent of this item is estimated.

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Steel Shipping Pails and Drums: 1995 and 1994

[Value in thousands of dollars]

Product description <sup>1</sup>	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) <sup>2</sup>	Imports for consumption <sup>3,4</sup> (value)	Apparent consumption <sup>5</sup>
Steel shipping pails:				
1995.....	173,986	70,697	49,462	152,751
1994.....	208,406	82,950	38,714	164,170
Steel shipping drums and barrels:				
1995.....	684,276	19,466	23,060	687,870
1994.....	681,972	13,985	14,080	682,067

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>4</sup>Represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.<sup>5</sup>Apparent consumption is derived by subtracting exports from manufacturers' shipments plus imports.



**HISTORICAL NOTE**

Data on steel shipping drums and pails have been collected by the Bureau of the Census since 1924. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your

local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Larry Blumberg, 301-457-4744.

## SELECTED INDUSTRIAL AIR POLLUTION CONTROL EQUIPMENT (MA35J)

### INTRODUCTION

These data cover firms engaged in the manufacture of selected industrial air pollution control equipment. The statistics in this publication were collected by mail on Bureau of the Census annual Form MA35J, Selected Air Pollution Control Equipment. The survey panel includes all known manufacturers of the selected products specifically designed for use in air pollution control, approximately 120 companies.

### SUMMARY OF FINDINGS

Shipments (and onsite construction in certain instances) of industrial air pollution devices in 1995 totaled \$752.8 million, of which \$489.8 million were particulate emissions collectors, \$220.2 million were gaseous emissions control devices, and \$42.8 million were other types of air pollution control equipment. Shipments decreased by 3 percent from the 1994 level of \$776.4 million.

New orders decreased by 5 percent in 1995 to \$664.2 million. Backlog of orders decreased by 23 percent in 1995 to \$292.2 million.

### EXPLANATION OF TERMS

**Net new orders (bookings).** Orders received during the year minus all cancellations received during the same year. Net new orders are defined to include: (a) the sales value of orders accepted during the reporting period for products and services to be delivered at some future date; (b) plus the sales value of orders received during the reporting period for immediate delivery; (c) plus or minus the net sales value of contract change documents that increase or decrease (or equal) the sales values of previous orders when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those orders that are supported by binding legal documents such as signed contracts, letters or awards, or letters of intent. In the case of letters of intent, the full amount of sales value is included if the parties concerned were in substantial agreement on this amount; otherwise, only the funds specially authorized to be expanded are included. Orders received and canceled during the year are excluded.

**Backlog of orders.** All orders that have not yet been reflected as shipments. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the end of the prior period, plus net new orders received, less net shipments.

### Particulate Emissions Collectors

*Electrostatic precipitator.* A device that separates aerosol particulate matter (solid or liquid) from industrial gases by imparting an electric charge to the particles and removing them from the gas stream with the force created by an electric field.

*Fabric filter.* A device in which the dustbearing gas is passed through a fabric in such a manner that the dust particles are retained on the upstream or "dirty" gas side of the fabric, while the cleaned gas passes through the fabric to the downstream or "clean" gas side, where it is removed by natural and/or mechanical means. The fabric may be of any fibrous material, natural or manmade.

*Mechanical collector.* A device for the separation in a dry state of entrained particulate material from a gas stream by the application of one or a combination of the following forces: centrifugal, inertial, and gravitational.

*Wet scrubber.* A device for the removal of particulate contaminants from a gas stream by means of intimate contact with scrubbing liquid. (If water is added in any form, it is considered a scrubber, except in the cases of wetted wall electronic precipitators and those devices which are primarily mechanical collectors.)

### Gaseous Emissions Control Devices

*Catalytic oxidation system.* A device for the removal of combustible air contaminants in which the contaminant-laden stream is preheated by a suitable heating mechanism. The contaminant-laden stream is then passed through a catalyst bed that initiates and promotes oxidation of the combustible contaminants to carbon dioxide, water vapor, and other compounds less noxious than those originally in the gas stream.

*Thermal oxidation system.* A device for the correction of combustible air contaminants in which the contaminant-laden gas stream is passed over a burner or other suitable preheat device(s) to a thermal residence chamber where the contaminant materials are oxidized to carbon dioxide, water vapor, and other materials less noxious than those originally in the gas stream.

*Direct oxidation system.* A device for the destruction of concentrated combustible or oxidant streams in which the air contaminant is reacted directly with a fuel or with oxidizing air in a burner flame, and the products of combustion are exhausted into the atmosphere directly or through a suitable incineration chamber and stack.

*Scrubber (gas absorber).* A device for the removal of soluble or reactive gaseous material from gas streams by contacting the stream with water, aqueous chemical solution, or other scrubbing liquids. The process involves a chemical reaction.

*Flue gas desulfurization systems (FGD).* Chemical process plants designed primarily for the removal of sulfur oxides from gaseous products of combustion emitted to the atmosphere from the use of fossil fuels, in boilers or other

combustion devices operated for the generation of thermal or combustion devices operated for the generation of thermal or electric energy. The system extends from gas inlet to gas discharge, including all required auxiliaries and controls.

*Gas adsorber.* A device for the removal of air contaminants by adsorption on a surface-active solid such as activated carbon or molecular sieves. Depending on the application, the adsorbent is either discarded or regenerated.

**Table 4. New Orders, Shipments, and Backlog of Orders for Selected Industrial Air Pollution Control Equipment: 1995 and 1994**

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	New orders		Shipments		Backlog of orders, December 31	
			Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>								
	Selected industrial air pollution control equipment .....	108	(S)	664,176	(S)	752,833	(S)	292,177
	Particulate emissions collectors .....	87	(S)	476,226	(S)	489,761	(S)	203,114
35646 51	Electrostatic precipitators .....	17	(S)	134,797	(S)	152,055	(S)	88,549
35646 54	Fabrics filters .....	55	53,992	239,347	51,955	227,912	7,627	60,194
35646 55	Mechanical collectors .....	35	6,116	65,885	6,030	61,624	700	26,519
35646 58	Wet scrubbers .....	30	1,263	36,197	1,245	48,170	258	27,852
	Gaseous emissions control devices ..	39	1,089	149,753	1,204	220,227	234	76,027
35646 70	Catalytic oxidation systems .....	12	207	27,648	249	34,832	43	12,774
35646 71	Nitric oxide (NO) control systems ..	4	(D)	4,237	(D)	4,402	(D)	(D)
35646 72	Thermal and direct oxidation systems .....	15	302	68,697	311	71,402	38	9,273
35646 73	Scrubbers (gas absorber, non-FGD <sup>1</sup> ) .....	12	519	25,290	571	25,403	115	3,815
35646 74	Wet flue gas desulfurization systems .....	4	(D)	(D)	(D)	72,559	7	31,422
35646 75	Dry flue gas desulfurization systems .....	5	(D)	(D)	14	8,542	(D)	(D)
35646 76	Gas adsorbers .....	5	35	7,147	38	3,087	23	8,477
35646 79	Other types of industrial air pollution control equipment .....	18	10,048	38,197	9,948	42,845	386	13,036
<b>1994</b>								
	Selected industrial air pollution control equipment .....	111	'(S)	'696,329	'(S)	776,381	'(S)	'380,834
	Particulate emissions collectors .....	90	'(S)	'502,286	'(S)	'479,244	'(S)	216,649
35646 51	Electrostatic precipitators .....	19	'(S)	161,817	'(S)	138,006	'(S)	105,807
35646 54	Fabrics filters .....	59	48,295	207,221	46,961	211,340	5,590	48,759
35646 55	Mechanical collectors .....	39	5,760	63,511	5,688	68,028	'614	22,258
35646 58	Wet scrubbers .....	32	1,340	'69,737	1,316	'61,870	'240	'39,825
	Gaseous emissions control devices ..	39	'1,276	'145,049	'1,232	'245,554	349	146,501
35646 70	Catalytic oxidation systems .....	'11	'195	'39,066	(S)	'34,751	(S)	'19,958
35646 71	Nitric oxide (NO) control systems ..	3	(D)	(D)	(D)	(D)	(S)	'(D)
35646 72	Thermal and direct oxidation systems .....	'15	'328	'66,943	'300	'63,402	47	11,978
35646 73	Scrubbers (gas absorber, non-FGD <sup>1</sup> ) .....	11	687	14,441	658	13,997	'167	'3,928
35646 74	Wet flue gas desulfurization systems .....	'4	(D)	(D)	(S)	105,821	(S)	'(D)
35646 75	Dry flue gas desulfurization systems .....	4	7	3,509	14	11,533	(S)	(S)
35646 76	Gas adsorbers .....	9	51	7,968	(D)	(D)	26	4,417
35646 79	Other types of industrial air pollution control equipment .....	19	11,942	48,994	12,014	51,583	'286	'17,684

D Withheld to avoid disclosing data for individual companies. publication standards.

'Revised by 5 percent or more from previously published data.

S Does not meet

<sup>1</sup>FGD - Flue gas desulfurization.

Table 5. Value of Shipments of Selected Air Pollution Control Equipment by End Use: 1995 and 1994

[Thousands of dollars]

Product description	Particulate emissions collectors		Gaseous emissions control devices		Other types of industrial air pollution control equipment	
	1995	1994	1995	1994	1995	1994
<b>Shipments</b> .....	<b>489,761</b>	<b>479,244</b>	<b>220,227</b>	<b>245,554</b>	<b>42,845</b>	<b>51,583</b>
Steam electric utility power plants .....	46,910	69,086	73,137	113,434	(D)	( <sup>1</sup> )
Steam industrial power plants .....	16,801	13,272	( <sup>2</sup> )	( <sup>2</sup> )	(D)	(D)
Coal mining and cleaning .....	1,320	1,596	( <sup>2</sup> )	( <sup>2</sup> )	-	-
Petroleum refining .....	13,265	(D)	<sup>2</sup> 14,991	<sup>2</sup> 16,593	( <sup>3</sup> )	(D)
Foundries .....	6,307	4,697	( <sup>4</sup> )	( <sup>5</sup> )	-	-
Iron and steel mills .....	20,714	16,096	(D)	(D)	(D)	(D)
Primary nonferrous metal smelting plants .....	11,995	8,152	<sup>4</sup> 1,082	( <sup>5</sup> )	-	(D)
Chemical and fertilizer .....	45,526	49,319	10,441	6,757	(D)	<sup>1</sup> 21,016
Cement manufacturing .....	4,144	6,196	-	<sup>5</sup> 933	(D)	(D)
Grain milling and handling .....	3,452	3,528	(D)	( <sup>6</sup> )	( <sup>3</sup> )	(D)
Pulp and paper mill operations .....	40,558	31,771	1,131	<sup>6</sup> 476	<sup>3</sup> 313	996
Municipal waste combusters .....	12,483	(D)	2,705	589	-	(D)
Other end use industries .....	219,873	187,448	(D)	(D)	20,193	24,430
End use not specified .....	46,413	52,042	278	5,037	4,007	3,317

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>r</sup> Revised by 5 percent or more from previously published data.

<sup>1</sup>"Electric utility steam power plants," and "Chemical and fertilizer production" are combined with "Other types of industrial air pollution control devices" for 1994, to avoid disclosing data for individual companies.

<sup>2</sup>"Industrial steam power plants, coal mining and cleaning," and "Petroleum refining" are combined with "Gaseous emissions control devices" for 1995 and 1994, to avoid disclosing data for individual companies.

<sup>3</sup>"Petroleum refining," "Grain milling and handling," and "Pulp and paper mill operations" are combined with "Other types of industrial air pollution control devices" for 1995, to avoid disclosing data for individual companies.

<sup>4</sup>"Foundries," and "Primary nonferrous metal smelting plants" are combined with "Gaseous emissions control devices" for 1995, to avoid disclosing data for individual companies.

<sup>5</sup>"Foundries," "Primary nonferrous metal smelting plants," and "Cement manufacturing" are combined with "Gaseous emissions control devices" for 1994, to avoid disclosing data for individual companies.

<sup>6</sup>"Grain milling and handling" and "Pulp and paper mill operations" are combined with "Gaseous emissions control devices" for 1994, to avoid disclosing data for individual companies.

## HISTORICAL NOTE

Data on selected air pollution control equipment have been collected by the Bureau of the Census since 1971. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Richard Wiesler, 301-457-4746.

## AIR-CONDITIONING AND REFRIGERATION EQUIPMENT (MA35M)

### INTRODUCTION

The data in this subsection cover firms engaged in the manufacture of refrigeration, air-conditioning equipment, and nonelectric warm air furnaces. The statistics in this publication were collected by mail on Bureau of the Census annual Form MA35M, Refrigeration and Air-Conditioning Equipment, Including Warm Air Furnaces. The survey panel includes all known producers of these products, approximately 277 companies.

### SUMMARY OF FINDINGS

In 1995, the value of shipments of heat transfer equipment increased by 6 percent to \$6,170.9 million, compared with the 1994 figure of \$5,802.3 million. Unitary air-conditioners increased by 2 percent to \$4,797.4 million, from the 1994 level of \$4,688.5 million. Compressors and compressor units increased by 14 percent to \$4,306.7 million, compared with \$3,790.9 million in 1994. The value of shipments of condensing units, refrigeration (complete), increased by 3 percent to \$288.4 million, from the 1994 level of \$277.5 million. Room air-conditioners showed an increase of 15 percent in 1995 with \$1,266.9 million shipped, compared with the \$1,105.8 million shipped in 1994. Nonelectric warm air furnaces and humidifiers had a value of shipments for 1995 of \$1,522.3 million, a 6-percent decrease from the 1994 value of \$1,523.4 million.

### EXPLANATION OF TERMS

**Open-type condensing unit.** A specific refrigerating combination for a given refrigerant, consisting of a compressor with an extended shaft for an external drive, a condenser, a liquid receiver (when required), and regularly furnished accessories. Includes units for household refrigerators and freezers.

**Hermetic-type condensing unit.** A specific refrigerating combination for a given refrigerant, consisting of a compressor and a motor, both of which are enclosed in the same housing, with no external shaft or shaft seal; the compressor motor operating in the refrigerant atmosphere; a condenser; a liquid receiver (when required); and the regularly furnished accessories. The compressor and compressor motor housing may be either the fully welded or brazed type, or the service-sealed type. Includes units for household refrigerators and freezers.

**Hermetic-type motor compressors.** Consists of a mechanical compressor and motor, both of which are enclosed in the same housing, with no external shafts or shaft seals, a motor that operates in the refrigerant atmosphere, and that

uses a refrigerant other than ammonia. Includes units for household refrigerators and freezers.

**Open-type compressors.** An open-type compressor (with or without motor) is a specific machine for compressing a given refrigerant vapor. This machine consists of a compressor with an extended shaft for an external drive. Includes units for household refrigerators and freezers.

**Ammonia compressor.** A compressor in which increase in ammonia vapor is attained by changing the internal volume of the compression chamber.

### Heat Transfer Equipment

**Evaporative condensers.** Consists of a condensing coil, spray system and pump (if furnished), a means for air circulation (including drive if furnished), and frame and enclosure.

**Room fan-coil air-conditioning units.** Units that are factory-made assemblies providing the functions of circulation, cooling, or heating, and filtering of air, but not including the source of cooling or heating.

**Room air-induction units.** Consists of a cooling coil, or cooling and heating coil, and means for delivering pre-conditioned air (received under pressure from an external source, mixed with recirculated air) to the space being conditioned.

**Packaged terminal air-conditioners.** Factory selected combinations of heating and cooling components or assemblies, intended to serve an individual room, and comprising: (1) heating assembly available with elements for use with hot water, steam, and electricity; means for forced heated air circulation and distribution; integral or remote temperature controls; (2) slide-in cooling section with complete refrigerant cycle; (3) room cabinet; (4) provision for outdoor air intake and discharge and accessories as required for mounting in a building wall; (5) provisions for air filtration and ventilation; (6) permanent individual branch circuit wiring with a suitable line cord or terminating at a junction box with the room cabinet; and (7) provisions for free conditioned air distribution or, when forced circulation is employed for minimal duct work, have a total external static resistance not exceeding 1/10 inch of water.

**Packaged terminal heat pumps.** Packaged terminal heat pumps are a separate unencased refrigeration system installed in a cabinet of similar function and configuration to that of a packaged terminal air-conditioner. It utilizes reverse cycle refrigeration as its prime heat source and should have other supplementary heat source availability.

*Unit coolers, refrigeration, all types.* Equipment in suitable enclosures with refrigerant or brine coils, fans, fan motor and drive; with or without refrigerant control; with or without sprays, pump, and defroster. This unit is also known as a forced air evaporator.

*Air-cooled refrigerant condensers, remote-type.* Condensing coil, a means for air circulation (including drive if furnished, frame, and enclosure).

### **Miscellaneous Heat Transfer Equipment**

#### **Shell-and-tube, shell-and-coil, shell-and-u-tube, tube-in-tube condensers**

*General.* A water-cooled refrigerant condenser is a factory-made assembly of elements by which the flows of refrigerant vapor and water are maintained in such a heat transfer relationship that the refrigerant vapor is condensed into a liquid.

*Shell-and-tube refrigerant condenser.* One in which the refrigerant vapor is condensed either on the inside or on the outside of a group of straight parallel tubes within a closed shell, with the tubes terminating at each end in a tube sheet.

*Shell-and-u-tube refrigerant condenser.* One in which the refrigerant vapor is condensed in a closed shell, with the cooling water circulated through a tube bundle consisting of U-tubes terminating in a single tube sheet.

*Tube-in-tube refrigerant condenser.* One or more assemblies of two tubes, one within the other, in which the refrigerant vapor is condensed either in the annular space or in the inner tube.

*Shell-and-coil refrigerant condenser.* One in which the refrigerant vapor is condensed in a closed shell, with the cooling water circulated through one or more continuous or assembled coils contained within the shell.

#### **Shell-and-tube, shell-and-coil, and shell-and-u-tube liquid coolers**

*General.* A factory-made assembly of elements in which the liquid and the refrigerant are in heat transfer relationship, causing the refrigerant to evaporate and the liquid to be cooled.

*Shell-and-tube liquid cooler.* Heat transfer is effected through a group of straight parallel tubes within a closed shell, with the tubes terminating at both ends of the cooler.

*Shell-and-u-tube liquid cooler.* Heat transfer is effected through a U-tube bundle in a closed shell; the U-tubes terminate at one end of the cooler.

*Tube-in-tube liquid cooler.* One or more assemblies of two tubes, one within the other, in which the heat transfer is effected through the inner tube or tubes.

*Shell-and-coil liquid cooler.* Heat transfer is effected through one or more continuous or assembled coils contained within a closed shell.

*Liquid-suction heat exchanger.* A device used to transfer heat from the refrigerant liquid to the suction gas. Such devices may be of the following types: shell-and-coil, tube-in-tube, finned-tube-in-tube, etc.

*Refrigerant liquid receiver.* A vessel, permanently connected to a refrigerant system by inlet and outlet pipes, for storage of a liquid refrigerant.

*Central system finned coils, air-conditioning and refrigeration type, used with, but not including, means for air circulation.* One or two row coils are considered as "heating only" coils. Three or more row coils are considered as "cooling and/or heating" coils.

*Original equipment manufactures (OEM) Coil sales intended for resale or assembly into equipment by other manufacturers (all types).* Includes shipments of coils to private branders and OEM accounts, as well as those finned coils that are intended for resale or for assembly into equipment by other manufacturers.

*Factory-assembled, refrigeration-type, finned gravity coils.* Includes all types of (1) flat or shaped plate surface type heat exchangers for use with volatile refrigerants, eutectic solutions, or brine and (2) extended surface heat exchangers consisting of tube or pipe prime surface and finned secondary surface, generally used for refrigeration in either frosted or not frosted operation, and usually without forced circulation of the substance being refrigerated. These include bunker and gravity-type evaporators.

*Wetted-surface dehumidifiers.* Consists of a suitable enclosure containing cooling coils or means for liquid spray over the cooling coils and tank but without means for air circulation provided as an integral part of the unit. The unit may include a recirculating water pump, eliminator plates, and inlet deflectors.

#### **Packaged unitary air-conditioning equipment, except room air-conditioners**

*Year-round air-conditioners, single package.* Factory-made assemblies of one or more condensing units or absorption refrigeration units, heat-generating units (such as electric, gas, or oil-fired furnace), and means for air-cooling, dehumidifying, heating, cleaning, and forced circulation of air through a duct system, which may also have a means for humidifying and controlling temperature.

*Year-round air-conditioners, remote-condenser type.* All units that have the condenser located remotely from the equipment described previously.

*Air source heat pumps.* A heat pump that transfers heat from outdoor air to an indoor air circulation system.

*Heat pumps, single package.* Factory-made assemblies of one or more condensing units and evaporators and with the means for air circulation, ventilation, and cleaning, with provision for modifying the performance so that either heating, or cooling and dehumidification may be produced.

*Heat pumps, split systems.* All units that have the coil located remotely from the equipment described previously.

*Water source heat pump.* A factory-made assembly that normally includes an indoor conditioning coil with air moving means, compressor(s) and refrigerant-to-water heat exchanger(s), including the means to provide both cooling and heating functions. When such equipment is provided in more than one assembly, the separate assemblies shall be designed to be used together, and the rating requirements outlined in the standard are based upon the use of matched assemblies.

*Split system air-conditioning units (air-conditioning condensing units only).* Units assembled in factory-made enclosures and consisting of a motor-driven compressor, a condenser, and possibly a liquid receiver.

*Recreational vehicle air-conditioning units.* Designed for application to a recreational vehicle, as defined in American National Standard for Recreational Vehicles (American National Standards Institute Standard A119.2) (NFPA 501C), and consisting of one or more factory-made assemblies that normally include an evaporator or cooling coil, and a compressor and condenser combination. These air-conditioning units may include a heating function as well. Where such equipment is provided in more than one assembly, the separated assemblies shall have been designed to be used together, and the requirements of rating outlined in this standard are based upon the use of matched assemblies.

*Split system air-conditioning coil with blower.* Factory-made assemblies of a coil (supplied with cooling media from an external source), without means for air circulation, and those that may have provision for the introduction of outside air.

*Split system air-conditioning coil without blower.* Factory-made assemblies that include only a coil (supplied with cooling media from an external source), without circulating fan, for use with heating equipment incorporating a fan.

## **Other Air-Conditioning and Refrigeration Equipment**

*Centrifugal liquid-chilling packages.* Factory-made assemblies of one or more centrifugal or screw compressors, condensers, liquid coolers, controls, component parts, with motor compressor (if hermetic), or without drive or prime mover (if open). The hermetic centrifugal horsepower should be the maximum brake horsepower for which the motor is rated. The open centrifugal horsepower should be the maximum brake horsepower for which the motor or turbine drive, to which the machine is intended to be connected, is rated.

*Ice-making machine.* A factory-made assembly (not necessarily shipped in one package) consisting of a condensing unit and ice-making section operating as an integrated unit, with means for making and harvesting ice. It may also include means for storing or dispensing ice, or both.

*Self-contained ice-making machine.* A model in which the ice-making mechanisms and storage compartment are in an integral cabinet.

*Absorption liquid-chilling systems.* Those systems of 25 tons and over that cool and dehumidify the air by means of cold contact surface, in the same manner as a compression system. (This is the closed-type absorption system.)

*Absorption systems.* A system utilizing the process by which gas is taken up by the capillaries and extended surface of a porous material.

*Open-type absorption systems.* A system that dehumidifies by bringing the air into direct contact with the absorbent.

*Central station air-handling unit.* A factory-made, encased assembly consisting of a fan or fans and the other necessary equipment to perform one or more of the functions of circulating, cleaning, heating, cooling, humidifying, dehumidifying, and mixing of air, but that does not include a source of heating or cooling.

*Factory fabricated water-cooling towers.* Towers that are prefabricated by the manufacturers, and shipped either as a factory-assembled section (i.e., cell) or as major components (e.g., casing, fan, and precut fill) for assembly at the site of the installation.

*Mobile vehicle refrigeration and air-conditioning systems.* An assembly of refrigeration compressor apparatus with suitable power source for use when the vehicle is in motion or not in motion; means for air-cooling and dehumidification; means for air circulation, ventilation, and air-cleaning; interconnecting refrigerant piping; and refrigerant and temperature control apparatus, for mounting on the vehicle. The system may or may not have provision for heating.

*Reciprocating liquid-chilling packages.* Factory-made assemblies of one or more reciprocating compressors, condensers, and water or brine coolers, with interconnections, base, and accessories. These assemblies may be furnished with or without refrigerant, drive, and prime mover.

*Mechanical drinking water cooler.* A factory-made assembly, in one structure, that includes a complete mechanical refrigerating system, and that has the primary function of cooling potable water, and also provides for dispensing such water, by either integral or remote means, or both.

**Electrically operated dehumidifiers, mechanically refrigerated, self-contained.** A factory-made assembly of a condensing unit and means for air circulation, dehumidification, and condensate collection.

**Nonelectric warm air furnace.** A device for the transfer of heat, generated by the combustion of fuel within the device, or by radiation from an electric heating element, to air that flows between the combustion chamber and an outer enclosure to pipes or ducts that carry the heat to the desired location. In a gravity air flow furnace, the warm air rises by gravity. In a forced air furnace, the warm air is circulated by a motor-driven blower.

**Humidifiers.** Furnace or duct-mounted device installed in the supply or return-air plenum of a residential warm air furnace or in a supply or return air duct of a warm air heating system.

Table 6. **Summary of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 1995 and 1994**

[Value in thousands of dollars]

Product code	Product description	1995	1994
35851 —	Heat transfer equipment .....	6,170,943	<sup>1</sup> 5,802,366
35852 —	Unitary air-conditioners .....	4,797,424	<sup>1</sup> 4,688,524
35853 pt.	Commercial refrigeration equipment .....	202,628	220,257
35854 —	Compressors and compressor units .....	4,306,689	3,790,885
35855 —	Condensing units, refrigeration (complete).....	286,415	277,479
35856 —	Room air-conditioners and dehumidifiers .....	1,266,882	1,105,844
3585C pt.	Nonelectric warm air furnaces and humidifiers .....	1,522,335	<sup>1</sup> 1,523,354

pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data.



Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35851 —	Heat transfer equipment (except room and unitary air-conditioners) . . . . .	155	(X)	6,170,943	(X)	'5,802,366
35851 01	Packaged terminal air-conditioners <sup>1</sup> . . . . .	10	117,575	66,246	104,495	58,104
35851 03	Packaged terminal heat pumps . . . . .	9	94,843	50,148	'83,099	'43,631
	Evaporative condensers . . . . .	(X)	2,353	52,727	2,724	49,803
35851 04	100 tons and under . . . . .	7	526	4,309	747	4,269
35851 07	Over 100 tons . . . . .	7	1,827	48,418	1,977	45,534
	Room fan-coil air-conditioning units . . . . .	(X)	234,650	121,365	215,387	109,787
35851 08	Vertical stack . . . . .	4	9,541	6,898	24,498	8,484
35851 09	Vertical . . . . .	8	114,999	68,640	97,064	63,129
35851 10	Horizontal . . . . .	8	110,110	45,827	93,825	38,174
35851 11	Room air induction units . . . . .	2	(D)	(D)	(D)	(D)
	Central station air-handling units (motor-driven fan type) . . . . .	(X)	336,207	492,828	'280,053	'429,088
35851 13	Draw through . . . . .	24	315,723	428,628	'258,438	'359,437
35851 15	Blow through . . . . .	13	7,942	41,295	9,850	46,978
35851 17	Heating and ventilating . . . . .	14	12,542	22,905	'11,765	22,673
	Coolers (refrigeration):					
	Ceiling, wall-mounted, and floor-mounted unit coolers . . . . .	(X)	194,278	140,129	187,572	122,190
35851 16	4,000 Btuh and under . . . . .	11	61,014	12,773	61,202	14,188
35851 21	4,001 to 6,000 Btuh . . . . .	9	10,852	4,195	11,120	3,183
35851 22	6,001 to 8,000 Btuh . . . . .	8	17,956	7,128	'19,906	'7,041
35851 23	8,001 to 12,000 Btuh . . . . .	9	42,091	21,736	38,938	18,033
35851 24	12,001 to 18,000 Btuh . . . . .	11	29,128	21,003	27,768	18,982
35851 25	Over 18,000 Btuh . . . . .	14	33,237	73,294	28,638	60,763
	Air-cooled refrigerant condensers (remote type) . . . . .	(X)	29,420	56,566	27,938	57,933
35851 30	Under 30 tons . . . . .	13	23,510	17,782	22,272	19,244
35851 32	30 to 50 tons . . . . .	11	2,074	7,673	2,029	8,154
35851 34	Over 50 tons . . . . .	10	3,836	31,111	3,637	30,535
	Miscellaneous heat transfer equipment:					
	Shell-and-tube, shell-and-coil, shell-and-u-tube, tube-in-tube . . . . .	(X)	(X)	66,997	(X)	64,831
35851 35	Condensers . . . . .	9	(X)	38,664	(X)	38,258
35851 36	Liquid coolers . . . . .	11	(X)	28,333	(X)	26,573
35851 37	Liquid-suction heat exchangers and refrigerant liquid receivers . . . . .	6	(X)	(D)	(X)	(D)
	Central system finned coils (air-conditioning and refrigeration type) . . . . .	(X)	(X)	78,649	(X)	86,868
35851 38	Standard steam and steam distributing tube . . . . .	14	(X)	14,517	(X)	13,876
35851 39	Standard water cooling and/or heating and cleanable tube water . . . . .	19	(X)	58,227	(X)	66,218
35851 40	Volatile refrigerant cooling . . . . .	11	(X)	5,905	(X)	6,774
	Coil sales by original equipment manufacturers intended for resale or assembly into equipment by other manufacturers (all types) . . . . .	(X)	(X)	372,485	(X)	385,305
35851 42	Copper and aluminum . . . . .	21	(X)	254,014	(X)	269,608
35851 43	Aluminum (only) . . . . .	9	(X)	49,349	(X)	52,623
35851 46	Other, including steel and copper . . . . .	10	(X)	69,122	(X)	63,074
35851 45	Factory-assembled, refrigeration type, finned gravity coils, including wetted-surface dehumidifiers . . . . .	5	(X)	12,823	(X)	12,618
	Centrifugal liquid chilling packages, hermetic and open types . . . . .	(X)	10,087	766,410	'7,661	'562,420
35851 51	200 hp and under . . . . .	8	1,487	46,301	'1,303	'38,328
35851 54	201 to 300 hp . . . . .	5	1,850	98,240	1,297	'64,774
35851 56	301 to 400 hp . . . . .	5	1,548	97,594	'1,112	'70,290
35851 58	Over 400 hp . . . . .	5	5,202	524,275	'3,949	'389,028

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35851 —	Heat transfer equipment (except room and unitary air-conditioners)—Con.					
	Ice-making machines . . . . .	(X)	216,764	296,178	210,863	294,489
	Self-contained ice-cube makers . . . . .	(X)	134,870	136,702	131,743	130,837
35851 62	Automatic, 200 lb and under . . . . .	6	82,976	55,154	79,518	50,150
35851 64	Automatic, 201 lb and over . . . . .	4	51,894	81,548	52,225	80,687
	Self-contained flake or chip machines . . . . .	(X)	8,349	20,372	10,164	34,859
35851 68	300 lb and under . . . . .	4	4,186	5,101	5,481	6,277
35851 70	Over 300 lb . . . . .	10	4,163	15,271	4,683	28,582
35851 71	Not self-contained . . . . .	7	45,998	78,566	44,758	76,101
35851 75	Combination ice makers and ice dispensers . .	5	(D)	60,538	24,198	52,692
35851 74	Absorption refrigeration and dehydration systems . . . . .	7	2,395	112,814	2,138	81,815
35851 78	Mechanical refrigeration systems used on all types of vehicles . . . . .	9	(D)	(D)	(D)	(D)
	Mobile vehicle mechanical air-conditioning systems . . . . .	(X)	16,820,583	2,165,907	18,023,826	2,176,716
35851 79	Air-conditioning units and systems for passenger automobiles <sup>2</sup> . . . . .	20	11,955,462	1,365,991	13,511,488	1,435,773
35851 80	Air-conditioning units and systems for trucks, buses, construction, and agriculture machinery and other vehicles . . . . .	18	4,865,121	799,916	4,512,338	740,943
	Reciprocating air and reciprocating water cooled, air-cooled screw, air-cooled scroll, and water-cooled scroll machines . . . . .	(X)	25,686	358,296	25,129	376,400
35851 91	20 hp and under . . . . .	23	13,156	45,012	11,719	44,680
35851 93	21 to 49 hp . . . . .	18	3,044	33,197	2,429	31,290
35851 95	50 to 75 hp . . . . .	16	2,696	49,493	2,709	49,567
35851 97	Over 75 hp . . . . .	15	6,790	230,594	8,272	250,863
35851 92	Factory-fabricated water cooling towers . . . . .	11	8,948	147,365	9,409	132,842
35852 —	Unitary air-conditioners . . . . .	60	(X)	4,797,424	(X)	4,688,524
35852 10	Recreational vehicle air-conditioners . . . . .	6	(D)	(D)	(D)	(D)
	Single package air-conditioners, with or without evaporator fans, including refrigeration chassis and remote-condenser type . . . . .	(X)	283,555	513,385	244,397	496,425
	Horizontal . . . . .	(X)	249,494	431,020	214,730	411,352
35852 31	Under 27,000 Btuh . . . . .	22	24,084	19,112	16,354	16,722
35852 32	27,000 to 32,999 Btuh . . . . .	19	44,878	35,775	29,578	32,329
35852 33	33,000 to 53,999 Btuh . . . . .	23	90,750	82,291	91,680	79,162
35852 34	54,000 to 64,999 Btuh . . . . .	22	37,689	42,089	29,511	38,862
35852 35	65,000 to 96,999 Btuh . . . . .	18	16,735	37,750	14,844	34,555
35852 36	97,000 to 134,999 Btuh . . . . .	15	15,407	45,769	14,149	41,718
35852 37	135,000 to 184,999 Btuh . . . . .	11	8,801	35,652	8,208	34,569
35852 38	185,000 to 249,999 Btuh . . . . .	11	4,976	36,669	4,993	35,077
35852 39	250,000 to 319,999 Btuh . . . . .	10	3,640	30,621	2,882	26,995
35852 40	320,000 to 379,999 Btuh . . . . .	9	560	8,432	601	10,015
35852 41	380,000 Btuh and over . . . . .	7	1,974	56,860	1,930	61,348
	Other than horizontal . . . . .	(X)	34,061	82,365	29,667	85,073
35852 4A	Under 54,000 Btuh . . . . .	7	(D)	(D)	(D)	(D)
35852 44	54,000 to 64,999 Btuh . . . . .	6	5,863	15,341	4,855	11,057
35852 45	65,000 to 96,999 Btuh . . . . .	4	608	2,192	603	2,248
35852 46	97,000 to 134,999 Btuh . . . . .	4	689	3,149	661	3,033
35852 47	135,000 to 184,999 Btuh . . . . .	4	591	3,668	781	5,126
35852 4T	185,000 Btuh and over . . . . .	6	1,010	25,684	1,007	29,433
	Year-round air-conditioners, single package and remote-condenser type (except heat pumps) . .	(X)	516,003	1,098,062	495,434	1,028,579
35852 50	Under 33,000 Btuh . . . . .	19	125,685	118,341	128,806	128,566
35852 51	33,000 to 38,999 Btuh . . . . .	19	104,987	110,318	97,426	101,267
35852 52	39,000 to 43,999 Btuh . . . . .	13	31,230	35,126	28,003	31,481
35852 53	44,000 to 53,999 Btuh . . . . .	15	48,722	64,478	51,285	67,753
35852 54	54,000 to 64,999 Btuh . . . . .	15	75,212	116,193	69,839	109,120
35852 55	65,000 to 134,999 Btuh . . . . .	14	83,388	244,675	77,517	220,660

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35852 —	Unitary air-conditioners—Con. Year-round air-conditioners, single package and remote condenser type (except heat pumps)—Con.					
35852 56	135,000 to 184,999 Btuh .....	12	24,790	131,975	22,725	118,950
35852 57	185,000 to 249,999 Btuh .....	12	12,123	93,623	10,917	85,921
35852 58	250,000 to 319,999 Btuh .....	11	5,964	62,098	4,953	51,525
35852 59	320,000 to 379,999 Btuh .....	10	1,024	17,723	1,158	20,633
35852 60	380,000 to 539,999 Btuh .....	8	975	21,063	1,308	27,377
35852 61	540,000 to 639,999 Btuh .....	9	554	20,229	581	19,544
35852 62	640,000 Btuh and over .....	8	1,349	62,220	916	45,782
	Air source heat pumps (except room air-conditioners) .....	(X)	1,036,767	790,146	1,022,908	778,375
	Single package:					
35852 63	Under 27,000 Btuh .....	17	24,907	21,030	24,868	20,392
35852 64	27,000 to 41,999 Btuh .....	15	73,229	75,979	74,934	75,149
35852 65	42,000 to 64,999 Btuh .....	15	48,719	60,381	45,892	57,590
35852 66	65,000 Btuh and over .....	8	8,482	34,729	8,560	32,426
	Split system:					
35852 67	Under 27,000 Btuh .....	16	285,165	140,463	264,469	130,536
35852 68	27,000 to 41,999 Btuh .....	16	404,889	273,913	408,255	278,692
35852 69	42,000 to 64,999 Btuh .....	15	177,984	156,733	184,073	159,454
35852 70	65,000 Btuh and over .....	7	13,392	26,918	11,857	24,136
35852 71	Water source heat pumps (except room air-conditioners) .....	14	109,326	120,378	99,321	105,771
	Split system air-conditioning condensing units ..	(X)	3,432,989	1,653,676	3,385,357	1,648,339
35852 72	Under 22,000 Btuh .....	15	264,111	83,156	249,416	76,888
35852 73	22,000 to 26,999 Btuh .....	18	732,403	255,287	694,309	238,751
35852 74	27,000 to 32,999 Btuh .....	19	717,482	300,764	679,479	274,825
35852 75	33,000 to 38,999 Btuh .....	17	694,783	299,427	783,945	356,132
35852 76	39,000 to 43,999 Btuh .....	18	342,832	184,654	302,569	161,761
35852 77	44,000 to 53,999 Btuh .....	18	337,343	200,738	353,024	210,077
35852 78	54,000 to 64,999 Btuh .....	16	289,291	175,783	273,591	189,607
35852 79	65,000 to 96,999 Btuh .....	7	20,533	27,024	17,600	23,362
35852 80	97,000 to 134,999 Btuh .....	8	15,470	29,301	13,657	25,842
35852 81	135,000 to 184,999 Btuh .....	7	8,460	24,981	8,478	25,546
35852 82	185,000 to 249,999 Btuh .....	7	4,130	17,723	3,388	14,240
35852 83	250,000 to 319,999 Btuh .....	5	1,629	9,206	1,519	8,311
35852 84	320,000 to 379,999 Btuh .....	5	1,557	10,204	1,529	9,811
35852 85	380,000 to 539,999 Btuh .....	5	1,258	11,342	1,212	10,539
35852 86	540,000 to 639,999 Btuh .....	4	614	6,552	629	6,590
35852 87	640,000 Btuh and over .....	4	1,093	17,534	1,012	16,057
	Split system air-conditioning coils .....	(X)	2,744,237	509,443	2,744,968	519,481
35852 88	With blower .....	16	1,216,712	324,868	1,180,386	322,903
35852 89	Without blower .....	15	1,527,525	184,575	1,564,582	196,578
35853 43	Commercial refrigeration equipment, mechanical drinking water coolers .....	5	927,333	202,628	982,905	220,257
35854 —	Compressors and compressor units <sup>3 4</sup> .....	37	(X)	4,306,689	(X)	3,790,885
	All refrigerants (except ammonia) .....	(X)	39,102,443	4,210,641	34,922,325	3,710,619
	Hermetic-type motor compressors .....	(X)	22,484,099	2,440,446	19,653,536	2,105,384
35854 11	Under 3 hp .....	11	17,634,944	1,294,667	15,480,795	1,115,298
35854 23	3 to 10 hp .....	12	4,722,588	879,630	4,077,895	765,625
35854 30	15 hp .....	11	25,851	30,374	20,827	26,060
35854 32	20 hp .....	11	23,865	34,742	19,608	28,086
35854 34	25 hp .....	11	14,996	24,948	12,858	21,104
35854 36	30 hp .....	12	13,682	24,181	10,271	20,185
35854 39	40 and 50 hp .....	10	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>
35854 42	60 hp .....	8	<sup>5</sup> 41,869	<sup>5</sup> 64,325	<sup>5</sup> 27,175	<sup>5</sup> 52,486
35854 46	75 hp .....	9	<sup>(6)</sup>	<sup>(6)</sup>	<sup>(6)</sup>	<sup>(6)</sup>
35854 49	100 hp and over .....	7	<sup>6</sup> 6,304	<sup>6</sup> 87,579	<sup>6</sup> 4,107	<sup>6</sup> 76,540
35854 52	Open-type compressors (with or without motor—all sizes) .....	14	<sup>(7)</sup>	<sup>(7)</sup>	<sup>(7)</sup>	<sup>(7)</sup>
35854 53	Automotive air-conditioning compressors (open-type, with or without motor) .....	9	<sup>(7)</sup>	<sup>(7)</sup>	<sup>(7)</sup>	<sup>(7)</sup>
35854 54	Screw type .....	3	<sup>7</sup> 16,618,344	<sup>7</sup> 1,770,195	<sup>7</sup> 15,268,789	<sup>7</sup> 1,605,235
35854 58	Ammonia refrigerants, all types .....	8	2,838	96,048	2,502	80,266

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35855 —	Condensing units, refrigeration (complete).....	27	538,329	286,415	542,776	277,479
	Air-cooled hermetic-type .....	(X)	526,413	198,456	524,021	177,624
35855 23	1 hp and under .....	16	442,416	101,627	444,911	91,717
35855 25	1.5 hp .....	14	18,352	13,686	18,801	10,845
35855 28	2 and 2.5 hp .....	14	23,602	16,201	18,540	14,996
35855 30	3 hp .....	15	20,995	22,310	22,385	21,482
35855 32	Over 3 hp, but under 15 hp .....	17	21,048	44,632	19,384	38,584
35855 44	Water-cooled hermetic-type, under 15 hp .....	5	(D)	(D)	(D)	(D)
	Water or air-cooled hermetic-type .....	(X)	4,224	42,421	4,293	55,271
35855 61	15 hp .....	6	1,793	21,782	2,123	26,364
35855 62	20 hp .....	6	783	4,401	876	7,861
35855 63	25 hp .....	7	348	2,539	286	2,715
35855 64	30 hp .....	6	298	2,771	425	5,881
35855 70	40 hp .....	5	1,002	10,928	547	12,450
35855 80	Water or air-cooled open-type (all sizes) .....	8	(D)	(D)	(D)	(D)
35856 —	Room air-conditioners and dehumidifiers .....	16	(X)	1,266,882	(X)	1,105,844
35856 11	Electrically operated dehumidifiers, mechanically refrigerated, self-contained .....	10	(X)	152,269	(X)	127,610
	Room air-conditioners .....	(X)	4,009,527	1,114,613	3,265,427	978,234
35856 31	5,999 Btuh and under .....	4	879,010	161,265	658,107	123,571
35856 34	6,000 to 6,999 Btuh .....	6	236,127	54,859	205,141	49,348
35856 38	7,000 to 7,999 Btuh .....	6	452,980	95,123	343,566	86,826
35856 42	8,000 to 8,999 Btuh .....	5	257,206	70,385	257,761	68,318
35856 46	9,000 to 9,999 Btuh .....	6	59,690	20,482	39,573	14,758
35856 52	10,000 to 10,999 Btuh .....	6	506,087	135,466	420,696	115,303
35856 56	11,000 to 12,999 Btuh .....	8	711,583	192,453	519,028	162,806
35856 61	13,000 to 14,999 Btuh .....	7	76,984	28,982	66,181	29,125
35856 63	15,000 to 16,999 Btuh .....	7	63,114	25,429	51,785	21,783
35856 65	17,000 to 19,999 Btuh .....	7	460,919	173,775	414,527	158,026
35856 67	20,000 to 22,999 Btuh .....	5	34,552	16,259	35,730	17,216
35856 68	23,000 to 25,999 Btuh .....	9	233,149	107,345	210,150	96,173
35856 69	26,000 Btuh and over .....	10	38,126	32,790	43,182	34,981
3585C pt.	Nonelectric warm air furnaces and dehumidifiers .....	(X)	(X)	1,522,335	(X)	1,523,354
	Oil, forced air:					
3585C 04	150,000 Btu bonnet output and under .....	22	214,140	120,517	250,553	137,470
3585C 13	150,000 Btu bonnet output and over .....	17	7,212	9,664	8,234	11,142
	Gas, forced air:					
3585C 07	150,000 Btu bonnet output and under .....	25	2,635,429	1,159,771	2,672,615	1,163,775
3585C 08	150,001-400,000 Btu bonnet output .....	17	(D)	18,646	(D)	20,837
3585C 09	Over 400,000 Btu bonnet output .....	12	(D)	146,567	(D)	124,936
3585C 79	All other nonelectric warm air furnaces .....	6	1,146	1,320	1,465	1,847
3585C 20	Humidifiers (attachments to warm air furnaces), all types, including central systems and self-contained (except portable humidifiers) .....	22	565,004	65,850	579,233	63,347

Btuh British thermal units-per hour. D Withheld to avoid disclosing data for individual companies. pt. Part. <sup>†</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Defined as factory-selected combinations of heating and cooling components or assemblies intended to serve an individual room and comprising: (1) heating assembly available with element for use with hot water, steam, and electricity; means for forced heated air circulation and distribution; integral or remote temperature controls; (2) slide-in cooling section with complete refrigerant cycle; (3) room cabinet; (4) provision for outdoor air intake and discharge and accessories as required for mounting in a building wall; (5) provisions for air filtration and ventilation; (6) permanent individual branch circuit wiring with a suitable line cord or terminating at a junction box within the room cabinet; and (7) provision for free conditioned air distribution, or when forced circulation is employed for minimal duct work having a total external static resistance not exceeding 1/10 inch of water.

<sup>2</sup>Figures exclude systems assembled from purchased components and installed at passenger automobile assembly lines. Values are understated for some systems because of exclusion of compressors.

<sup>3</sup>Represents only those compressors and compressor units produced and shipped separately, including interplant transfers.

<sup>4</sup>Includes units shipped for household refrigerators.

<sup>5</sup>Product codes 35854 39 and 35854 42 are combined to avoid disclosing data for individual companies.

<sup>6</sup>Product codes 35854 46 and 35854 49 are combined to avoid disclosing data for individual companies.

<sup>7</sup>Product codes 35854 52, 35854 53, and 35854 54 are combined to avoid disclosing data for individual companies.

Table 8. Quantity of Assembled Compressor Bodies: 1995 and 1994

[Quantity in number of units]

Product description	Number of companies	1995	1994
Compressor bodies <sup>1 2</sup> .....	(X)	33,195,629	30,959,021
All refrigerants (except ammonia) .....	(X)	33,194,921	30,958,332
Other than automotive air-conditioning .....	(X)	22,095,789	20,014,461
1/4 hp and under .....	5	5,825,347	5,420,787
1/3 and 1/2 hp .....	6	( <sup>3</sup> )	( <sup>3</sup> )
3/4 and 1 hp .....	4	<sup>3</sup> 4,942,711	<sup>3</sup> 4,021,049
1-1/2 hp .....	5	880,010	<sup>1</sup> 991,282
2 hp .....	6	4,851,194	4,354,485
3 hp .....	10	2,650,997	2,514,514
4 hp .....	5	( <sup>4</sup> )	( <sup>4</sup> )
5 hp .....	6	<sup>4</sup> 2,153,683	<sup>4</sup> 1,916,268
7-1/2 hp .....	9	278,270	308,503
10 hp .....	11	317,984	265,317
15 hp .....	9	60,557	108,077
20 hp .....	9	34,893	31,100
25 hp .....	9	17,107	20,944
30 hp .....	10	21,387	20,618
40 hp .....	10	28,913	25,830
50 hp .....	5	( <sup>5</sup> )	( <sup>5</sup> )
60 hp .....	7	<sup>5</sup> 24,861	<sup>5</sup> 9,093
75 hp .....	6	1,372	1,889
100 hp and over .....	6	6,503	4,705
Automotive air-conditioning, including passenger automobiles, trucks, buses, agriculture, and construction equipment .....	4	(D)	(D)
Ammonia refrigerants .....	5	(D)	(D)

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Includes units for household refrigerators.<sup>2</sup>Represents total number of compressor bodies assembled, whether shipped separately or incorporated into a condensing package or unitary end-use product such as single package air-conditioners, freezers, and refrigerators (manufactured and remanufactured units).<sup>3</sup>"Other than automotive air-conditioning 1/3 and 1/2 hp" combined with "Other than automotive air-conditioning 3/4 and 1 hp" to avoid disclosing data for individual companies.<sup>4</sup>"Other than automotive air-conditioning 4 hp" combined with "Other than automotive air-conditioning 5 hp" to avoid disclosing data for individual companies.<sup>5</sup>"Other than automotive air-conditioning 40 hp" combined with "Other than automotive air-conditioning 50 hp" to avoid disclosing data for individual companies.

Table 9. **Shipments, Exports, Imports, and Apparent Consumption of Air-Conditioning and Refrigeration Equipment: 1995 and 1994**

[Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments (value f.o.b. plant)	Export of domestic merchandise <sup>1</sup>		Imports for consumption <sup>4 5</sup>
			Value at port <sup>2</sup>	Estimated producers' value <sup>3</sup>	
<b>1995</b>					
35851 —	Heat transfer equipment, excluding room and unitary air-conditioners and dehumidifiers.....	6,170,943	757,880	568,562	42,554
35852 —	Unitary air-conditioners .....	4,797,424	298,377	223,842	43,879
35853 43	Commercial refrigeration equipment, mechanical drinking water coolers.....	202,628	26,147	19,615	2,479
35854 —	Compressors and compressor units, all refrigerants.....	4,306,689	817,714	613,449	753,526
35855 —	Condensing units, all refrigerants .....	286,415	20,695	15,525	19,040
35856 —	Room air-conditioners and dehumidifiers.....	1,266,882	142,835	107,155	368,664
3585C pt.	Nonelectric warm air furnaces and humidifiers.....	1,522,335	(NA)	(NA)	(NA)
<b>1994</b>					
35851 —	Heat transfer equipment, excluding room and unitary air-conditioners and dehumidifiers.....	†5,802,366	494,915	371,285	41,096
35852 —	Unitary air-conditioners .....	†4,688,524	302,290	226,778	57,922
35853 43	Commercial refrigeration equipment, mechanical drinking water coolers.....	220,257	23,758	17,823	1,685
35854 —	Compressors and compressor units, all refrigerants.....	3,790,885	711,776	533,974	722,336
35855 —	Condensing units, all refrigerants .....	277,479	15,700	11,778	13,955
35856 —	Room air-conditioners and dehumidifiers.....	1,105,844	101,888	76,436	286,017
3585C pt.	Nonelectric warm air furnaces and humidifiers.....	†1,523,354	(NA)	(NA)	(NA)

NA Not available. pt. part. †Revised by 5 percent or more from previously published data.

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>2</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at port of export.<sup>3</sup>Values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to port of export. Adjustment is made to convert values to an approximation of the producers' value of exported goods. Current adjustment factors are based on data for 1995 that are published in *Exports from Manufacturing Establishments*, AR95-1, appendix B. Adjustment factor for this report is 0.7502.<sup>4</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. Figures include both import value and duty value.<sup>5</sup>Represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

## HISTORICAL NOTE

Data on air-conditioning and refrigeration have been collected by the Bureau of the Census since 1944. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also

available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Joanna T. Q. Nguyen, 301-457-4752.

## FLUID POWER PRODUCTS, INCLUDING AEROSPACE (MA35N)

### INTRODUCTION

These data cover producers of fluid power products, including aerospace, except very small firms (generally less than 20 employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies.

The statistics were collected by mail on Bureau of the Census annual Form MA35N, Fluid Power Products, Including Aerospace Products. The survey panel includes all known producers of fluid power products, approximately 361 companies. This survey does not include products produced and consumed within the same establishment.

### SUMMARY OF FINDINGS

Shipments of fluid power products, including aerospace, increased by 11 percent from \$7,913.8 million in 1994 to \$8,789.9 million in 1995. Hydraulic and pneumatic valves increased by 15 percent to \$2,343.7 million in 1995 from \$2,039.6 million in 1994. Fittings and assemblies for tubing and hose, excluding plumbers' brass goods went from \$1,881.7 million in 1994 to \$2,036.8 million in 1995, an 8-percent increase. Hydraulic and pneumatic cylinders, actuators, accumulators, cushions, and nonvehicular shock and absorbers increased by 9 percent to \$2,069.1 million in 1995 from \$1,902.3 million in 1994. Compressed air and gas dryers, and lubricators increased by 35 percent from \$66.1 million in 1994 to \$89.3 million in 1995. Filters of hydraulic and pneumatic fluid power systems went from \$399.3 million in 1994 to \$434.0 million in 1995, a 9-percent increase. Hydraulic and pneumatic pumps, motors, and hydrostatic transmission components had a 12-percent increase from \$1,624.9 million in 1994 to \$1,817.0 million in 1995.

### EXPLANATION OF TERMS

**Accumulators (hydraulic only).** Devices that store hydraulic fluid under pressure as a source of fluid power.

**Actuators.** Devices that convert fluid power into linear or rotary mechanical force. Linear types are typically referred to as cylinders. Rotary types are referred to as rotary actuators and motors. Motors have shafts that rotate continuously in the same direction. Rotary actuator shafts do not rotate continuously. Typically, the shafts rotate a certain number of degrees before rotating in the opposite direction to their point of origin.

**Air dryer.** A device for reducing the moisture vapor content of the compressed air in a pneumatic system.

**Assembly.** A length of hose and/or tubing to which fittings have been attached.

**Cushion.** A device that provides controlled resistance to nonlinear motion.

**Cylinder, electrohydraulic.** A hydraulic, linear actuator that produces a continuously variable mechanical output, as a function of a continuously variable electronic input signal (voltage or current).

**Cylinder, mill type.** A linear actuator that has circular flanges welded to the cylinder barrel ends. This type of cylinder is used in severe duty applications like the steel mills from which it derived its name.

**Cylinder, rodless (shuttle).** A linear actuator with a rod that never leaves its case, that is sealed lengthwise. Typically used in position control applications.

**Cylinder, telescoping.** A linear actuator with nested tubular rod segments that provide a long working stroke in a short retracted envelope.

**Cylinder, threaded/weld fused combination.** A linear actuator with one threaded end and one weld fused end.

**Cylinder, tie rod.** A linear actuator with head and cap end closures that are secured by tie rods.

**Filter (filter assembly).** A device whose primary function is the retention of insoluble contaminants in a fluid by a porous media.

**Filter element.** That part of a filter that retains contaminants. Some elements are permanent (reusable or cleanable) and others are disposable (nonreusable). Disposable elements must eventually be replaced.

**Fittings.** Devices used to connect hoses and tubing to components (valves, cylinders, motors, and pumps) of a fluid power system. They are constructed from metal or plastics, and are sometimes referred to as connectors or couplings.

**Gerotor/gerolor.** A special type of internal gear motor where the internal gear is always in sliding contact with the external gear.

**Hydrostatic transmission.** A device that combines a hydraulic pump with a hydraulic motor. Quantity and value of pumps and motors sold together as transmissions were reported separately in the relevant pump and motor categories.

**Intensifiers.** A device that is driven by a low pressure fluid to produce fluid at a higher pressure.

**Lubricator.** A device that adds controlled or metered amounts of lubricant into a pneumatic system.

**Manifold (manifold assembly).** A fluid conductor that can provide multiple connection ports. In a fluid power system, manifolds are typically used as housings for cartridge valves.

**Motor.** A device that transforms fluid power into rotary mechanical force. Motors can be hydraulic or pneumatic.

**Motor, axial piston.** A motor with several parallel pistons arranged around a common axis.

**Motor, external gear.** A motor that has only external gears and no internal gear.

**Motor, internal gear.** A motor with an internal gear that meshes with one or more external gears. See also gerotor/gerolor.

**Motor, radial piston.** A motor with several pistons arranged to operate radially.

**Motor, vane.** A motor with multiple vanes that cause rotation of an internal member when under pressure.

**Power unit.** A device that combines a hydraulic pump with a prime mover (usually an electric motor). As is done for hydrostatic transmissions, the quantity and value of the pumps and prime movers were reported separately in relevant categories.

**Pump, axial piston.** A reciprocating pump with several parallel pistons arranged around a common axis.

**Pump, external gear.** A rotary pump that has only external gears, and no internal gear.

**Pump, internal gear.** A rotary pump that has an internal gear in engagement with one or more external gears. An internal gear pump generally has external gears that rotate

on a fixed axis. A gerotor pump differs from other internal gear types in that its internal gear is always in sliding contact with the external gear.

**Pump, radial piston.** A reciprocating pump with several pistons arranged radially within the pump chamber.

**Pump, reciprocating.** A pump that uses pistons to create a partial vacuum to draw hydraulic fluid through the pump inlet. The return strokes of the pistons unseat outlet check valves and force the fluid through the pump outlet.

**Pump, rotary.** A pump that uses gears or vanes to cause rotary motion that moves hydraulic fluid from the pump inlet to the pump outlet.

**Pump, vane.** A rotary pump with multiple vanes within a supporting rotor.

**Reservoir, hydraulic.** A container for storage of hydraulic fluid under pressure.

**Valves, cartridge.** Valves with working parts contained in a cylindrical body. The body must be inserted into a housing (usually a manifold) for use. Ports through the body of the valve align with ports in the housing.

**Valves, electrohydraulic.** Valves that use continuously variable electronic input (voltage or current) to produce a continuously variable hydraulic output.

**Valve, manually operated.** Valves actuated by means of a hand lever, or other manual energizing device.

**Valve, mechanical.** Valves that are actuated by cams, levers, rollers, screws, springs, stems, or other mechanical energizing devices.

**Valve, relief.** Direct acting or pilot operated valves that are used to prevent a hydraulic system from exceeding its maximum pressure limits.

**Valve, remote pilot.** Pilot operated valves that are controlled remotely through the use of air pressure.

**Valve, solenoid.** Valves that are operated by a solenoid.



Table 10. Value of Shipments of Fluid Power Products, Including Aerospace: 1995 and 1994

[Value in thousands of dollars]

Product code	Product description	1995	1994
	Fluid power products, including aerospace . . . . .	8,789,898	7,913,841
3492C	Nonaerospace-type hydraulic directional control valves . . . . .	491,529	<sup>1</sup> 429,491
3492D	Nonaerospace-type hydraulic valves (except directional control) . . . . .	707,972	561,317
3492E	Nonaerospace-type pneumatic directional control valves . . . . .	438,772	<sup>1</sup> 382,154
3492F	Nonaerospace-type pneumatic valves (except directional control) . . . . .	189,077	158,720
3492A	Aerospace-type hydraulic fluid power valves . . . . .	223,605	<sup>1</sup> 259,033
3492B	Aerospace-type pneumatic fluid power valves . . . . .	77,210	<sup>1</sup> 61,635
3492G	Parts for fluid power valves . . . . .	215,563	187,246
3492J	Nonaerospace-type flared (metal) fittings and couplings for, and assemblies of tubing used in fluid power transfer systems . . . . .	313,805	<sup>1</sup> 269,271
3492K	Nonaerospace-type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems . . . . .	447,361	368,014
3492M	Nonaerospace-type hydraulic and pneumatic fittings and couplings for hose and manifolds . . . . .	647,307	628,763
3492N	Nonaerospace-type hydraulic and pneumatic assemblies of hose . . . . .	267,968	291,144
3492H	Aerospace-type hydraulic and pneumatic hose or tube end fittings and assemblies and manifolds . . . . .	360,364	324,480
35694	Nonaerospace-type filters for hydraulic fluid power systems . . . . .	292,163	262,945
35695	Nonaerospace-type filters for pneumatic fluid power systems . . . . .	92,190	90,253
35696	Aerospace-type hydraulic and pneumatic filters . . . . .	49,604	46,101
35699 pt.	Compressed air and gas dryers, and lubricators . . . . .	89,258	66,070
35934	Nonaerospace-type hydraulic fluid power cylinders and actuators, linear and rotary . . . . .	1,074,464	916,878
35935	Nonaerospace-type pneumatic fluid power cylinders and actuators, linear and rotary . . . . .	397,748	<sup>1</sup> 367,542
35939	Parts for nonaerospace-type hydraulic and pneumatic fluid power cylinders, actuators, and related items, n.e.c. . . . .	236,299	205,529
35932	Aerospace-type fluid power cylinders and actuators, hydraulic and pneumatic . . . . .	360,600	<sup>1</sup> 412,399
35943	Nonaerospace-type reciprocating pumps . . . . .	439,041	344,151
35944	Nonaerospace-type rotary and other fluid power pumps . . . . .	426,710	412,934
35945	Nonaerospace-type fluid power motors . . . . .	506,118	<sup>1</sup> 433,166
35946	Aerospace-type fluid power pumps and motors . . . . .	105,808	100,618
35949	Parts for fluid power pumps, motors, and hydrostatic transmissions . . . . .	339,362	333,987

pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data. n.e.c. Not elsewhere classified.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace by Type: 1995 and 1994**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
3492C —	Fluid power products, including aerospace.....	(X)	(X)	8,789,898	(X)	(X)	7,913,841
	Nonaerospace-type hydraulic directional control valves.....	(X)	4,956,850	491,529	(X)	'4,757,921	'429,491
	Manual:						
3492C 22	3- and 4-way monoblock .....	27	1,459,308	100,571	27	'1,781,984	'100,416
3492C 24	3- and 4-way sectional .....	21	932,477	176,607	21	826,848	144,376
	Solenoid:						
3492C 26	2-way types .....	18	352,822	23,888	16	( <sup>1</sup> )	'18,996
3492C 28	3- and 4-way types .....	21	1,026,447	124,074	18	<sup>1</sup> '1,066,315	'104,211
3492C 25	Other directional control .....	31	1,185,796	66,389	30	'1,082,774	'61,492
3492D —	Nonaerospace-type hydraulic valves (except directional control) .....	(X)	15,740,205	707,972	(X)	12,536,491	561,317
	Pressure control:						
3492D 31	Relief valves .....	25	1,864,152	52,323	25	1,505,786	33,596
3492D 33	Other, including load sensing and manual types .....	18	1,259,718	37,399	19	'923,609	'31,055
	Flow control:						
3492D 34	Manual types .....	21	736,527	32,032	21	744,220	29,740
3492D 35	Other flow control valves .....	23	3,126,340	59,209	24	'1,929,185	'41,310
3492D 38	Cartridge valves, all types .....	19	6,110,367	188,724	20	5,321,228	146,585
	Electrohydraulic valves:						
3492D 49	Pilot-operated, torque motor servovalves .....	12	195,466	71,471	13	'108,698	'53,393
3492D 50	Other types, including proportional .....	9	( <sup>2</sup> )	44,140	10	( <sup>2</sup> )	'39,764
3492D 48	Other nonaerospace-type hydraulic valves, including stack and logic .....	23	<sup>2</sup> 2,447,635	222,674	22	<sup>2</sup> '2,003,765	185,874
3492E —	Nonaerospace-type pneumatic directional control valves .....	(X)	14,611,766	438,772	(X)	'12,692,805	'382,154
3492E 51	Manual .....	39	3,422,156	91,011	38	'2,979,792	80,416
	Solenoid:						
3492E 54	Under 1/8 inch port diameter .....	11	2,151,468	31,658	11	'1,636,454	'25,347
	1/8 inch up to and including 1/4 inch port diameter:						
3492E 56	3-way types .....	20	2,124,699	44,671	18	'1,880,405	'40,237
3492E 57	4-way types .....	20	2,488,674	98,562	20	'1,740,507	'72,698
	Over 1/4 inch port diameter:						
3492E 58	3-way types .....	15	571,020	31,783	14	'407,851	'28,800
3492E 59	4-way types .....	16	1,434,817	76,338	16	'1,531,637	'75,805
3492E 55	Mechanical, remote pilot, and all other types .....	30	2,418,932	64,749	28	'2,516,159	'58,851
3492F —	Nonaerospace-type pneumatic valves (except directional control) .....	(X)	13,340,667	189,077	(X)	'11,104,280	158,720
3492F 61	Filter-regulator combination units, integral types .....	15	1,365,482	25,490	14	'1,132,447	'21,465
3492F 62	Other FR's and filter-regulator-lubricator combo units .....	14	361,086	16,015	15	268,415	12,568
3492F 64	Regulators, sold separately .....	21	4,470,116	73,591	21	4,239,023	68,561
3492F 65	Flow control valves .....	33	3,489,319	39,155	33	2,620,843	31,868
3492F 69	Check, shuttle, exhaust, needle, and all other types .....	30	3,654,664	34,826	30	'2,843,552	'24,258
3492A —	Aerospace-type hydraulic fluid power valves .....	(X)	866,778	223,605	(X)	'900,592	'259,033
3492A 71	Manually or mechanically operated .....	17	(D)	56,228	17	(D)	58,649
3492A 72	Solenoid operated .....	22	46,653	47,352	25	52,191	44,115
3492A 73	Motor operated .....	7	(D)	5,340	7	(D)	'4,873
3492A 74	Electrohydraulic servovalves .....	6	57,759	61,611	7	61,965	72,335
3492A 75	Flow, pressure, and other types of hydraulic valves .....	23	247,279	53,074	22	'306,381	'79,061
3492B —	Aerospace-type pneumatic fluid power valves .....	(X)	(D)	77,210	(X)	(D)	'61,635
3492B 79	Pneumatic valves, all types .....	18	(D)	77,210	20	(D)	'61,635
3492G —	Parts for fluid power valves .....	(X)	(X)	215,563	(X)	(X)	187,246
3492G 96	Parts for nonaerospace-type hydraulic and pneumatic valves, sold separately .....	64	(X)	178,544	62	(X)	153,348
3492G 98	Parts for aerospace-type hydraulic and pneumatic valves, sold separately .....	24	(X)	37,019	23	(X)	33,898
3492J —	Nonaerospace-type flared (metal) fittings and couplings for, and assemblies of tubing used in fluid power transfer systems <sup>3</sup> .....	(X)	(X)	313,805	(X)	(X)	'269,271
	Flared fittings:						
3492J 11	Brass and bronze (SAE 45 degrees and 37 degrees) <sup>3</sup> .....	8	(D)	( <sup>4</sup> )	10	(D)	( <sup>4</sup> )
3492J 13	Carbon steel (JIC 37 degrees) <sup>3</sup> .....	12	(D)	138,012	12	(D)	'117,355
3492J 15	Other, including alloy steel <sup>3</sup> .....	14	(D)	490,989	15	(D)	'482,779
3492J 41	Assemblies of tubing <sup>3</sup> .....	10	(X)	39,874	11	(X)	40,374
3492J 42	Assemblies of tubing and hose <sup>3</sup> .....	6	(X)	44,930	7	(X)	'28,763

See footnotes at end of table.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
3492K —	Fluid power products, including aerospace—Con. Nonaerospace-type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems <sup>3</sup> .....	(X)	(D)	447,361	(X)	(D)	368,014
	Metal types:						
3492K 21	Brass and bronze <sup>3</sup> .....	15	(D)	155,694	15	(D)	130,300
3492K 23	Carbon steel <sup>3</sup> .....	14	-	82,898	15	-	71,342
3492K 24	Stainless steel <sup>3</sup> .....	17	(D)	185,915	18	(D)	151,609
3492K 28	Other, including alloy steel <sup>3</sup> .....	7	-	14,317	7	-	7,370
3492K 38	Nonmetal fittings, including plastics <sup>3</sup> .....	9	(D)	8,537	10	(D)	7,393
3492M —	Nonaerospace-type hydraulic and pneumatic fittings and couplings for hose, and manifolds ...	(X)	(X)	647,307	(X)	(X)	628,763
3492M 44	Permanent hose end fittings (crimped and swaged) .....	21	(X)	277,890	21	(X)	259,098
3492M 46	Hydraulic and pneumatic reusable end fittings ..	30	(X)	117,347	30	(X)	111,772
3492M 47	Hydraulic quick connect and disconnect couplings .....	18	(X)	111,755	18	(X)	109,200
3492M 48	Pneumatic quick connect and disconnect couplings .....	24	(X)	63,956	24	(X)	72,670
3492M 49	Manifolds and manifold assemblies for fluid power systems .....	20	(X)	32,843	20	(X)	31,054
3492M 50	All other, including steel adaptor, swivel, rotating, and extension fittings .....	22	(X)	43,516	23	(X)	44,969
3492N —	Nonaerospace-type hydraulic and pneumatic assemblies of hose .....	(X)	(X)	267,968	(X)	(X)	291,144
3492N 51	Assemblies with permanent end fittings .....	25	(X)	235,122	25	(X)	249,432
3492N 53	Assemblies with reusable end fittings .....	11	(X)	32,846	11	(X)	41,712
3492H —	Aerospace-type hydraulic and pneumatic hose or tube end fittings and assemblies and manifolds .....	(X)	(X)	360,364	(X)	(X)	324,480
3492H 61	Assemblies of hose and/or tubing .....	11	(X)	78,188	13	(X)	68,700
3492H 62	Quick connect, rotating, swivel, and extension fittings .....	10	(X)	119,014	10	(X)	105,871
3492H 63	Manifolds for aerospace hydraulic systems .....	7	(X)	27,706	7	(X)	33,777
3492H 69	Aerospace hose and tube fittings, n.e.c. ....	16	(X)	135,456	17	(X)	116,132
35694 —	Nonaerospace-type filters for hydraulic fluid power systems .....	(X)	(X)	292,163	(X)	(X)	262,945
	Hydraulic fluid filter assemblies, with or without filter element installed:						
35694 11	Low pressure (below 301 psi) .....	30	1,152,516	53,169	29	953,380	41,507
35694 12	Medium pressure (301 to 2,999 psi) .....	19	706,472	24,798	19	631,168	19,967
35694 14	High pressure (3,000 psi and above) .....	15	128,618	16,540	15	116,637	14,703
	Filter replacement elements:						
35694 15	Reusable (cleanable) type .....	17	903,488	13,594	17	565,851	10,699
35694 17	Nonreusable type .....	27	15,007,618	156,424	27	14,785,603	146,942
35694 19	Strainers and separators, filter parts, and accessories .....	25	(X)	27,638	25	(X)	29,127
35695 —	Nonaerospace-type filters for pneumatic fluid power systems .....	(X)	(X)	92,190	(X)	(X)	90,253
	Air supply filter assemblies and filter replacement elements, excluding those shipped as part of an FR or FRL combo unit:						
35695 32	Coalescing types, including elements sold separately .....	13	(X)	35,474	13	(X)	37,955
35695 34	Other types, including elements sold separately .....	11	(X)	31,760	11	(X)	29,097
35695 39	Air exhaust mufflers, diffusers, filter parts, and air preparation accessories .....	19	(X)	24,956	19	(X)	23,201
35696 —	Aerospace-type hydraulic and pneumatic filters ..	(X)	(X)	49,604	(X)	(X)	46,101
35696 51	Hydraulic .....	7	(X)	549,604	7	(X)	546,101
35696 53	Pneumatic .....	1	(X)	( <sup>6</sup> )	1	(X)	( <sup>6</sup> )
35699 pt.	Compressed air and gas dryers, and lubricators ..	(X)	729,142	89,258	(X)	516,192	66,070
	Compressed air and gas dryers:						
35699 41	Refrigerated dryers .....	5	(D)	42,362	4	(D)	(D)
35699 42	Dessicant dryers .....	6	6,034	30,267	5	5,049	22,575
35699 43	Deliquescent dryers .....	-	-	-	-	-	-
35699 44	Other compressed air and gas dryers .....	4	(D)	1,693	3	(D)	(D)
35699 13	Lubricators for pneumatic systems, sold separately .....	8	672,004	14,936	8	481,164	10,266

See footnotes at end of table.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
35934 —	Fluid power products, including aerospace—Con. Nonaerospace-type hydraulic fluid power cylinders and actuators, linear and rotary . . . . .	(X)	4,165,689	1,074,464	(X)	3,681,354	916,878
	Hydraulic cylinders, excluding electrohydraulic:						
	Tie-rod types:						
	Standard NFPA and JIC tie-rod types:						
35934 04	Less than 1,500 psi . . . . .	24	208,344	43,088	24	166,663	39,282
35934 06	1,500 to 3,000 psi . . . . .	22	216,097	83,799	21	196,326	73,340
35934 08	Greater than 3,000 psi . . . . .	9	( <sup>6</sup> )	( <sup>6</sup> )	7	( <sup>6</sup> )	( <sup>6</sup> )
35934 10	Other tie-rod types . . . . .	17	460,938	46,429	17	497,320	43,485
35934 12	Threaded/weld-fused combination . . . . .	49	2,516,771	608,317	50	2,238,702	501,294
35934 13	Telescoping . . . . .	23	165,894	89,600	24	164,750	85,026
35934 15	Mill type . . . . .	15	18,630	21,043	15	18,425	21,622
35934 16	Other, including those threaded at both ends . . . . .	26	<sup>6</sup> 535,404	<sup>6</sup> 129,541	26	<sup>6</sup> 358,713	<sup>6</sup> 101,383
35934 18	Electrohydraulic types . . . . .	6	4,560	10,218	6	5,897	13,148
35934 25	Hydraulic rotary actuators . . . . .	14	39,051	42,429	15	34,558	38,298
35935 —	Nonaerospace-type pneumatic fluid power cylinders and actuators, linear and rotary . . . . .	(X)	5,816,996	397,748	(X)	5,906,314	367,542
	Tie-rod types:						
	Steel . . . . .	16	253,725	69,806	16	245,884	63,930
	Aluminum:						
35935 24	Less than 1-1/2 inch bore size . . . . .	6	38,483	3,344	7	86,040	3,363
35935 25	1-1/2 inch bore size and over . . . . .	21	264,788	39,289	21	250,100	36,438
35935 27	Rodless cylinders . . . . .	12	65,332	31,856	12	59,004	25,448
	Other pneumatic cylinders:						
35935 28	Less than 1-1/2 inch bore size . . . . .	22	3,589,921	122,934	23	3,433,979	113,567
35935 29	1-1/2 inch bore size and over . . . . .	33	1,499,926	101,794	32	1,731,970	98,311
35935 26	Pneumatic rotary actuators . . . . .	16	104,821	28,725	16	99,337	26,485
35939 —	Parts for nonaerospace-type hydraulic and pneumatic fluid power cylinders, actuators, and related items, n.e.c. . . . .	(X)	5,106,008	236,299	(X)	4,363,671	205,529
35939 31	Accumulators (bladder, piston, and other types) . . . . .	25	131,296	41,828	26	109,834	34,037
35939 34	Shock absorbers, not for vehicle suspension, and cushions (hydraulic and pneumatic) . . . . .	16	1,872,250	52,187	16	1,519,335	42,812
35939 36	Reservoirs, intensifiers, and other devices for fluid energy absorption and/or storage . . . . .	11	2,418	2,497	9	1,229	2,033
35939 96	Parts for nonaerospace-type hydraulic and pneumatic cylinders, actuators, accumulators, cushions, and nonvehicular shock absorbers, sold separately . . . . .	64	3,100,044	139,787	64	2,733,273	126,647
35932 —	Aerospace-type fluid power cylinders and actuators, hydraulic and pneumatic . . . . .	(X)	(X)	360,600	(X)	(X)	412,399
	Hydraulic servo-actuator assemblies (linear and rotary):						
35932 51	Mechanical input . . . . .	4	13,536	(D)	5	21,994	94,447
35932 52	Electrical input . . . . .	5	7,111	106,955	6	10,252	128,130
35932 55	Combination input . . . . .	3	(D)	(D)	4	(D)	(D)
	Hydraulic utility actuators:						
35932 61	Linear actuators (cylinders) . . . . .	10	12,917	36,116	11	12,257	32,826
35932 62	Rotary actuators (limited rotation) . . . . .	3	(D)	(D)	3	(D)	(D)
35932 71	Shock absorbers, snubbers, and cushions, all types, excluding oleo strut assemblies . . . . .	6	(D)	7,912	8	(D)	10,588
35932 72	Pneumatic actuators (linear and rotary) . . . . .	5	(D)	(D)	6	(D)	(D)
35932 73	Accumulators (bladder, piston, and other types) . . . . .	9	7,424	5,204	10	9,904	7,675
35932 74	Reservoirs, intensifiers, and other devices for fluid energy absorption and/or storage . . . . .	4	739	4,146	5	(D)	8,378
35932 79	Other aerospace-type fluid power cylinders, rotary actuators, cushions, and related items, n.e.c. . . . .	5	(X)	1,388	6	(X)	2,862
35939 98	Parts for aerospace-type hydraulic and pneumatic cylinders, actuators, accumulators, cushions, and related items, sold separately . . . . .	10	(X)	25,466	11	(X)	29,283
35943 —	Nonaerospace-type reciprocating pumps . . . . .	(X)	1,284,160	439,041	(X)	1,044,613	344,151
	Axial piston:						
	Variable displacement types:						
35943 15	Closed loop . . . . .	12	717,477	266,926	14	630,682	227,091
35943 27	Open loop . . . . .	13	176,400	96,021	13	155,424	76,776
35943 37	Fixed displacement types . . . . .	10	390,283	70,263	8	258,507	33,439
35943 36	Radial piston types . . . . .	4	( <sup>7</sup> )	5,831	4	( <sup>7</sup> )	6,845

See footnotes at end of table.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1995			1994		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
35944 —	Fluid power products, including aerospace—Con. Nonaerospace-type rotary and other fluid power pumps	(X)	2,646,217	426,710	(X)	2,606,499	412,934
	Fixed displacement, open and closed loop:						
35944 30	Internal gear type, including gerotors	13	897,623	101,565	14	<sup>1</sup> 840,145	94,964
35944 34	External gear type	15	1,365,986	221,308	16	1,368,378	206,059
35944 35	Vane type	2	( <sup>8</sup> )	( <sup>8</sup> )	4	( <sup>8</sup> )	( <sup>8</sup> )
35944 38	Variable displacement types	7	<sup>8</sup> 382,608	<sup>8</sup> 103,837	8	<sup>8</sup> 397,976	<sup>8</sup> 111,911
35945 —	Nonaerospace-type fluid power motors	(X)	(X)	506,118	(X)	(X)	<sup>1</sup> 433,166
35945 40	Pneumatic (air) motors	5	(D)	(D)	4	(D)	(D)
	Hydraulic motors:						
	Gear type:						
35945 52	Internal types, excluding gerotors	8	(D)	117,173	8	(D)	104,858
35945 56	Gerotors and gerolors	6	808,453	136,758	6	680,066	110,720
35945 54	External types	9	137,497	25,037	10	105,677	20,337
35945 42	Vane types, fixed and variable	7	(D)	11,344	7	(D)	<sup>1</sup> 10,791
35945 43	Radial piston types, fixed and variable	4	(D)	(D)	4	(D)	(D)
	Axial piston type:						
35945 44	Fixed displacement	12	334,738	86,783	11	<sup>1</sup> 286,240	70,081
35945 45	Variable displacement	7	(D)	50,430	7	(D)	47,771
35945 50	Prime movers shipped with pumps or sold separately	6	(X)	44,382	7	(X)	37,480
35946 —	Aerospace-type fluid power pumps and motors	(X)	56,494	105,808	(X)	<sup>5</sup> 59,196	100,618
	Hydraulic pumps:						
35946 71	Fixed and variable displacement types	10	20,915	56,191	11	<sup>1</sup> 18,805	<sup>1</sup> 50,912
35946 72	Pump/electric motor assemblies, fixed, and variable displacement types	10	12,506	24,519	11	<sup>1</sup> 12,178	22,627
35946 73	Other pump packages, n.e.c.	10	20,483	12,978	10	25,097	13,653
	Motors:						
35946 83	Pneumatic (air) motors and motor packages	-	-	-	-	-	-
35946 86	Hydraulic motors, fixed and variable displacement types	3	( <sup>9</sup> )	( <sup>9</sup> )	3	( <sup>9</sup> )	( <sup>9</sup> )
35946 87	Hydraulic motor packages, including motor/gearbox, motor/valve, motor/generator, and similar combination units	4	<sup>9</sup> 2,590	<sup>9</sup> 12,120	4	<sup>9</sup> <sup>1</sup> 3,116	<sup>9</sup> 13,426
35949 —	Parts for fluid power pumps, motors, and hydrostatic transmissions	(X)	(X)	339,362	(X)	(X)	333,987
	Hydraulic:						
35949 91	Nonaerospace	32	(X)	306,331	33	(X)	304,697
35949 93	Aerospace	6	(X)	28,450	6	(X)	24,697
	Pneumatic:						
35949 95	Nonaerospace	2	(X)	(D)	3	(X)	(D)
35949 97	Aerospace	2	(X)	(D)	2	(X)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Product codes 3492C 26 and 3492C 28 are combined to avoid disclosing data for individual companies.  
<sup>2</sup>Product codes 3492D 50 and 3492D 48 are combined to avoid disclosing data for individual companies.  
<sup>3</sup>Quantity reported in thousands of pounds.  
<sup>4</sup>Product codes 3492J 11 and 3492J 15 are combined to avoid disclosing data for individual companies.  
<sup>5</sup>Product codes 35696 51 and 35696 53 are combined to avoid disclosing data for individual companies.  
<sup>6</sup>Product codes 35934 08 and 35934 16 are combined to avoid disclosing data for individual companies.  
<sup>7</sup>Product codes 35943 37 and 35943 36 are combined to avoid disclosing data for individual companies.  
<sup>8</sup>Product codes 35944 35 and 35944 38 are combined to avoid disclosing data for individual companies.  
<sup>9</sup>Product codes 35946 86 and 35946 87 are combined to avoid disclosing data for individual companies.

Table 12. Shipments, Exports, and Imports of Fluid Power Products: 1995

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments		Export shipments <sup>1</sup>		Import shipments <sup>2</sup>	
		Quantity	Value	Quantity	Value	Quantity	Value
3492A, C, D	Hydraulic fluid power valves . . . . .	21,563,833	1,423,106	3,289,988	167,258	6,260,332	111,585
3492B, E, F	Pneumatic fluid power valves . . . . .	(D)	705,059	(X)	77,137	(X)	99,824
3492G	Parts for fluid power valves; hydraulic, pneumatic, and whether or not aerospace.	(X)	215,563	(X)	49,600	(X)	46,415
35932 pt., 35934 pt.	Hydraulic cylinders and hydraulic linear actuators (except electrohydraulic types) . .	4,139,555	1,068,151	282,683	65,232	979,857	154,326
35935 pt.	Pneumatic cylinders (tie-rod types) . . . . .	(D)	112,439	(X)	377	(X)	279
35935 pt.	Pneumatic cylinders (except tie-rod types) .	(D)	256,584	(X)	23,774	(X)	24,611
35932 pt., 35934 pt., 35935 pt.	Fluid power accumulators, hydraulic and pneumatic, and other hydraulic, pneumatic or combination devices for fluid energy absorption and/or storage, whether or not aerospace . . . . .	(D)	127,239	(X)	77,827	(X)	45,789
35945 pt.	Pneumatic (air) motors and motor packages, whether or not aerospace . . . . .	(D)	17,895	(X)	11,700	(X)	1,197
35945 pt., 35946 pt.	Hydraulic motors, whether or not aerospace . . . . .	(D)	451,886	(X)	27,983	(X)	123,650
35943, 35944 pt., 35946 pt.	Hydraulic pumps, whether or not aerospace . . . . .	3,951,292	921,942	(X)	263,600	(X)	236,697
35939 pt., 35949	Parts for fluid power pumps and motors . . .	(X)	504,615	(X)	226,146	(X)	223,037

D Withheld to avoid disclosing data for individual companies. pt. Part. X Not applicable.

<sup>1</sup>Source: Bureau of the Census report, EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report, IM 145, *U.S. Imports for Consumption*.

## HISTORICAL NOTE

Data on fluid power products have been collected by the Bureau of the Census since 1981. Historical data may be obtained from Current Industrial reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## FUNDING

The MA35N survey is funded by the National Fluid Power Association.

## CONTACT FOR DATA USERS

For additional information about these data, contact Renee Coley, 301-457-4742.

## PUMPS AND COMPRESSORS (MA35P)

### INTRODUCTION

This survey covers companies engaged in manufacturing industrial pumps (reciprocating, turbine, centrifugal, rotary, diaphragm, and other pumps); domestic water systems; domestic sump pumps; oil-well and oil-field pumps; other pumps; air compressors; gas compressors; and vacuum pumps. Very small firms (generally less than five employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies are excluded. Excluded from this survey are hand pumps; measuring and dispensing pumps; automotive circulating pumps; hydraulic fluid power pumps; paint-spraying equipment; compressors for ice making, refrigeration equipment, and air-conditioning units; and replacement and repair parts for pumps and compressors.

The statistics in this publication were collected by mail on Bureau of the Census annual Form MA35P, Pumps and Compressors. The survey panel includes all known manufacturers of the covered products, except the very small firms excluded from the scope of the survey. Approximately 460 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

In 1995, manufacturers' shipments of pumps and compressors totaled \$7,197.8 million, a decrease of 1 percent from the 1994 figure of \$7,291.0 million. The 1995 total includes industrial pumps, \$2,671.9 million, an increase of 1 percent from the 1994 total of \$2,637.8 million; compressors and vacuum pumps, \$2,636.8 million, a slight increase from the 1994 total of \$2,633.5 million; domestic water systems, \$329.1 million, an increase of 1 percent from the 1994 total of \$325.4 million; and other pumps, \$680.2 million, a decrease of 16 percent from the 1994 total of \$814.4 million.

### EXPLANATION OF TERMS

**Pump.** A device for raising, transferring, moving, or pressurizing fluids.

**Driver.** An electric motor, or a prime mover, such as a steam engine, steam or gas turbine, or internal combustion engine.

#### Reciprocating Pumps

*Direct-acting steam-driven.* A reciprocating pump and a steam engine built together as a unit. The power to drive the pump is furnished by the steam engine.

*Power-operated, other than steam.* A reciprocating pump driven by power from an outside source applied to the crankshaft of the pump.

**Vertical turbine pumps (including deep well).** A submersible pump system, over 5 horsepower. Submersible pump systems, 5 horsepower and under, are included in domestic water systems.

#### Centrifugal Pumps

*Centrifugal pump.* A pump in which the pressure is developed principally by the action of centrifugal force. Pumps in this class with single inlet impellers usually have a specific speed below 4,200; and with double suction impellers, a specific speed below 6,000. In pumps of this class, the liquid normally enters the impeller at the hub and flows radially to the periphery.

*Frame-mounted pump.* A pump design in which the impeller is mounted on a shaft, held in a bearing frame and coupled to a motor with a flexible coupling.

*Close-coupled pump.* A pump design in which the impeller is mounted on the motor shaft.

*Mixed-flow pump.* A pump in which the head is developed partly by centrifugal force and partly by the lift of the vanes on the liquid. This type pump has a single inlet impeller with the flow entering axially and discharging in an axial and radial direction. Pumps of this type usually have a specific speed from 4,200 to 9,000.

*Propeller (or axial-flow) pump.* A pump of this type develops most of its head by the propelling or lifting action of the vanes on the liquid. It has a single inlet impeller, with the flow entering axially and discharging nearly axially. Pumps of this type usually have a speed above 9,000.

*Single-stage pump.* A pump in which the total head is developed by one impeller.

*Multistage pump.* A pump having two or more impellers acting in series in one casing.

*Single-suction pump.* A pump equipped with one or more single suction impellers.

*Double-suction pump.* A pump equipped with one or more double suction impellers.

**Rotary pump.** A positive displacement pump, consisting of a fixed casing containing gears, cams, screws, vanes, plungers, or similar elements actuated by rotation of the drive shaft. These pumps are characterized by their close running clearances and the absence of suction and discharge valves.

**Domestic water system.** A complete water supply pump system for household and farm use, containing driver, tank, and fittings. May include submersible pump systems 5 horsepower and under. Submersible pump systems over 5 horsepower are reported as vertical turbine pumps. Excluded are irrigation pumps, which are reported under industrial pumps by class and type of pump.

*Jet pump.* A pump with built-in jet (ejector) assembly for either shallow or deep well use.

*Nonjet pump.* An electrical reciprocating piston pump for shallow or deep well use.

*Submersible pump.* A pump completely submerged in water (well, pond, reservoir, etc.) that uses a series of impellers and diffusers (stages) on a single shaft or a helical rotor positive displacement design propelled by an oil-filled or water-lubricated motor.

*Domestic hand pumps, etc..* Hand, windmill, or engine-driven well pumps not electrically powered.

**Oil-well and oil-field pumps.** Included are pumps especially designed for oil-well and oil-field applications (except boiler feed).

**Vacuum pump.** A device for withdrawing air, gas, or air and gas mixtures from piping systems, enclosed vessels, or enclosed spaces, discharging the air to the atmosphere, and removing the moisture.

**Compressors.** Devices for compressing gases such as air for motive power or natural gas for the transfer of gas or for the recovery of liquid hydrocarbons.

*Stationary air compressors.* Air compressors that are intended for permanent installation and are not typically mobile.

*Portable air compressors.* Air compressors that are mountable on wheels, skids, or motor trucks in order to be typically mobile.

*Gas compressors.* This category includes engine-compressor units that generally consist of an integral engine compressor block that houses both the engine and compressor. In such machines, the engine pistons and compressor pistons are mounted on a common crankshaft.

## STANDARD ABBREVIATIONS

hp	horsepower
ANSI	American National Standards Institute
API	American Petroleum Institute
ISO	International Organization for Standardization
FM	Factory Mutual Insurance Certification
UL	Underwriters' Laboratories
PSI	Pounds per square inch
GPM	Gallons per minute
PSIG	Pounds per square inch gauge (represents the differential between atmospheric pressure and output pressure of compressors)
CFM	Cubic feet per minute



Table 13. Quantity and Value of Shipments of Pumps and Compressors: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35612 —	Pumps and compressors .....	(S)	20,201,062	17,197,834	<sup>1</sup> 22,067,636	<sup>1</sup> 17,291,001
35612 99	Industrial pumps (except hydraulic fluid power pumps) .....	(X)	6,757,555	2,671,886	<sup>2</sup> 6,703,900	<sup>2</sup> 2,637,840
	Value of drivers <sup>3</sup> .....	89	(X)	385,855	(X)	419,488
	Centrifugal pumps:					
	Sewage type (nonsubmersible), vertical or horizontal with nonclog impeller:					
35612 68	12" and under .....	18	16,454	34,629	(S)	(S)
35612 69	Over 12" .....	6	365	10,731	(S)	(S)
	Submersible effluent pumps (less than 1" solids handling capacity):					
35612 70	Less than 1 hp .....	16	214,448	23,723	178,419	<sup>1</sup> 19,637
35612 71	1 hp and over .....	15	12,423	9,858	<sup>1</sup> 15,742	<sup>1</sup> 9,893
	Submersible solids handling pumps (solids 1" to 2" inclusive):					
35612 72	1/2 hp and under .....	13	208,022	37,011	172,285	30,911
35612 73	Over 1/2 hp .....	19	38,302	23,451	23,542	<sup>1</sup> 9,577
	Submersible nonclog pumps (greater than 2" solids handling capacity):					
35612 74	3" discharge and under .....	14	12,448	8,511	9,256	6,500
35612 75	Discharge more than 3" but less than 7" .....	18	15,921	48,829	8,556	<sup>1</sup> 17,914
35612 76	7" discharge and over .....	9	1,552	11,834	<sup>1</sup> 330	<sup>1</sup> 3,144
	Submersible grinder pumps (incorporating a hardened stainless steel cutter mechanism to macerate the solids into a fine slurry):					
35612 77	2 hp and below .....	6	22,587	23,651	(S)	(S)
35612 78	Over 2 hp .....	7	6,770	8,456	(S)	(S)
	Single and two stage, single and end suction, close coupled with driver:					
35612 03	1" discharge and under .....	26	214,240	27,422	(S)	(S)
35612 07	Discharge more than 1", up to 2" .....	29	205,837	57,359	(S)	(S)
35612 08	Over 2" discharge .....	31	57,707	45,134	(S)	(S)
	Single and two stage, single suction, in-line, close coupled with driver:					
35612 17	2" discharge and under .....	11	12,047	8,167	(S)	(S)
35612 18	Over 2" discharge .....	12	3,384	3,250	(S)	(S)
	Single stage, single suction, vertical, in-line frame:					
35612 21	2" discharge and under .....	14	11,795	17,150	(S)	(S)
35612 23	Over 2" discharge .....	12	14,165	39,053	(S)	(S)
	Single stage, single suction, frame or foot mounted, metallic pumps (built to National or International Standards ANSI B73.1 or ISO 2858):					
35612 25	2" discharge and under .....	18	28,336	66,035	(S)	(S)
35612 27	Over 2" discharge .....	17	37,090	95,210	(S)	(S)
	Single stage, single suction, frame or foot mounted, nonmetallic pumps (built to National or International Standards ANSI B73.1 or ISO 2858):					
35612 30	2" discharge and under .....	10	(D)	13,150	(S)	(S)
35612 31	Over 2" discharge .....	8	1,658	8,002	(S)	(S)
	Single stage, single suction, frame or foot mounted, non-ANSI, non-ISO, with or without recessed impeller:					
35612 33	1" discharge and under .....	16	12,897	3,641	(S)	(S)
35612 35	Discharge more than 1", up to 2" .....	17	21,987	15,362	(S)	(S)
35612 37	Over 2" discharge .....	20	29,336	56,021	(S)	(S)
	Single stage, single suction, replaceable elastomer lined or hard metal, frame or foot mounted:					
35612 41	1" discharge and under .....	5	305	805	(S)	(S)
35612 43	Discharge more than 1", up to 2" .....	10	1,255	4,703	(S)	(S)
35612 45	Over 2" discharge .....	11	3,217	36,333	(S)	(S)
	Single stage, single suction, centerline mounted:					
35612 46	2" discharge and under .....	6	2,618	11,091	(S)	(S)
35612 47	Over 2" discharge .....	6	1,673	24,540	(S)	(S)
	Single stage, axially split, double suction:					
35612 48	4" discharge and under .....	10	3,783	9,653	(S)	(S)
35612 49	Discharge more than 4", up to 8" .....	12	8,234	25,975	(S)	(S)
35612 4A	Over 8" discharge .....	11	3,503	32,701	(S)	(S)

See footnotes at end of table.

Table 13. Quantity and Value of Shipments of Pumps and Compressors: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35612 —	Pumps and compressors—Con. Industrial pumps (except hydraulic fluid power pumps)—Con. Centrifugal pumps—Con.					
	Single stage, radially split, double suction impeller pumps, API-610 compliant:					
35612 4B	4" discharge and under	5	(D)	2,707	(S)	(S)
35612 4C	Discharge more than 4", up to 8"	4	73	4,372	(S)	(S)
35612 4D	Over 8" discharge	5	68	3,033	(S)	(S)
	Single stage, radially split, double suction impeller pumps, non-API compliant:					
35612 4E	4" discharge and under	4	(4)	(5)	(S)	(S)
35612 4F	Discharge more than 4", up to 8"	6	(4)	2,529	(S)	(S)
35612 4G	Over 8" discharge	4	41,047	55,724	(S)	(S)
	Multistage, single or double suction, diffuser design, radially split case:					
35612 52	4" discharge and under	8	2,453	22,318	(S)	(S)
35612 53	Discharge more than 4", up to 8"	6	(6)	(6)	(S)	(S)
35612 54	Over 8" discharge	2	6254	615,885	(S)	(S)
	Multistage, single or double suction, volute or diffuser design, axially split case:					
35612 56	4" discharge and under	8	(7)	(7)	(S)	(S)
35612 57	Discharge more than 4", up to 8"	4	(7)	(7)	(S)	(S)
35612 58	Over 8" discharge	2	72,908	744,853	(S)	(S)
	Sealless centrifugal pumps, magnetic drive:					
35612 60	1" discharge and under	11	95,377	18,219	(S)	(S)
35612 61	Discharge more than 1", up to 2"	9	2,977	8,363	(S)	(S)
35612 62	Over 2" discharge	9	785	5,747	(S)	(S)
	Sealless centrifugal pumps, canned motor:					
35612 63	1" discharge and under	6	(D)	11,523	(S)	(S)
35612 64	Discharge more than 1", up to 2"	4	(8)	(8)	(S)	(S)
35612 65	Over 2" discharge	3	81,246	87,370	(S)	(S)
	Propeller and mixed flow, horizontal and vertical, including vertical turbine over 36":					
35612 66	36" and under	17	3,697	46,300	(S)	(S)
35612 67	Over 36"	11	1,426	23,225	(S)	(S)
	All other centrifugal pumps:					
35612 79	6" discharge and under	26	(D)	156,413	(S)	(S)
35612 80	Over 6" discharge	12	(D)	31,266	(S)	(S)
35612 CC	Centrifugal pumps, n.s.k. <sup>9</sup>	30	753,972	87,553	-	-
	Vertical turbine pumps not exceeding 36" discharge, including deep-well: <sup>10</sup>					
	Pump with submersible motor					
35612 81	Bowl diameter 6" and under	15	18,788	26,633	(S)	(S)
35612 82	Bowl diameter over 6"	12	7,852	28,407	(S)	(S)
35612 83	Pump and bowl assemblies through 36" (all column and shaft lengths, including FM or UL approved vertical turbine fire pumps; deep well and short coupled pumps, except can and pot type)	12	21,232	99,440	(S)	(S)
35612 84	Can and pot type (pump and bowl assemblies, suction can and pot type)	9	1,969	25,160	(S)	(S)
35612 VV	Vertical turbine pumps, n.s.k. <sup>9</sup>	4	2,092	14,365	-	-
	Reciprocating pumps:					
35612 85	Direct-acting steam-driven	3	(D)	1,733	191	2,665
35612 86	Driven by electric motor, engine, or steam turbine: Reciprocating piston, plunger or diaphragm (not air operated) pumps	28	340,261	161,772	(S)	(S)
35612 87	Diaphragm pumps (air operated)	17	759,758	140,563	(S)	(S)
	Rotary pumps:					
	100-PSI and under designed pressure:					
35612 88	10 GPM and under, designed capacity	30	475,247	51,453	496,621	47,207
35612 89	11 to 99 GPM, designed capacity	23	138,016	67,585	(11)	38,288
35612 90	100 to 299 GPM, designed capacity	16	(D)	33,603	1158,010	20,727
35612 91	300 GPM and over, designed capacity	10	(D)	10,327	3,726	9,807
	101 to 249 PSI, designed pressure:					
35612 92	10 GPM and under, designed capacity <sup>12</sup>	10	139,057	21,469	(13)	25,632
35612 93	11 to 99 GPM, designed capacity <sup>12</sup>	10	37,427	26,860	43,825	49,546
35612 94	100 GPM, and over, designed capacity <sup>12</sup>	8	(D)	23,728	21,482	38,635

See footnotes at end of table.

Table 13. Quantity and Value of Shipments of Pumps and Compressors: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35612 —	Pumps and compressors—Con. Industrial pumps (except hydraulic fluid power pumps)—Con. Rotary pumps—Con. 250 to 500 PSI, designed capacity:					
35612 95	10 GPM and over, designed capacity <sup>12</sup> .....	8	(D)	8,421	<sup>13</sup> 191,274	5,965
35612 96	11 GPM, and over, designed capacity <sup>12</sup> .....	9	( <sup>14</sup> )	( <sup>14</sup> )	(D)	(D)
35612 97	Over 500 PSI, designed pressure .....	7	<sup>14</sup> 8,531	<sup>14</sup> 22,483	(D)	(D)
35612 98	Other industrial pumps, n.e.c. ....	27	618,366	94,865	(S)	89,669
35612 00	Industrial pumps, n.s.k. ....	89	(S)	88,323	(S)	(S)
35613 —	Domestic water systems, including drivers .....	(X)	1,880,778	329,055	1,955,270	325,362
35613 67	Nonsubmersible pump systems (jet and nonjet, including drivers) .....	21	898,868	130,315	918,451	118,551
	Submersible pump systems, 5 hp and under, including drivers:					
35613 76	Up to 1 hp .....	21	809,904	148,183	868,880	159,387
35613 77	Over 1 to 3 hp .....	15	128,141	32,723	116,249	30,148
35613 78	Over 3 to 5 hp .....	13	29,078	15,205	28,405	13,517
35613 90	Domestic hand and windmill pumps, pumps jacks, and cylinders (sold separately, including drivers) .....	3	8,637	1,553	8,982	1,379
35613 00	Domestic water systems and related pumps, n.s.k. <sup>15</sup> .....	6	(S)	1,076	(S)	2,380
35614 —	Domestic sump pumps, 1 hp and under, including drivers ..	(X)	2,053,903	117,967	( <sup>16</sup> )	( <sup>16</sup> )
35614 35	Pedestal, including drivers .....	21	264,270	13,761	296,837	<sup>r</sup> 15,218
	Submersible, including drivers:					
35614 38	1/3 hp and over .....	22	1,631,808	91,214	1,827,653	92,439
35614 39	Over 1/3 hp .....	12	149,903	12,537	115,263	9,597
35614 00	Domestic sump pumps, n.s.k. <sup>15</sup> .....	4	(S)	455	( <sup>16</sup> )	( <sup>16</sup> )
35617 —	Oil-well and oil-field pumps (except boiler feed) .....	(X)	(D)	292,233	<sup>16</sup> <sup>r</sup> 10,243,341	<sup>16</sup> <sup>r</sup> 814,391
35617 98	Value of drivers <sup>3</sup> .....	7	(X)	104,168	(X)	114,390
35617 01	Subsurface pumps for oil-well pumping .....	11	(D)	134,785	(D)	<sup>r</sup> 145,514
35617 11	Mud mumps (slush pumps) .....	5	(D)	7,331	341	7,485
35617 21	Other oil-well and oil-field pumps <sup>17</sup> .....	11	9,301	18,997	<sup>r</sup> 10,827	<sup>r</sup> 16,461
35617 00	Oil-well and oil-field pumps, n.s.k. <sup>15</sup> .....	8	(S)	26,952	( <sup>16</sup> )	<sup>16</sup> <sup>r</sup> 146,224
35618 —	Other pumps, n.e.c., including drivers .....	41	6,002,656	270,042	( <sup>16</sup> )	( <sup>16</sup> )
35618 00	Other pumps (except vacuum pumps, automotive pumps, measuring and dispensing or service station pumps, hand pumps, and hydraulic fluid power pumps), including oil burner and appliance pumps, fire engine pumps, laboratory pumps, packaged pump units, hot water heating circulator pumps, etc. <sup>18</sup> .....	41	6,002,656	270,042	<sup>r</sup> 5,989,146	267,063
35619 —	Parts and attachments for pumps and pumping equipment whose product codes begin with 3561; made by manufacturers of complete units only .....	(X)	(X)	648,859	(X)	<sup>19</sup> 648,859
35619 11	Aftermarket (spare) parts for centrifugal pumps .....	36	(X)	416,531	(X)	(S)
35619 22	Aftermarket (spare) parts for vertical turbine pumps .....	11	(X)	39,192	(X)	(S)
35619 33	Aftermarket (spare) parts for reciprocating pumps .....	16	(X)	35,363	(X)	(S)
35619 95	Other .....	28	(X)	157,773	(X)	(S)
35633 —	Air and gas compressors .....	(X)	2,958,967	2,365,235	( <sup>20</sup> )	( <sup>20</sup> )
35633 98	Value of drivers <sup>3</sup> .....	34	(X)	264,773	(X)	<sup>r</sup> 271,450
	Air compressors, new:					
	Stationary, reciprocating, single acting:					
35633 01	1-1/2 hp and under .....	20	( <sup>21</sup> )	45,520	<sup>r</sup> ( <sup>21</sup> )	44,293
35633 02	Over 1-1/2 to 5 hp .....	26	227,214	115,398	211,552	106,323
35633 03	6 to 25 hp .....	24	44,584	83,427	38,596	75,848
35633 04	26 hp and over .....	9	1,641	16,296	<sup>r</sup> 1,272	<sup>r</sup> 15,273
35633 05	Stationary, reciprocating, double acting .....	11	<sup>21</sup> 499,537	44,281	<sup>21</sup> <sup>r</sup> 481,273	40,473
	Stationary, rotary positive:					
35633 07	Discharge pressure 50 PSIG and under, all hp sizes. Discharge pressure of 51 PSIG and over:	8	(D)	30,779	(D)	22,473
35633 11	40 hp and under .....	12	8,427	54,687	<sup>r</sup> 7,944	51,243
35633 12	41-150 hp .....	16	15,095	163,688	10,965	120,207
35633 13	151-300 hp .....	10	2,247	75,540	<sup>r</sup> 1,964	<sup>r</sup> 73,430
35633 15	301 hp and over .....	6	662	43,948	380	29,958

See footnotes at end of table.

Table 13. Quantity and Value of Shipments of Pumps and Compressors: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35633 —	Pumps and compressors—Con.					
	Air and gas compressors—Con.					
	Air compressors, new—Con.					
35633 16	Stationary, centrifugal and axial .....	9	(D)	206,981	(D)	<sup>1</sup> 170,135
	Portable:					
35633 29	Under 11 CFM .....	10	( <sup>22</sup> )	219,524	( <sup>22</sup> )	215,423
35633 33	11 to 74 CFM .....	9	<sup>22</sup> 1,819,033	82,621	<sup>22</sup> 1,704,193	82,536
35633 34	75 to 124 CFM .....	9	1,282	8,522	<sup>1</sup> 1,448	<sup>1</sup> 9,512
35633 36	125 to 249 CFM .....	9	10,362	73,777	11,176	79,127
35633 37	250 to 599 CFM .....	6	2,067	25,693	<sup>r(23)</sup>	<sup>r(23)</sup>
35633 40	600 CFM and over .....	7	2,104	72,795	<sup>23</sup> <sup>r</sup> 3,831	<sup>23</sup> <sup>r</sup> 87,875
	Gas compressors, new:					
	Stationary, centrifugal and axial:					
35633 42	Natural gas .....	5	60	85,629	64	103,553
35633 43	All other gases .....	6	345	137,108	326	123,507
	Stationary reciprocating:					
35633 45	Integral engine, including drivers .....	4	( <sup>24</sup> )	( <sup>24</sup> )	<sup>r(25)</sup>	<sup>r(25)</sup>
	Other than integral engine:					
35633 51	1,000 hp and over .....	16	1,339	68,778	3,169	172,053
35633 53	1,001 hp and over .....	6	<sup>24</sup> 744	<sup>24</sup> 178,657	660	126,209
35633 56	Stationary rotary positive .....	6	610	19,487	<sup>25</sup> <sup>r</sup> 873	<sup>25</sup> <sup>r</sup> 64,513
35633 88	Other compressors (except for refrigeration, air-conditioning, and ice-making), including rebuilt compressors, compressor packages, and packaged compressor units assembled from purchased compressors .....	22	(D)	144,217	(D)	121,821
35633 00	Air and gas compressors, n.s.k. <sup>15</sup> .....	23	(S)	103,109	(S)	( <sup>26</sup> )
38210 —	Laboratory vacuum pumps <sup>27</sup> .....	3	(D)	1,769	( <sup>20</sup> )	( <sup>20</sup> )
38210 66	Laboratory vacuum pumps, including drivers and replacement parts <sup>27</sup> .....	3	(D)	1,769	(S)	(S)
35634 —	Vacuum pumps, excluding laboratory .....	(X)	324,122	269,766	<sup>20</sup> 3,165,125	<sup>20</sup> 2,633,527
35634 98	Value of drivers <sup>3</sup> .....	11	(X)	18,395	(X)	<sup>1</sup> 18,915
	Low vacuum, 29.5" mercury vacuum and lower:					
35634 61	Under 5 hp .....	13	197,366	32,785	192,525	33,781
35634 65	5 hp and over .....	10	4,927	38,537	4,972	43,457
	High vacuum, 29.6" mercury vacuum and over:					
35634 73	Under 5 hp .....	15	95,686	129,359	<sup>1</sup> 87,465	<sup>1</sup> 109,633
35634 77	5 hp and over .....	8	3,221	31,612	<sup>2</sup> 7,388	<sup>2</sup> 28,257
35634 00	Vacuum pumps, n.s.k. <sup>15</sup> .....	19	(S)	19,078	(S)	<sup>26</sup> <sup>r</sup> 192,249
35639 —	Parts and attachments for air and gas compressors and vacuum pumps whose produce codes begin with 3563; made by manufacturers of complete units only .....	19	(X)	231,022	(X)	<sup>19</sup> 231,022
35639 00	Parts and attachments for air and gas compressors and vacuum pumps (except laboratory) .....	19	(X)	231,022	(X)	(S)

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data. S Does not meet publication standards.

<sup>1</sup>Pump and compressor parts, new to the MA35P for 1995, are now included in total survey value of shipments but not in total survey number of units shipped. (For these products, only value, not number of units, is collected.) 1994 total has been revised to reflect this change.

<sup>2</sup>Due to major changes in product classification within product class 35612 (formerly 35611; see table 14, footnote 1), updated estimates for 1994 product class quantity and value are not provided, and original figures are retained. Even data changes for those product codes whose content was unchanged (35612 70 through 35612 76, 35612 85, 35612 88 through 35612 91, 35612 97, and 35612 98) are to a significant degree explained by products formerly estimated in "not specified by kind" code (see footnote 15) which are now understood to a proper seven-digit level.

<sup>3</sup>Value of drivers was reported only at product class (five-digit) level. For each product line, value excludes (except as noted for product codes 35613 67 through 35613 90, 35614 35 through 35614 39, 35618 00, 35633 45, 38210 66, and all "not specified by kind" codes except 35612 CC and 35612 VV—see footnotes 9 and 15) value of driver (electric motor or prime mover) shipped with that product. Extent to which some respondents may have included value of drivers with value of specific pumps or compressors is unknown.

<sup>4</sup>Quantities for product codes 35612 4E, 35612 4F, and 35612 4G are combined for 1995 to avoid disclosing data for individual companies.

<sup>5</sup>Values for product codes 35612 4E and 35612 4G are combined for 1995 to avoid disclosing data for individual companies.

<sup>6</sup>Product codes 35612 53 and 35612 54 are combined for 1995 to avoid disclosing data for individual companies.

<sup>7</sup>Product codes 35612 56, 35612 57, and 35612 58 are combined for 1995 to avoid disclosing data for individual companies.

<sup>8</sup>Product codes 35612 64 and 35612 65 are combined for 1995 to avoid disclosing data for individual companies.

<sup>9</sup>Certain companies which provided acceptable data under classification basis used for 1994 and earlier did not do so for 1995. For these companies most recent reported quantity and value figures for centrifugal pumps (35612 CC) and vertical turbine pumps (35612 VV) were used for 1995 estimate in respective "not specified by kind" (see footnote 15) product code. Precursor product codes from which values derive were not intended to include drivers.

<sup>10</sup>Instructions for 1995 were clarified so that vertical turbine pumps exceeding 36" discharge be classified in product code 35612 67.

Table 13. Quantity and Value of Shipments of Pumps and Compressors: 1995 and 1994—Con.

- <sup>11</sup>Quantities for product codes 35612 89 and 35612 90 are combined for 1994 to avoid disclosing data for individual companies.
- <sup>12</sup>Five product categories within "rotary pumps" are not completely comparable from 1995 to 1994 because the divisions of pumps pressure were set at 101 to 250 PSI and 251 to 500 PSI for 1994 (see table 1b) and revised for 1995. Where companies did not revise historic data accordingly for 1994, originally reported 1994 data were substituted.
- <sup>13</sup>Quantities for product codes 35612 92 and 35612 95 are combined for 1994 to avoid disclosing data for individual companies.
- <sup>14</sup>Product codes 35612 96 and 35612 97 are combined for 1995 to avoid disclosing data for individual companies.
- <sup>15</sup>Not specified by kind (n.s.k.). Values and quantities for a number of manufacturing establishments (either delinquent or too small to be included in survey) were estimated from the 1992 Census of Manufactures, 1993 and 1994 Annual Survey of Manufactures, and subsequent administrative records. Estimates were made only to the five-digit product class level. Drivers may in some cases be included.
- <sup>16</sup>Totals for product classes 35614, 35617, and 35618 are combined for 1994. (The three were previously classified together as product class 36515. The the Annual Survey of Manufactures will continue to use product class 35615 through 1996 and adopt change for 1997). Similarly, "n.s.k." codes for the three product classes are combined for 1994 and with product class 35617 00.
- <sup>17</sup>Power pumps for water flooding are reported in product code 35612 86.
- <sup>18</sup>For product code 35618 00 for 1995, reports account for 26 companies, 5,533,432 units, and \$248,933 thousand. Estimates from other sources (see footnote 15) account for the balance.
- <sup>19</sup>Parts for pumps and compressors were not collected on the MA35P until 1995 (and even so are only collected for establishments which also manufacture complete pumps or compressors). In absence of historic data, 1995 values are arbitrarily assigned for 1994 at five-digit level so that survey totals can be compared for the 2 years.
- <sup>20</sup>Totals for product classes 35633, 38210, and 35634 are combined for 1994. (The first and last of these were previously classified together as product class 35631, and product class 38210 was treated for this survey as if it was in 35631 as well (see footnote 27). The Annual Survey of Manufactures will continue to use product class 35631 through 1996 and adopt change for 1997).
- <sup>21</sup>Quantities for product codes 35633 01 and 35633 05 are combined for 1995 and 1994 to avoid disclosing data for individual companies.
- <sup>22</sup>Quantities for product codes 35633 29 and 35633 33 are combined for 1995 and 1994 to avoid disclosing data for individual companies.
- <sup>23</sup>Product codes 35633 37 and 35633 40 are combined for 1994 to avoid disclosing data for individual companies.
- <sup>24</sup>Product codes 35633 45 and 35633 53 are combined for 1994 to avoid disclosing data for individual companies.
- <sup>25</sup>Product codes 35633 45 and 35633 56 are combined for 1994 to avoid disclosing data for individual companies.
- <sup>26</sup>Product codes 35633 00 and 35634 00 are combined for 1994. (See footnote 20.)
- <sup>27</sup>Before 1995, respondents were instructed, contrary to Standard Industrial Classification (SIC) system guidelines, to treat laboratory vacuum pumps, placed in Industry 3821 by SIC, as if they belonged in Industry 3563; i.e., to include them within the existing categories. The MA35P now follows the SIC directive. It is not known to what extent, if any, products properly within industry 3821 are still placed by the MA35P in product class 35634.

Table 14. Quantity and Value of Shipments of Industrial Pumps: 1994 and 1993

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
35611 — <sup>1</sup>	Industrial pumps.....	(X)	6,703,900	2,637,840	6,031,853	2,570,566
35611 98	Value of drivers (reported separately) <sup>2</sup> .....	94	(X)	403,244	(X)	434,838
	Reciprocating pumps.....	(X)	266,630	129,183	254,397	114,329
35611 01	Direct-acting steam-driven.....	3	( <sup>3</sup> )	1,860	35	1,875
35611 02	Electric motor driven.....	23	251,631	114,305	240,345	99,589
35611 04	Engine driven.....	8	<sup>3</sup> 14,999	13,018	14,017	12,865
	Turbine pumps, vertical, including deep-well.....	(X)	37,646	175,672	34,978	180,707
35611 05	Submersible, over 5 hp.....	20	19,757	46,757	17,657	43,076
	Other than submersible:					
	Up to 8" diameter bowl size.....	11	4,612	23,463	4,106	24,720
35611 08	Over 8" to 16" diameter bowl size.....	11	12,344	84,880	12,149	88,989
35611 10	Over 16" diameter bowl size.....	9	933	20,572	1,066	23,922
	Centrifugal pumps.....	(X)	4,265,069	1,219,842	3,740,265	1,195,909
	Submersible centrifugal pumps (except submersible sump pumps):					
	Submersible effluent pumps (less than 1" solids handling capacity):					
35611 83	1/4 to 3/4 hp.....	10	171,351	18,485	158,478	17,059
35611 84	1 hp and over.....	7	13,496	8,394	14,098	8,837
	Submersible solids handling pumps (solids 1" to 2" inclusive):					
35611 85	1/3 to 1/2 hp.....	9	172,274	30,896	156,263	28,101
35611 86	3/4 hp and over.....	10	22,838	8,245	24,221	8,279
	Submersible nonlog pumps (greater than 2" solids handling capacity):					
35611 87	3" discharge outlet and under.....	10	9,224	6,217	9,276	6,037
35611 88	4" to 6" discharge outlet.....	13	8,214	15,887	6,900	14,070
35611 92	7" discharge outlet and over.....	8	314	1,989	251	2,742
	Single stage, single suction, close coupled:					
35611 11	1/2" discharge outlet and under.....	12	49,482	5,633	85,397	6,856
35611 12	3/4" and 1" discharge outlet.....	37	328,311	43,116	266,766	38,008
35611 14	1-1/4" and 1-1/2" discharge outlet.....	40	325,865	78,625	316,906	72,089
35611 15	2" and 2-1/2" discharge outlet.....	45	103,052	46,042	127,166	50,363
35611 16	3" and 4" discharge outlet.....	42	24,580	24,420	24,041	22,463
35611 19	Over 4" discharge outlet.....	30	10,189	24,878	11,748	30,515
	Single stage, single suction, frame mounted:					
35611 20	1" discharge outlet and under.....	37	(D)	54,192	(D)	51,719
35611 23	1-1/4" and 1-1/2" discharge outlet.....	39	28,604	43,276	33,720	47,414
35611 24	2" and 2-1/2" discharge outlet.....	46	35,801	64,851	36,938	61,851
35611 25	3" discharge outlet.....	44	26,976	59,570	28,570	57,727
35611 26	4" to 6" discharge outlet.....	40	25,474	89,858	29,506	91,821
35611 29	Over 6" discharge outlet.....	32	8,410	71,029	9,219	92,738
	Single stage, double suction:					
35611 42	Under 4" discharge outlet.....	15	7,341	14,142	6,765	12,026
35611 44	4" and 5" discharge outlet.....	18	7,017	25,241	5,525	23,264
35611 46	6" and 7" discharge outlet.....	16	5,401	30,778	3,952	24,022
35611 48	8" to 12" discharge outlet.....	17	4,897	37,468	3,534	37,480
35611 49	Over 12" discharge outlet.....	12	504	16,262	470	13,612
	Multistage (single or double suction):					
35611 52	1-1/2" discharge outlet and under.....	15	33,293	13,919	29,439	15,759
35611 54	2" and 3" discharge outlet.....	18	7,814	39,000	6,602	29,327
35611 56	4" and 5" discharge outlet.....	17	971	27,230	895	24,351
35611 58	6" and 7" discharge outlet.....	9	( <sup>4</sup> )	( <sup>4</sup> )	161	22,009
35611 59	8" discharge outlet and over.....	7	<sup>4</sup> 313	<sup>4</sup> 36,994	55	8,175
	Propeller and mixed flow:					
35611 62	20" and under.....	11	1,105	9,661	1,624	15,079
35611 64	Over 20".....	14	377	30,128	549	22,902
	All other centrifugal pumps, including can:					
35611 65	1-1/2" discharge outlet and under.....	22	(D)	99,516	(D)	87,910
35611 66	2" to 6" discharge outlet.....	19	169,539	68,938	( <sup>5</sup> )	( <sup>5</sup> )
35611 69	Over 6" discharge outlet.....	9	662	74,962	<sup>5</sup> 148,141	<sup>5</sup> 151,304

See footnotes at end of table.

Table 14. Quantity and Value of Shipments of Industrial Pumps: 1994 and 1993—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
35611 —	Industrial pumps—Con.					
	Rotary pumps . . . . .	(X)	936,351	254,078	914,433	229,484
	100 PSI and under, designed pressure:					
35611 70	10 GPM and under, designed capacity . . . . .	25	507,738	50,786	492,814	45,830
35611 71	11 to 99 GPM designed capacity . . . . .	21	( <sup>6</sup> )	37,288	( <sup>6</sup> )	30,933
35611 72	100 to 299 GPM, designed capacity . . . . .	13	<sup>6</sup> 158,005	20,727	<sup>6</sup> 145,592	20,655
35611 73	300 GPM and over, designed capacity . . . . .	11	3,726	9,807	3,181	6,963
	101 to 250 PSI, designed capacity:					
35611 74	10 GPM and under, designed capacity . . . . .	11	( <sup>7</sup> )	25,697	( <sup>7</sup> )	( <sup>7</sup> )
35611 75	11 to 99 GPM, designed capacity . . . . .	14	45,807	50,046	43,818	44,710
35611 76	100 GPM, and over, designed capacity . . . . .	12	22,433	39,508	19,452	33,254
	251 to 500 PSI, designed pressure:					
35611 77	10 GPM and under, designed capacity . . . . .	7	<sup>7</sup> 192,508	5,792	<sup>7</sup> 203,143	<sup>7</sup> 28,969
35611 78	11 GPM, and over, designed capacity . . . . .	9	( <sup>8</sup> )	( <sup>8</sup> )	5,082	14,972
35611 79	Over 500 PSI, designed pressure . . . . .	5	<sup>8</sup> 6,134	<sup>8</sup> 14,427	1,351	3,198
35611 85	Diaphragm pumps . . . . .	17	431,406	150,327	457,249	126,215
35611 97	Other industrial pumps, n.e.c. . . . .	18	75,619	33,530	44,607	35,481
35611 00	Industrial pumps, n.s.k. <sup>9</sup> . . . . .	(S)	(S)	271,964	(S)	253,603

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. <sup>†</sup>Revised by 5 percent or more from previously published data. S Does not meet publication standards. X Not applicable.

<sup>1</sup>Product class 35611 was recoded as product class 35612 for the MA35P for 1995. (The Annual Survey of Manufactures will continue to use 35611 through 1996 and change to 35612 for 1997.)

<sup>2</sup>Value of drivers was reported only at product code (five-digit) level for one product class included in this table. For each product line, value figure excludes (except as for product code 35611 — see footnote 9) value of driver (electric motor, internal combustion engine, hydrostatic transmission, steam turbine, etc.) shipped with that product. The extent to which some respondents may have included value of drivers with value of specific pumps or compressors is unknown.

<sup>3</sup>For 1994, quantities for product codes 35611 01 and 35611 04 are combined to avoid disclosing data for individual companies.

<sup>4</sup>For 1994, product codes 35611 58 and 35611 59 are combined to avoid disclosing data for individual companies.

<sup>5</sup>For 1993, product codes 35611 66 and 35611 69 are combined to avoid disclosing data for individual companies.

<sup>6</sup>Quantities for products 35611 71 and 35611 72 are combined to avoid disclosing data for individual companies.

<sup>7</sup>For 1994, quantities for product codes 35611 74 and 35611 77 are combined to avoid disclosing data for individual companies. For 1993, quantities and values are combined to avoid disclosing data for individual companies.

<sup>8</sup>For 1994, product codes 35611 78 and 35611 79 are combined to avoid disclosing data for individual companies.

<sup>9</sup>Not specified by kind (n.s.k.). Values and quantities for a number of manufacturing establishments (either delinquent or too small to be included in the survey) were estimated from the 1992 Census of Manufactures and 1993 Annual Survey of Manufactures. Estimates were made only to five-digit product code level. Drivers may in some cases be included.

Table 15. Shipments, Exports, and Imports of Pumps and Compressors: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product description	Manufacturers' shipments <sup>1</sup>		Export shipments <sup>2</sup>		Import shipments <sup>4</sup>	
	Quantity	Value f.o.b. plant	Quantity	Value <sup>3</sup>	Quantity	Value <sup>5</sup>
<b>1995</b>						
Pumps .....	19,977,681	3,207,005	1,982,473	809,243	42,640,441	464,861
Reciprocating pumps.....	(D)	163,505	75,450	78,812	239,252	45,097
Turbine pumps, vertical.....	51,933	194,005	5,647	25,076	3,355	2,052
Centrifugal pumps, submersible .....	532,473	195,324	213,041	56,880	426,249	25,102
Centrifugal pumps, other .....	(D)	1,143,517	171,500	226,671	3,488,040	160,371
Rotary pumps .....	(D)	265,929	67,124	105,061	1,665,420	62,328
Diaphragm pumps .....	759,758	140,563	167,645	46,716	35,778	13,220
Oil-well and oil-field pumps (except boiler feed) .....	(D)	292,233	4,394	39,771	2,793	4,797
Domestic water systems, including windmill and hand pumps .....	1,880,778	329,055	322,182	24,489	15,762,097	21,103
Other pumps, including domestic water systems and sump pumps, and hot water circulator pumps.....	8,674,925	482,874	955,490	157,586	21,017,457	130,791
Compressors.....	2,829,975	1,997,353	1,174,109	139,860	7,181,648	303,423
Stationary air compressors:						
Reciprocating, single and double acting .....	772,976	304,922	( <sup>6</sup> )	( <sup>6</sup> )	87,750	42,523
Rotary positive, centrifugal, and axial .....	(D)	575,623	( <sup>6</sup> )	( <sup>6</sup> )	516,193	138,920
Portable air compressors .....	1,834,848	482,932	4,731	86,054	3,555,410	73,971
Other air and gas compressors, including gas compressors, and compressor packages .....	(D)	633,876	<sup>6</sup> 1,169,378	<sup>6</sup> 53,806	3,022,295	48,009
Vacuum pumps.....	(D)	539,532	352,588	92,514	4,161,089	334,979
<b>1994</b>						
Pumps .....	20,482,965	3,365,190	2,212,718	721,201	35,481,274	401,644
Reciprocating pumps.....	266,630	129,183	53,393	64,935	154,888	25,967
Turbine pumps, vertical.....	37,646	175,672	31,208	22,792	2,871	948
Centrifugal pumps:						
Submersible .....	397,711	90,113	204,228	42,549	162,730	20,329
Single stage, single suction, close coupled .....	841,479	222,714	158,141	37,965	2,490,243	54,665
Single stage, single suction, frame mounted .....	(D)	382,776	13,420	42,420	5,520	5,124
Single stage, double suction .....	25,160	123,891	1,799	9,748	1,107	2,305
Multistage, single or double suction.....	42,391	117,143	3,048	17,717	1,608	9,130
Other, including propeller and mixed flow .....	(D)	283,205	45,374	113,610	1,973,977	82,138
Rotary pumps .....	936,351	254,078	57,383	112,877	1,188,605	45,664
Diaphragm pumps .....	431,406	150,327	162,204	35,284	34,383	8,298
Oil-well and oil-field pumps (except boiler feed) .....	(D)	168,007	5,403	56,295	2,117	3,857
Other pumps, including domestic water systems and sump pumps, and hot water circulator pumps, etc. .	(D)	1,268,081	1,477,117	165,009	29,463,225	143,219
Compressors.....	(D)	1,935,785	259,660	810,255	7,083,147	302,081
Stationary air compressors:						
Reciprocating, single and double acting .....	<sup>r</sup> 732,693	282,210	177,660	70,440	187,595	34,027
Rotary positive, centrifugal, and axial .....	(D)	<sup>r</sup> 467,446	64,264	133,491	466,890	138,918
Portable air compressors .....	1,720,648	474,473	10,555	103,710	2,451,498	58,689
Other compressors, including gas compressors and compressor packages.....	(D)	711,656	7,181	502,614	3,977,164	70,447
Vacuum pumps.....	(S)	(S)	253,596	71,695	3,307,677	227,300

D Withheld to avoid disclosing data for individual companies. <sup>r</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>Manufacturers' shipments generally exclude values of drivers. See footnotes 1, 8, and 9 in table 13.<sup>2</sup>Source: Bureau of Census report EM 545, *U.S. Exports*.<sup>3</sup>Excludes value of drivers.<sup>4</sup>Source: Bureau of Census report IM 145, *U.S. General Imports, and IM 146, U.S. Imports for Consumption*.<sup>5</sup>Value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.<sup>6</sup>Export data for three categories of compressors are combined for 1995 because one harmonized code in the third category may be used interchangeably with any of several codes in the first two categories.



**HISTORICAL NOTE**

Data on pumps and compressors have been collected by the Bureau of the Census since 1960. Data on hydraulic fluid power pumps and motors formerly collected on this survey are now included in the Current Industrial Report, MA35N, Fluid Power Products. Historical data may be obtained from Current Industrial Reports available at your

local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information on these data, contact Richard Wiesler, 301-457-4746.

## ANTIFRICTION BEARINGS (MA35Q)

### INTRODUCTION

These data cover companies engaged in the manufacture of complete antifriction bearings and components, including balls and rollers, in the United States.

The statistics were collected by mail on Bureau of the Census annual Form MA35Q, Antifriction Bearings. The survey panel includes all known producers of these products, approximately 84 companies.

### SUMMARY OF FINDINGS

The value of shipments of complete antifriction bearings and components, including balls and rollers, was \$5,202.9 million in 1995, an increase of 11 percent from shipments of \$4,693.8 million in 1994. The 1995 total includes: complete ball bearings, \$1,885.7 million, an increase of 12 percent from the 1994 value of shipments; complete tapered roller bearings and roller bearing parts (except rollers), \$1,283.8 million, an increase of 13 percent; other complete roller bearings, \$985.9 million, an increase of 5 percent; mounted bearings (except plain), \$458.7 million, an increase of 12 percent; and parts and components for ball and roller bearings, sold separately, \$589.5 million, an increase of 10 percent.

### EXPLANATION OF TERMS

**Antifriction bearing.** A bearing using rolling elements, i.e., balls or rollers. Plain bearings, i.e., those with no rolling elements, are not included.

**Ball bearings, complete.** An antifriction bearing using balls as rolling elements.

**Annular ball bearing.** An antifriction bearing primarily designed to support load perpendicular to shaft axis. More commonly called "radial" ball bearing.

**Ground or precision.** Excludes all unground ball bearings.

**Single-row conrad-ball bearing.** A deep groove ball bearing with only one row of balls and a cage (i.e., retainer, separator). Included are all standard and special types, all inner race configurations (extended, wide, etc.), and all outer race configurations (spherical outside diameter, cylindrical outside diameter., wide, etc.).

**Miniature ball bearing.** Ball bearing with outside diameter below, but not including, 3/8 in. or 9 mm outside diameter.

**ABEC 1 and ABEC 3.** The "regular" standards of ground ball bearing precision.

**ABEC 5 and up.** The higher or "precision" standards of ground ball bearing precision.

**Single-row maximum capacity type.** Distinguished from the conrad type by a filling slot in both outer and inner rings, which allows the bearing to contain a greater number of larger balls than the corresponding conrad bearing without filling slots. Also known as "max" type, "full complement," or "filling slot" ball bearings.

**Integral shaft and integral spindle ball bearings.** Bearings that have a solid inner race, i.e., a shaft that has the ball raceway(s) ground into the shaft surface, thus making the inner race/shaft integral to the bearing. Examples include, but are not restricted to, water pump bearings, some automotive hub units, and computer spindle bearings.

**Double-row ball bearing.** A unitary bearing with two rows of balls. Includes both angular contact and deep groove types, and both conrad and max types. All ABEC 1 and up of all standard and special configurations are included, but self-aligning, double-row bearings are not included.

**Angular contact ball bearings.** Bearings that have a single row of balls whose internal clearances and ball race locations result in a definite contact angle and predetermined relationship of inner to outer ring faces. All standard and special configurations and all ABEC 1 and up precisions are included.

**All other ground or precision ball bearings (ABEC 1 and up).** All radial ball bearings not covered previously. This category includes only those ground ball bearings, etc., that are not classified above. It includes linear ball bearings.

**Ground ball bearings of less than ABEC 1 precision.** All types of radial (single-row, double-row, angular contact, and other) ball bearings that have ground raceways but are less than the ABEC 1 precision grade.

**Unground, including self-aligning (less than ABEC 1).** Antifriction ball bearings with unground raceways. All radial types, styles, and configurations are included.

**Thrust ball bearings.** Concentric axial loading only, both ground (less than ABEC 1 and up) and unground types, of all configurations. Both single-direction thrust and double-direction thrust ball bearings are included. Angular contact bearings are not included.

**Other ball bearings.** Bearings that do not qualify under any of the previous categories. This category only includes bearings that have not been described previously.

**Tapered roller bearing.** An antifriction bearing using taper-shaped rollers as rolling elements.

**Cup and cone assemblies shipped as a set.** This is a complete tapered roller bearing, which includes the cup and cone and roller assembly, each of which may be sold separately.

**Cups.** Tapered bearing outer races.

**Cone assemblies.** Tapered bearing inner race, with cage and rollers.

**Other parts, except rollers.** Includes cages, spacers, railroad end caps, and other miscellaneous items.

**Cylindrical roller bearing.** An antifriction bearing using cylindrical shaped rollers as the rolling elements. Axes of rollers are parallel to the bearing axis. Regular (ABEC 1 and 3) and precision (ABEC 5 and up) are reported separately, but within each category all types and configurations are included: single-row and multirow, radial and thrust, traction motor, journal, aeroengine, and others, except those classified as needle roller bearings, as defined below.

**Spherical roller bearing.** A self-aligning antifriction bearing using convex (spherical, or barrel-shaped) or concave (hourglass shaped) rollers as the rolling elements. Within

each category of single-row and double-row types, all configurations of radial and thrust, and all precisions are included: geared outer, spherangular, air frame, and all other similar types.

**Needle roller bearing.** An antifriction bearing using "needle" roller elements. Needle rollers are cylindrically shaped, but are long and slim, with a uniform diameter not exceeding 5 mm and having a length of a least three times the diameter. The ends of the rollers may be of several shapes.

**Linear bearings.** A roller bearing designed for linear relative motion between its raceways in the direction of rolling. Only includes linear roller bearings. Those pertaining to ball bearings are included in "All other ground or precision ball bearings (ABEC 1 and Up)" category.

**Other roller bearings not specified above.** This category includes roller bearings not classified above.

**Mounted bearings, except plain.** Antifriction ball or roller bearings that are encased (mounted) in an enclosure (a mounting, or housing closure) that is usually made of iron, steel, or rubber. The enclosure, or housing, may be of one piece (unit) or two-piece (split) construction. Major types included are pillow blocks, flange units, takeup units, "rubber tired" bearings, and any other types of mounted bearings. Loose inserts sold separately are not included here, but are included in appropriate bearing categories above.

Table 16. **Value of Shipments for Complete Antifriction Bearings and Components, Including Balls and Rollers by Product Class: 1986 to 1995**

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988 <sup>1</sup>	1987	1986
3562-	Ball and roller bearings . . . . .	5,202.9	4,693.8	4,331.1	4,011.3	3,778.9	4,064.2	3,965.3	3,899.2	3,550.9	3,349.3
35621	Ball bearings, complete . . . .	1,885.7	1,676.2	1,616.8	1,484.2	1,406.7	1,469.0	1,420.9	1,497.6	1,312.2	1,298.6
35622	Tapered roller bearings, cups and cones . . . . .	1,283.1	1,139.2	1,001.0	935.6	876.8	977.3	963.9	745.7	754.6	667.0
35623	Roller bearings, complete . .	985.9	935.5	810.4	773.1	794.3	872.4	849.6	834.3	737.9	703.6
35624	Mounted bearings (except plain) . . . . .	458.7	407.8	439.4	378.0	322.9	362.9	344.9	358.2	305.6	298.2
35629	Parts and components for ball and roller bearings, including balls and rollers sold separately . . . . .	589.5	535.1	467.0	440.4	378.3	382.6	386.1	463.4	440.6	381.9

<sup>1</sup>Data for 1988 and earlier years may not be directly comparable due to reclassifications.

Table 17. Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3562—	Antifriction bearings and components . . . . .	(X)	(X)	5,202,961	(X)	4,693,853
35621 —	Ball bearings, complete . . . . .	52	583,412	1,885,700	585,777	1,676,202
	Annular, including self-aligning:					
	Ground or precision:					
	Single-row conrad:					
	Miniature (below 9 mm outside diameter):					
35621 01	Regular (ABEC 1 and 3) . . . . .	3	1,230	2,997	1,185	2,556
35621 02	Precision (ABEC 5 and up) . . . . .	6	(D)	(D)	(D)	(D)
	Other regular (ABEC 1 and 3):					
35621 03	9 mm outside diameter through 30 mm outside diameter . . . . .	7	85,273	78,565	78,563	69,947
35621 04	Over 30 mm outside diameter through 52 mm outside diameter . . . . .	13	128,963	181,588	123,741	169,491
35621 05	Over 52 mm outside diameter through 100 mm outside diameter . . . . .	16	33,260	195,127	40,127	207,545
35621 07	Over 100 mm outside diameter . . . . .	12	5,262	165,647	5,476	142,199
	Other precision (ABEC 5 and up):					
35621 09	9 mm outside diameter through 30 mm outside diameter . . . . .	4	5,390	54,246	4,535	48,743
35621 11	Over 30 mm outside diameter through 52 mm outside diameter . . . . .	7	667	39,019	584	33,868
35621 12	Over 52 mm outside diameter through 100 mm outside diameter . . . . .	8	219	31,402	179	27,559
35621 13	Over 100 mm outside diameter . . . . .	7	46	33,609	35	29,839
35621 14	Single-row maximum capacity type . . . . .	6	1,368	23,794	1,095	17,833
35621 18	Integral shaft and integral spindle ball bearings . . . . .	7	29,378	323,092	26,742	302,598
35621 16	Double row . . . . .	10	23,875	171,635	15,021	111,509
	Angular contact:					
35621 19	Regular . . . . .	9	(1)	(1)	(1)	(1)
35621 22	Precision . . . . .	2	17,767	189,488	17,292	153,069
35621 21	All other ground or precision bearings (ABEC 1 and up) . . . . .	4	(D)	(D)	(D)	(D)
35621 23	Ground bearings of less than ABEC 1 precision . . . . .	3	4,826	29,635	4,780	24,811
35621 25	Unground, including self-aligning (less than ABEC 1) . . . . .	16	200,240	120,066	222,103	121,784
	Thrust ball bearings:					
35621 33	Ground . . . . .	15	3,957	27,628	4,163	28,117
35621 35	Unground . . . . .	5	5,375	11,368	4,936	7,952
35621 55	Other ball bearings . . . . .	16	39,042	172,246	38,806	146,552
35622 —	Tapered roller bearings . . . . .	9	251,115	1,283,106	258,727	1,139,236
35622 32	Cup and cone assemblies shipped as a set . . . . .	9	15,615	423,097	16,049	351,992
35622 33	Cups shipped separately . . . . .	7	(2)	(2)	(2)	(2)
35622 34	Cone assemblies shipped separately . . . . .	8	235,500	860,009	242,678	787,244
35623 —	Cylindrical, spherical, needle, and other roller bearings . . . . .	31	764,182	985,999	738,657	935,545
	Cylindrical roller bearings:					
35623 11	Regular (ABEC 1 and 3) . . . . .	19	46,543	150,527	38,947	160,803
35623 12	Precision (ABEC 5 and up) . . . . .	7	133	58,437	138	60,318
	Spherical roller bearings, including hourglass and barrel:					
35623 24	Single-row . . . . .	4	281	20,877	258	19,465
35623 25	Double-row . . . . .	5	1,047	179,069	955	155,689
35623 41	Needle roller bearings . . . . .	7	650,293	491,047	638,187	463,733
35623 93	Other roller bearings not specified above . . . . .	18	65,885	86,042	60,172	75,537

See footnotes at end of table.

Table 17. **Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 1995 and 1994—Con.**

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3562—	Antifriction bearings and components—Con.					
35624 —	Mounted bearings (except plain) . . . . .	15	10,399	458,697	10,459	407,750
35624 17	Ball bearings, unit and/or split-mounted . . . . .	13	9,054	249,900	9,195	219,006
	Roller:					
35624 53	Unit mounted . . . . .	6	1,160	172,557	1,112	156,110
35624 55	Split-mounted . . . . .	5	185	36,240	152	32,634
35629 —	Parts and components for ball and roller bearings, including balls and rollers sold separately . . . . .	45	(X)	589,459	(X)	535,120
35629 11	Balls:					
	Shipments (quantity in millions of units) . . . . .	17	29,808	221,209	27,570	186,722
	Production for all purposes (quantity in millions of units) . . . . .	17	(S)	(X)	(S)	(X)
35629 21	Other antifriction ball and bearing components and parts, including unassembled ball bearings, cages, housing closures, and races . . . . .	19	(X)	112,182	(X)	98,851
35629 31	Rollers:					
	Shipments (quantity in millions of units) . . . . .	14	14,199	108,200	13,339	100,891
	Production for all purposes (quantity in millions of units) . . . . .	15	(S)	(X)	(S)	(X)
	Other roller bearing parts and components (except rollers):					
35629 35	For tapered roller bearings (except cup and cone assemblies) . . . . .	8	(X)	45,810	(X)	42,454
35629 36	For cylindrical roller bearings . . . . .	4	(X)	1,912	(X)	1,688
35629 37	For spherical roller bearings . . . . .	3	(X)	(D)	(X)	(D)
35629 49	For other roller bearings . . . . .	4	(X)	(D)	(X)	(D)
35629 59	Housing and parts and components for housings, including housing closures, collars, spacers, sleeves, adapters, and other miscellaneous items . . . . .	4	(X)	26,179	(X)	20,719

D Withheld to avoid disclosing data for individual companies.

†Revised by 5 percent or more from previously published data.

S Does not meet publication standards. X Not applicable.

<sup>1</sup>Product code 35621 19 is combined with product code 35621 22 to avoid disclosing data for individual companies.<sup>2</sup>Product code 35622 33 is combined with product code 35622 34 to avoid disclosing data for individual companies.

Table 18. Shipments, Exports, Imports, and Apparent Consumption of Antifriction Bearings and Components, Including Balls and Rollers: 1995 and 1994

[Quantity in thousands of units. Value and duty in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Imports for consumption <sup>2</sup>		Apparent consumption <sup>3</sup>	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	C.i.f. and calculated duty	Quantity	Value
<b>1995</b>								
Radial ball bearings and integral shaft and spindle ball bearings . . . . .	544,370	1,713,454	31,647	206,045	497,874	605,240	1,010,597	2,112,649
Other ball bearings . . . . .	39,042	172,246	14,610	77,946	33,588	130,156	58,020	224,456
Tapered roller bearings . . . . .	251,115	1,283,106	18,101	200,389	61,488	160,373	294,502	1,243,090
Cylindrical roller bearings . . . . .	46,676	208,964	1,974	47,883	8,236	85,637	52,938	246,718
Spherical roller bearings . . . . .	1,328	199,946	3,653	27,567	1,376	57,553	(949)	229,932
Needle roller bearings . . . . .	525,954	491,047	13,001	40,342	20,777	30,999	533,730	481,704
Other roller bearings . . . . .	65,885	86,042	4,432	62,086	422	5,773	61,875	29,729
Mounted bearings:								
Ball . . . . .	9,054	249,900	475	15,900	3,320	24,858	11,899	258,858
Roller . . . . .	1,345	208,797	136	1,073	2,756	11,191	3,965	218,915
Parts for ball and roller bearings:								
Balls (quantity in millions of units) . . .	29,808	221,209	(NA)	45,487	(NA)	13,587	29,808	189,309
Rollers (quantity in millions of units) . .	14,199	108,200	(NA)	39,120	(NA)	27,180	14,199	96,260
Other parts for tapered roller bearings . . . . .	(X)	147,868	(NA)	54,350	(NA)	2,308	(NA)	95,826
Other ball bearing parts . . . . .	(X)	108,200	(NA)	98,823	(NA)	103,255	(NA)	112,632
<b>1994</b>								
Radial ball bearings and integral shaft and spindle ball bearings . . . . .	546,971	1,529,650	27,341	180,039	422,454	556,555	942,084	1,906,166
Other ball bearings . . . . .	38,806	146,552	10,084	56,055	43,637	65,716	72,359	156,213
Tapered roller bearings . . . . .	258,727	1,139,236	13,586	172,802	75,927	147,302	321,068	1,113,736
Cylindrical roller bearings . . . . .	39,085	221,121	1,663	38,300	9,002	80,597	46,424	263,418
Spherical roller bearings . . . . .	1,213	175,154	3,053	21,971	670	51,982	(NA)	(NA)
Needle roller bearings . . . . .	638,187	463,187	9,193	28,647	30,221	33,753	659,215	468,293
Other roller bearings . . . . .	60,172	75,537	4,043	57,027	2,918	5,956	59,047	24,466
Mounted bearings:								
Ball . . . . .	9,195	219,006	357	15,883	4,012	23,989	12,850	227,112
Roller . . . . .	1,264	188,744	244	12,667	2,514	9,721	3,534	185,798
Parts for ball and roller bearings:								
Balls (quantity in millions of units) . . .	27,570	186,722	(NA)	30,655	(NA)	9,166	27,570	165,233
Rollers (quantity in millions of units) . .	13,339	100,891	(NA)	30,742	(NA)	21,811	13,339	91,960
Other parts for tapered roller bearings . . . . .	(X)	148,656	(NA)	74,394	(NA)	90,870	(NA)	165,132
Other ball bearing parts . . . . .	(X)	98,851	(NA)	12,396	(NA)	-	(NA)	86,455

- Represents zero. NA Not available. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Source: Bureau of Census report EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>Apparent consumption is derived by subtracting exports from manufacturers' shipments plus imports.

## HISTORICAL NOTE

Data on antifriction bearings have been collected by the Bureau of the Census since 1972. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Joanna Nguyen, 301-457-4752.

## VENDING MACHINES (COIN-OPERATED) (MA35U)

### INTRODUCTION

These data cover manufacturers of coin-operated vending machines in the United States. The statistics were collected by mail on Bureau of the Census annual Form MA35U, Vending Machines (Coin-Operated). The survey panel includes all known producers of this type of machine with more than 10 employees (45 companies).

### SUMMARY OF FINDINGS

In 1995, manufacturers' shipments of coin-operated vending machines totaled \$767.0 million, an increase of 10 percent from the 1994 figure of \$698.2 million. Shipments of beverage vending machines increased 20 percent, from \$387.2 million in 1994 to \$464.7 million in 1995. Vending machines for confections and foods decreased 11 percent, from \$239.0 million in 1994 to \$211.6 million in 1995.

### EXPLANATION OF TERMS

#### Hot Beverages

*Instant, freeze-dried, or liquid concentrate coffee.* Hot beverages made by an instant process; i.e., prepared in machine from powdered, freeze-dried or liquid concentrate, with options for chocolate, soup, tea, and decaffeinated coffee.

*Fresh-brew or freeze-dried coffee counter type.* Small, usually counter type vendors, with or without chocolate or hot water options.

*Fresh brew coffee and combinations.* Brewed coffee vendors with optional chocolate, soup, tea, and decaffeinated coffee.

#### Soft Drink

*Canned and bottled beverages (refrigerated).* Canned soft drinks in all sizes and bottled soft drinks in all glass package sizes.

*Cup drink (postmix).* Machines that produce soft drinks by the postmix method; machines may include automatic ice-making equipment.

*Packaged milk.* Milk and flavored milk in paper, plastics, or glass containers; includes all sizes of containers.

*Other vending machines for beverages.* Fruit or vegetable juices in all types of containers and other beverages not included above.

#### Confections and Food Vending Machines

*Bulk confection and charms.* Bulk confections such as candy, peanuts, single-wrapped sticks of gum, ball gum, capsules, and trinkets.

*Bagged snacks and confections.* Glass-front and other vendors selling candy bars, cookies, crackers, and packaged gum, bagged snack, chips, pastry and other confections.

*Ice cream.* Frozen novelties such as cones, bars, sandwiches, and other frozen desserts.

*Multipurpose food.* Refrigerated, frozen, or heated temperature foods in various package sizes and materials.

*Other vending machines for confections and foods.* Machines not classified above such as bulk popcorn and french fries.

#### Other Vending Machines

*Water.* Machines for filtering/treating water for dispensing by bulk into a container.

*Postage stamp.* U.S. postage stamps and other types of stamps.

*All other coin-operated vending machines.* Aspirin, cigars, combs, cosmetics, pencils, paper, newspapers, etc.; includes multipurpose machines for nonfood and nonbeverage items.

Table 19. Value of Shipments Coin-Operated Vending Machines: 1985 to 1994

[Millions of dollars]

Year	MA35U	Annual Survey of Manufactures
1995.....	767.0	(NA)
1994.....	698.2	657.0
1993.....	590.2	609.5
1992.....	592.8	<sup>1</sup> 559.5
1991.....	522.1	478.5
1990.....	524.6	507.0
1989.....	591.8	581.7
1988.....	583.2	558.6
1987.....	521.1	<sup>1</sup> 502.1
1986.....	469.7	454.9
1985.....	451.2	439.6

NA Not available.

<sup>1</sup>Source: Census of Manufactures.

Table 20. Quantity and Value of Shipments of Coin-Operated Vending Machines: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Company count	1995		1994	
			Quantity	Value	Quantity	Value
	Coin-operated vending machines.....	45	783,982	767,006	748,635	698,234
	Beverage vending machines.....	(X)	340,463	464,777	287,390	387,192
	Hot beverage:					
35811 10	Instant, freeze-dried, or liquid concentrate coffee.....	4	2,939	6,279	1,338	2,821
35811 03	Fresh brew or freeze-dried office counter type.....	3	(D)	(D)	(D)	(D)
35811 04	Fresh brew coffee and combinations.....	7	(D)	(D)	(D)	(D)
	Soft drink:					
35811 08	Canned and bottled beverages (refrigerated).....	9	298,491	382,774	251,920	313,976
35811 09	Cup (postmix).....	4	1,706	7,319	1,903	8,730
35811 19	Other vending machines for beverages.....	3	(D)	(D)	(D)	(D)
	Confections and food vending machines.....	(X)	232,949	211,602	255,733	239,022
35811 21	Bulk confections and charms.....	6	128,097	6,681	139,421	8,334
35811 22	Bagged snacks and confections.....	10	88,436	137,752	94,865	143,737
35811 24	Frozen foods and ice cream.....	3	(D)	(D)	(D)	(D)
35811 25	Multipurpose food and confections.....	7	14,990	63,872	18,663	80,968
35811 29	Other vending machines for confections and foods.....	4	(D)	(D)	(D)	(D)
	Other vending machines.....	(X)	210,570	90,627	<sup>1</sup> 205,512	<sup>1</sup> 72,020
35811 31	Cigarettes (single packs only).....	3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
35811 32	Water.....	2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
35811 35	Postage stamp.....	3	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
35811 49	All other vending machines.....	24	<sup>1</sup> 210,570	<sup>1</sup> 90,627	<sup>1</sup> 205,512	<sup>1</sup> 72,020

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Product codes 35811 31, 35811 32, and 35811 35 are combined with product code 35811 49 to avoid disclosing data for individual companies.



Table 21. **Shipments, Exports, Imports, and Apparent Consumption of Coin-Operated Vending Machines: 1995 and 1994**

[Value in millions of dollars]

Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise <sup>1</sup>	Imports for consumption <sup>2 3</sup>	Apparent consumption <sup>4</sup>
<b>1995</b>				
Coin-operated vending machines .....	767.0	155.6	31.8	643.2
<b>1994</b>				
Coin-operated vending machines .....	698.2	132.7	27.8	593.3

<sup>1</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*. Schedule B export numbers for automatic merchandising machines, coin-operated, and new are: 8476.11.0000 and 8476.19.0000.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*. HTSUSA numbers for automatic merchandising machines, coin-operated, new are: 8476.11.0000 and 8476.19.0000.

<sup>3</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

<sup>4</sup>Apparent consumption is derived by subtracting exports from total of manufacturers' shipments plus imports.

## HISTORICAL NOTE

Data on coin-operated vending machines have been collected by the Bureau of the Census since 1955. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## FUNDING

The MA35U survey is funded by the National Automatic Merchandising Association.

## CONTACT FOR DATA USERS

For additional information about these data, contact Joanna T. Q. Nguyen, 301-457-4752.

## MOTORS AND GENERATORS (MA36H)

### INTRODUCTION

These data cover firms engaged in the manufacture of electric motors and generators and engine-driven generator sets in the United States. The statistics were collected by mail on Bureau of the Census annual Form MA36H, Motors and Generators. The survey panel includes all known manufacturers of these products, approximately 261 companies.

### SUMMARY OF FINDINGS

During 1995, the total value of shipments of motors and generators, including interplant transfers, was \$10.4 billion, up 9 percent from the revised 1994 value of \$9.6 billion. The 1995 data for individual categories of motors and generators exhibited the following changes. The value of shipments of fractional horsepower motors increased 11

percent, from \$4.5 billion in 1994 to \$5.0 billion in 1995. The integral horsepower motors and generators increased 6 percent, from \$2.0 billion in 1994 to \$2.1 billion in 1995. The value of land transportation motors and generators was combined with parts for motors and generators to avoid disclosing data for individual companies. The value of shipments of prime mover generator sets increased 5 percent from the 1994 value of \$1.4 billion, to \$1.5 billion in 1995. Electric motor generator sets and other rotating equipment, including hermetics and parts, increased 9 percent to \$1.9 billion in 1995, from the revised data of \$1.8 billion reported in 1994.

### EXPLANATION OF TERMS

For explanation of terms, see "Contact for Data Users" at the end of this subsection.

Table 22. Value of Shipments of Motors and Generators by Product Class: 1986 to 1995

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
3621-36211	Motors and generators . . . . .	10,425.8	9,596.2	9,011.2	8,092.3	7,652.5	7,552.7	7,947.3	7,664.1	6,762.0	6,198.7
36212	Fractional horsepower motors, excluding hermetics. Integral horsepower motors and generators, other than for land transportation equipment . . . . .	4,964.7	4,469.7	4,242.8	4,019.7	3,626.0	3,698.3	4,049.7	3,983.5	3,493.8	3,258.6
36213	Land transportation motors, generators, and control equipment . . . . .	2,064.1	1,951.4	1,695.0	1,568.9	1,670.7	1,568.3	1,573.5	1,477.0	1,249.7	1,191.5
36214	Prime mover generator sets (except steam or hydraulic turbine) . . . . .	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	138.4	202.7	195.4	237.4	190.4	228.6	257.4
	Motor generator sets and other rotating equipment:										
36217	Fractional . . . . .	405.4	413.7	358.6	344.1	325.1	311.4	281.1	250.5	248.7	231.1
36218	Integral . . . . .	536.1	397.7	381.5	394.6	393.3	359.0	342.7	318.7	282.2	275.4
36219	Parts for motors and generators . . . . .	<sup>1</sup> 995.2	<sup>1</sup> 968.1	<sup>1</sup> 1,087.4	539.4	386.6	428.4	464.9	487.8	479.6	195.2

<sup>1</sup>Industry 36213 is combined with industry 36219 to avoid disclosing data for individual companies.

Note: Beginning in 1986, data in this survey are shown in a new format. See "Summary of Findings" for more information.

Table 23. Quantity and Value of Shipments of Motors and Generators: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity <sup>1</sup>	Value	Quantity <sup>1</sup>	Value
3621—	Motors and generators	(NA)	(X)	10,425,793	(X)	'9,596,192
36211 —	Fractional horsepower, excluding hermetics and other rotating equipment	(NA)	310,506	4,964,697	'307,959	'4,469,685
36211 0M	Used in automobile accessories (such as heaters, convertible tops, and automatic windows; excluding starter motors and generators), including ac and dc	14	92,155	1,363,250	65,014	919,903
	Used in aircraft and spacecraft, excluding generators:					
36211 0N	Ac	15	44	18,851	'52	22,835
36211 0P	Dc	18	158	39,809	231	45,432
36211 0T	Used in toys (all sizes) and clock type synch and subsynch timing, ac and dc	8	11,475	59,743	15,070	68,850
	All other uses:					
	Ac (noncommutated)	(NA)	146,194	2,320,303	'154,336	2,309,301
	Single phase or polyphase:					
36211 X2, 3	Less than 746 watts, under 1 hp (three-digit FS)	(NA)	<sup>2</sup> 74	<sup>2</sup> 11,291	(D)	(D)
	Single phase	(NA)	144,266	2,152,672	152,432	2,155,496
	Skeleton type shaded pole	(NA)	37,924	141,842	40,278	145,415
36211 1A	Less than 2.75-inch diameter at widest point	8	<sup>3</sup>	<sup>3</sup>	8,622	41,298
36211 1B	2.75-inch diameter and over	5	<sup>3</sup> 37,924	<sup>3</sup> 141,842	31,656	104,117
	Conventional type shaded pole	(NA)	56,899	554,768	'61,400	'576,879
36211 1C	Less than 2.5-inch diameter:	9	16,349	91,017	19,166	87,240
	2.5- to less than 3.75-inch diameter:					
36211 1D	2 pole	9	11,709	207,420	13,524	'218,092
36211 1Q	4 pole	5	(D)	(D)	'11,580	'106,373
36211 1T	6 pole and over	1	(D)	(D)	(D)	(D)
36211 1F	3.75- to less than 4.375-inch diameter:	4	2,618	33,336	3,117	44,916
	4.375- to less than 5.375-inch diameter:					
36211 1G	2 and 4 pole	6	2,696	34,530	3,053	43,656
36211 1H	6 pole and over	5	8,944	54,115	8,537	56,741
36211 1I	5.375-inch diameter and over	3	(D)	(D)	(D)	(D)
	Permanent split capacitor	(NA)	17,338	438,153	'16,828	'417,113
36211 1J	Less than 2.5-inch diameter:	5	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>
	2.5- to less than 3.75-inch diameter:					
36211 1K	2 pole	9	<sup>4</sup> 1,912	<sup>4</sup> 41,590	<sup>4</sup> '2,083	<sup>4</sup> '40,412
36211 1L	4 pole and over	12	3,155	48,033	'2,812	'41,617
	3.75- to less than 4.375-inch diameter:					
36211 1M	2 pole	4	<sup>5</sup>	<sup>5</sup>	<sup>5</sup>	<sup>5</sup>
36211 1V	4 pole	8	<sup>5</sup>	<sup>5</sup>	<sup>5</sup>	<sup>5</sup>
36211 1W	6 pole and over	4	<sup>5</sup> 1,212	<sup>5</sup> 26,451	<sup>5</sup> '1,150	<sup>5</sup> '25,180
	4.375- to less than 5.375-inch diameter:					
36211 1O	2 pole	4	<sup>6</sup>	<sup>6</sup>	<sup>6</sup>	<sup>6</sup>
36211 1P	4 pole	10	<sup>6</sup> 1,569	<sup>6</sup> 33,451	<sup>6</sup> 1,318	<sup>6</sup> 29,529
36211 1R	6 pole and over	7	1,012	25,593	685	23,510
	5.375- to less than 6-inch diameter:					
36211 1S	Less than 746 watts, under 1 hp (two-digit FS)	11	8,229	243,499	8,527	237,265
36212 1A	746 watts and over, 1 hp and over (two-digit FS)	4	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>
	6-inch diameter and over:					
36211 1U	Less than 746 watts, under 1 hp (two-digit FS)	8	249	19,536	'254	'19,600
36212 1B	746 watts and over, 1 hp and over (two-digit FS)	5	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>
	Capacitor start	(NA)	7,583	264,639	'8,837	'269,741
36211 11	Less than 3.75-inch diameter	5	(D)	(D)	(D)	(D)
36211 14	3.75- to less than 4.375-inch diameter	3	(D)	(D)	(D)	(D)
36211 15	4.375- to less than 5.375-inch diameter	5	(D)	(D)	216	9,628
	5.375- to less than 6-inch diameter:					
36211 16	Less than 746 watts, under 1 hp (two-digit FS)	8	1,561	61,237	1,393	55,971
36212 1C	746 watts and over, 1 hp and over (two-digit FS)	5	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>
	6-inch diameter and over:					
36211 18	Less than 746 watts, under 1 hp (two-digit FS)	8	769	72,431	673	62,896
36212 1D	746 watts and over, 1 hp and over (two-digit FS)	9	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>	<sup>7</sup>

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Motors and Generators: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity <sup>1</sup>	Value	Quantity <sup>1</sup>	Value
3621—	Motor and generators—Con.					
36211—	Fractional horsepower, excluding hermetics and other rotating equipment—Con.					
	All other uses—Con.					
	Ac (noncommutated)—Con.					
	Single phase or polyphase—Con.					
	Single phase—Con.					
	Split phase.....	(NA)	8,525	290,270	(D)	(D)
36211 30	Less than 3.75-inch diameter.....	3	(D)	(D)	(D)	(D)
36211 31	3.75- to less than 5.375-inch diameter.....	6	(D)	(D)	(D)	(D)
	5.375- to less than 6-inch diameter:					
36211 36	Less than 746 watts, under 1 hp (two-digit FS)...	10	(D)	(D)	(D)	(D)
36212 3E	746 watts and over, 1 hp and over (two-digit FS) .	4	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
	6-inch diameter and over:					
36211 38	Less than 746 watts, under 1 hp (two-digit FS)...	8	(D)	(D)	(D)	(D)
36212 3F	746 watts and over, 1 hp and over (two-digit FS) .	3	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
	All other single phase.....	(NA)	15,996	463,000	<sup>1</sup> 16,423	<sup>1</sup> 479,078
36211 41	Less than 6-inch diameter.....	7	(D)	(D)	7,378	219,648
	6-inch diameter and over:					
36211 48	Less than 746 watts, under 1 hp (two-digit FS)...	5	(D)	(D)	9,044,940	259,430
36212 4H	746 watts and over, 1 hp and over (two-digit FS) .	5	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
	Polyphase (servo and nonservo).....	(NA)	1,855	156,340	<sup>1</sup> 1,827	<sup>1</sup> 142,434
36211 55	Synchronous stepper motors.....	8	494	19,874	517	19,774
	All other polyphase:					
36211 56	Servo (induction rotor).....	3	(D)	(D)	(D)	(D)
	Nonservo:					
36211 57	Less than 5.375-inch diameter.....	13	(D)	(D)	(D)	(D)
	5.375- to less than 6-inch diameter:					
36211 5T	Less than 736 watts, under 1 hp (two-digit FS) .	10	561	54,276	534	47,976
36212 5I	746 watts and over, 1 hp and over (two-digit FS).....	6	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
	6-inch diameter and over:					
36211 5V	Less than 746 watts, under 1 hp (two-digit FS) .	10	535	55,502	421	44,210
36212 5J	746 watts and over, 1 hp and over (two-digit FS).....	8	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
	Ac (commutated).....	(NA)	49,949	647,979	<sup>1</sup> 61,982	<sup>1</sup> 599,230
	Mechanically commutated (brushes, for example):					
	Cased or sleeved:					
36211 6E	Less than 2.875-inch diameter.....	20	11,209	124,852	<sup>9</sup> 9,056	<sup>9</sup> 83,288
36211 6F	2.875- to less than 3.188-inch diameter.....	15	7,160	96,900	<sup>7</sup> 7,269	<sup>9</sup> 93,757
36211 6G	3.188- to less than 3.563-inch diameter.....	15	400	19,589	<sup>1</sup> 312	<sup>1</sup> 14,728
	3.563-inch diameter and over:					
36211 6H	Less than 746 watts, under 1 hp (two-digit FS).....	13	319	39,459	276	<sup>1</sup> 32,911
36212 6K	746 watts and over, 1 hp and over (two-digit FS).....	8	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
	Uncased:					
36211 6J	Less than 2.875-inch diameter.....	9	( <sup>10</sup> )	( <sup>10</sup> )	<sup>8</sup> 8,541	<sup>9</sup> 97,107
36211 6K	2.875- to less than 3.188-inch diameter.....	7	<sup>10</sup> 28,884	<sup>10</sup> 319,956	<sup>1</sup> 34,350	223,446
36211 6L	3.188- to less than 3.563-inch diameter.....	1	(D)	(D)	(D)	(D)
36211 6M	3.563- to less than 4.375-inch diameter.....	4	(D)	(D)	(D)	(D)
	4.375-inch diameter and over:					
36211 6N	Less than 746 watts, under 1 hp (two-digit FS).....	2	(D)	(D)	(D)	(D)
36212 6L	746 watts and over, 1 hp and over (two-digit FS)...	1	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
	Dc or universal motors by case size.....	(NA)	10,531	514,762	<sup>1</sup> 11,275	<sup>1</sup> 504,134
	By case diameter:					
36211 6C	Less than 4-inch diameter.....	(S)	(S)	(S)	( <sup>1</sup> S)	( <sup>1</sup> S)
36211 6D	4-inch diameter and over.....	(S)	(S)	(S)	( <sup>1</sup> S)	( <sup>1</sup> S)
	Permanent magnet (brushless):					
	Servo:					
36211 8E	Less than 4-inch diameter.....	17	1,160	112,100	<sup>1</sup> 1,304	<sup>1</sup> 111,767
36211 8H	4-inch diameter and over.....	12	91	40,120	77	33,281
	Nonservo:					
36211 8D	Less than 4-inch diameter.....	24	7,012	141,822	<sup>7</sup> 7,433	<sup>1</sup> 142,260
36211 8K	4-inch diameter and over.....	12	309	44,357	332	<sup>1</sup> 45,921
36211 8P	Wound field.....	13	120	17,846	434	15,858
36211 88	Electronically commutated.....	8	1,574	98,659	<sup>1</sup> 1,477	99,382
	All other:					
36211 89	Servo.....	10	206	48,960	<sup>1</sup> 160	<sup>1</sup> 45,984
36211 96	Nonservo.....	4	59	10,898	58	9,681

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Motors and Generators: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity <sup>1</sup>	Value	Quantity <sup>1</sup>	Value
3621—	Motors and generators—Con.					
36212 —	Integral horsepower, excluding hermetics and other rotating equipment	(NA)	9,320,605	2,064,107	<sup>9</sup> 9,623,638	<sup>1</sup> 1,951,441
36212 04	Used in aircraft and spacecraft, excluding generators	5	12,344	27,876	<sup>1</sup> 11,558	<sup>1</sup> 27,920
	All other uses:					
	Ac (noncommutated)	(NA)	4,556,658	1,430,300	<sup>4</sup> 4,563,020	<sup>1</sup> 1,331,863
	Motors (single, polyphase induction, and synchronous):					
	Single phase	(NA)	1,885,705	170,145	<sup>1</sup> 1,816,331	<sup>1</sup> 163,967
36211 1W	Less than 746 watts, under 1 hp (three-digit FS)	3	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>
36212 12	746 watts and over, 1 hp and over (three-digit FS)	10	256,956	52,502	296,077	56,459
36212 X4	746 watts and over, 1 hp and over (two-digit FS)	(NA)	<sup>7</sup> 1,628,749	<sup>7</sup> 117,643	<sup>7</sup> 1,520,254	<sup>7</sup> 107,508
	Polyphase induction, excluding synchronous	(NA)	2,667,531	1,233,794	<sup>2</sup> 2,742,507	<sup>1</sup> 1,134,555
	All motors, including Energy Efficient (EE):					
36211 1X	Less than 0.746 watts, less than 1 hp (three-digit FS)	5	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>
36212 X5	746 watts and over, 1 hp and over (two-digit FS)	(NA)	<sup>8</sup> 982,262	<sup>8</sup> 120,167	<sup>8</sup> 1,230,134	<sup>8</sup> 133,559
36212 15	0.746 to 3.371 kW, 1 through 5 hp	17	846,833	158,181	<sup>7</sup> 764,720	<sup>1</sup> 144,461
36212 16	3.731 to less than 14.921 kW, greater than 5 through 20 hp	19	571,519	196,226	507,336	179,180
36212 17	14.921 to less than 37.301 kW, greater than 20 through 50 hp	16	155,130	152,612	141,644	141,135
36212 18	37.301 to less than 74.601 kW, greater than 50 through 100 hp	17	52,911	113,926	50,277	<sup>1</sup> 107,148
36212 19	74.601 to less than 149.201 kW, greater than 100 through 200 hp	17	32,160	132,257	27,839	120,557
36212 20	149.601 kW to less than 373.001 kW, greater than 200 through 500 hp	18	21,798	208,145	15,954	168,782
36212 27	373.001 to less than 746.001, greater than 500 through 1,000 hp	11	2,329	61,779	2,047	52,064
36212 28	746.001 to less than 1865.001 kW, greater than 1,000 through 2,500 hp	7	2,403	69,766	2,339	66,283
36212 29	1,865.001 kW and over, greater than 2,500 hp	6	186	20,735	217	21,386
	Energy efficient motors, included in product codes 36212 15 to 36212 19	(NA)	339,712	212,954	<sup>3</sup> 311,509	<sup>1</sup> 178,114
36212 2K	0.746 to 3.371 kW, 1 through 5 hp	7	157,542	29,099	<sup>1</sup> 145,811	<sup>1</sup> 27,575
36212 2L	3.731 to less than 14.921 kW, greater than 5 through 20 hp	8	108,037	39,096	<sup>1</sup> 103,198	<sup>1</sup> 37,199
36212 2M	14.921 to less than 37.301 kW, greater than 20 through 50 hp	8	43,502	48,375	37,741	42,078
36212 2N	37.301 to less than 74.601 kW, greater than 50 through 100 hp	8	20,159	45,125	16,556	34,173
36212 2P	74.601 to less than 149.201 kW, greater than 100 through 200 hp	8	10,472	51,259	8,203	37,089
36212 30	Synchronous (servo and nonservo)	6	3,422	26,361	<sup>4</sup> 4,182	<sup>1</sup> 33,341
	Ac generators (for internal combustion engines)	(NA)	99,255	241,105	<sup>1</sup> 100,099	<sup>2</sup> 248,064
36212 33	Less than 5 kVA	5	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>
36212 38	5 to less than 15 kVA	9	<sup>11</sup> 47,334	<sup>11</sup> 29,236	<sup>11</sup> 46,099	<sup>11</sup> 27,112
36212 40	15 to less than 75 kVA	8	<sup>(12)</sup>	<sup>(12)</sup>	<sup>1</sup> 24,937	<sup>1</sup> 30,559
36212 50	75 to less than 375 kVA	8	<sup>12</sup> 39,739	<sup>12</sup> 79,178	<sup>1</sup> 17,442	<sup>1</sup> 54,247
36212 51	375 to less than 750 kVA	7	7,944	45,698	<sup>8</sup> 8,067	<sup>4</sup> 49,213
36212 55	750 kVA and over	4	4,238	86,993	3,554	86,933
	Dc motors and generators, excluding all arc welding and battery charging generators for internal combustion engines	(NA)	4,652,348	364,826	<sup>1</sup> 4,948,961	<sup>1</sup> 343,594
36212 70	0.746 to less than 3.375 kW, 1 through 5 hp	12	4,458,629	164,717	4,777,832	<sup>1</sup> 155,806
36212 X6	746 watts and over, 1 hp and over (two-digit FS)	(NA)	<sup>9</sup> 110,908	<sup>9</sup> 49,313	<sup>9</sup> 89,067	<sup>9</sup> 32,503
36212 72	3.375 to less than 74.601 kW, 5 through 100 hp	9	79,229	73,989	<sup>7</sup> 76,782	57,823
36212 74	74.601 kW and over, greater than 100 hp	6	3,582	76,807	5,280	97,462
36213 —	Motors and generators for land transportation, including those used in associated control equipment	9	(S)	( <sup>13</sup> )	(S)	( <sup>13</sup> )
36214 —	Prime mover generator sets (except steam or hydraulic turbine and electric motor-driven generator sets)	(NA)	508,424	1,460,333	<sup>1</sup> 481,654	<sup>1</sup> 1,395,550
	Gas/gasoline engine-driven generator sets, ac and dc output	(NA)	449,761	404,185	<sup>1</sup> 427,365	<sup>1</sup> 420,573
36214 03	Under 1.5 kVA	3	<sup>(14)</sup>	<sup>(14)</sup>	<sup>(14)</sup>	<sup>(14)</sup>
36214 04	1.5 to less than 5 kVA	16	<sup>14</sup> 319,759	<sup>14</sup> 169,177	<sup>14</sup> 270,721	<sup>14</sup> 152,726
36214 05	5 to less than 15 kVA	21	119,235	132,713	<sup>1</sup> 137,029	<sup>1</sup> 138,149
36214 07	15 to less than 50 kVA	15	6,560	39,539	6,109	36,374
36214 08	50 to less than 100 kVA	12	3,452	24,780	11,807	32,615

See footnotes at end of table.

Table 23. Quantity and Value of Shipments of Motors and Generators: 1995 and 1994—Con.

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity <sup>1</sup>	Value	Quantity <sup>1</sup>	Value
3621—	Motors and generators—Con.					
36214 —	Prime mover generator sets (except steam or hydraulic turbine and electric motor-driven generator sets)—Con.					
	Gas/gasoline engine-driven generators, ac and dc output—Con.					
36214 10	100 to less than 500 kVA .....	9	( <sup>15</sup> )	( <sup>15</sup> )	( <sup>15</sup> )	( <sup>15</sup> )
36214 12	500 to less than 1,000 kVA .....	1	( <sup>15</sup> )	( <sup>15</sup> )	( <sup>15</sup> )	( <sup>15</sup> )
36214 13	1,000 kVA and over .....	1	<sup>15</sup> 755	<sup>15</sup> 37,976	<sup>15</sup> 1,699	<sup>15</sup> 60,709
	Diesel engine-driven generator sets, ac and dc output .....	(NA)	58,663	1,056,148	<sup>15</sup> 54,289	<sup>15</sup> 974,977
36214 41	Under 15 kVA .....	22	17,362	87,413	<sup>15</sup> 19,511	<sup>15</sup> 87,850
36214 42	15 to less than 50 kVA .....	28	8,184	67,841	<sup>15</sup> 7,509	<sup>15</sup> 60,736
36214 43	50 to less than 100 kVA .....	24	8,768	83,548	<sup>15</sup> 5,693	<sup>15</sup> 65,790
36214 44	100 to less than 200 kVA .....	20	8,782	105,924	<sup>15</sup> 7,754	<sup>15</sup> 94,322
36214 45	200 to less than 400 kVA .....	19	8,055	176,224	<sup>15</sup> 7,099	<sup>15</sup> 167,621
36214 46	400 to less than 600 kVA .....	16	3,411	81,852	<sup>15</sup> 1,690	<sup>15</sup> 66,209
36214 47	600 to less than 800 kVA .....	15	872	60,322	( <sup>16</sup> )	( <sup>16</sup> )
36214 48	800 to less than 1,000 kVA .....	11	857	67,265	( <sup>16</sup> )	( <sup>16</sup> )
36214 49	1,000 to less than 2,000 kVA .....	15	( <sup>17</sup> )	( <sup>17</sup> )	( <sup>16</sup> )	( <sup>16</sup> )
36214 50	2,000 to less than 3,000 kVA .....	2	( <sup>17</sup> )	( <sup>17</sup> )	( <sup>16</sup> )	( <sup>16</sup> )
36214 51	3,000 kVA and over .....	3	<sup>17</sup> 2,372	<sup>17</sup> 325,759	<sup>16</sup> 5,033	<sup>16</sup> 432,449
	Dual fuel (oil and gas) engine-driven generator sets, ac and dc output:					
36214 52	Under 2,000 kVA .....	(S)	(S)	(S)	(S)	(S)
36214 53	2,000 kVA and over .....	(S)	(S)	(S)	(S)	(S)
36214 75	Other generator set units, excluding electric motor-driven generator sets .....	(S)	(S)	(S)	(S)	(S)
36217, 8	Electric motor-driven generator sets .....	(NA)	28,583,902	941,488	<sup>16</sup> 22,223,796	<sup>16</sup> 811,428
	Electric motor-driven generator sets, including dynamotors, converters, inverters, and frequency changers:					
36218 11	Synchro converters and double current generators, 746 watts or more .....	2	(D)	(D)	(D)	(D)
	Other motor generator sets:					
36217 21	Ac and dc output rated at less than 746 watts .....	5	9,671	3,273	7,955	2,751
	Ac and dc output rated at 746 watts or more:					
36218 30	Ac output, based on the rating of the largest ac generator .....	9	( <sup>18</sup> )	( <sup>18</sup> )	<sup>18</sup> 4,295	<sup>18</sup> 19,395
36218 40	Dc output, based on the rating of the largest dc generator .....	4	<sup>18</sup> 5,255	<sup>18</sup> 22,123	2,902	13,073
	Other rotating equipment:					
36217 53	Rate generators, resolvers, and combinations (less than 746 watts) .....	10	( <sup>19</sup> )	( <sup>19</sup> )	( <sup>19</sup> )	( <sup>19</sup> )
36217 57	Synchro-type components, less than 746 watts .....	5	<sup>19</sup> 647,518	<sup>19</sup> 113,257	<sup>19</sup> 884,239	<sup>19</sup> 112,805
	All hermetic motors:					
36217 97	5.5-inch stator core diameters, and smaller .....	6	11,132	275,440	11,448	272,293
36218 97	Over 5.5-inch stator core diameters .....	9	16,713	470,055	9,756	316,624
	All other rotating equipment:					
36217 98	Rated at less than 746 watts .....	7	56	13,422	101	25,840
36218 98	Rated at 746 watts or more .....	11	(D)	(D)	(D)	(D)
36219 —	Parts for motors and generators regardless of output rating .....	(NA)	(X)	<sup>13</sup> <sup>20</sup> 995,168	(X)	<sup>13</sup> <sup>20</sup> 968,088
36219 90	Commutators .....	12	(X)	( <sup>20</sup> )	(X)	( <sup>20</sup> )
36219 59	Land transportation .....	6	(X)	( <sup>20</sup> )	(X)	( <sup>20</sup> )
36219 95	All other parts .....	61	(X)	( <sup>20</sup> )	(X)	( <sup>20</sup> )

D Withheld to avoid disclosing data for individual companies. FS Frame size. NA Not available. <sup>1</sup>Revised by 5 percent or more from previously published data. S Does not meet publication standards. X Not applicable.

<sup>1</sup>Unit of measure shown for "Fractional horsepower, excluding hermetics and other rotating equipment," is in thousands of units and "Integral horsepower, excluding hermetics and other rotating equipment," is in number of units.

<sup>2</sup>Data were included in product code 36211 X2, 3.

<sup>3</sup>For 1995, product code 36211 1A is included with product code 36211 1B to avoid disclosing data for individual companies.

<sup>4</sup>Product codes 36211 1J and 36211 1K are combined to avoid disclosing data for individual companies.

<sup>5</sup>Product codes 36211 1M, 36211 1V, and 36211 1W are combined to avoid disclosing data for individual companies.

<sup>6</sup>Product codes 36211 1O and 36211 1P are combined to avoid disclosing data for individual companies.

<sup>7</sup>Data are included in product code 36212 X4.

<sup>8</sup>Data are included in product code 36212 X5.

<sup>9</sup>Data are included in product code 36212 X6.

<sup>10</sup>For 1995, product code 36211 6J is included with product code 36211 6K to avoid disclosing data for individual companies.

<sup>11</sup>Product codes 36212 33 and 36212 38 are combined to avoid disclosing data for individual companies.

<sup>12</sup>For 1995, product code 36212 40 is included with product code 36212 50 to avoid disclosing data for individual companies.

Table 23. Quantity and Value of Shipments of Motors and Generators: 1995 and 1994—Con.

- <sup>13</sup>Industries 36213 and 36219 are combined to avoid disclosing data for individual companies.
- <sup>14</sup>Product codes 36214 03 and 36214 04 are combined to avoid disclosing data for individual companies.
- <sup>15</sup>Product codes 36214 10, 36214 12, and 36214 13 are combined to avoid disclosing data for individual companies.
- <sup>16</sup>For 1994, product codes 36214 47, 48, 49, 50, and 51 are combined to avoid disclosing data for individual companies.
- <sup>17</sup>For 1995, product codes 36214 49, 50, and 51 are combined to avoid disclosing data for individual companies.
- <sup>18</sup>For 1995, product code 36218 30 is included with product code 36218 40 to avoid disclosing data for individual companies.
- <sup>19</sup>Product codes 36217 53 and 36217 57 are combined to avoid disclosing data for individual companies.
- <sup>20</sup>Product codes 36219 90, 36219 59, and 36219 95 are combined with industry 36219 to avoid disclosing data for individual companies.

Table 24. Quantity and Value of Total Shipments and Interplant Transfers of Motors and Generators and Quantity of Motors and Generators Produced and Incorporated Into Other Products at the Same Establishment: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Total shipments, including interplant transfers		Interplant transfers		Produced and incorporated (quantity)
		Quantity	Value	Quantity	Value	
<b>1995</b>						
3621—	Motors and generators:					
36211 —	Fractional horsepower motors, excluding hermetics . . . . .	310,506	4,964,697	28,961	284,289	35,747
36212 —	Integral horsepower motors and generators, excluding hermetics . . . . .	9,320,605	2,064,107	5,154,872	93,743	1,336,234
	Alternating current:					
36212 00	Polyphase, induction greater than 1 hp . . . . .	1,685,269	1,113,627	12	24,490	10
36212 XX	Other . . . . .	982,262	120,167	-	-	-
36213 —	Motors and generators for land transportation equipment . . . . .	(X)	( <sup>1</sup> )	(X)	( <sup>1</sup> )	(X)
36214 —	Prime mover generator sets (except steam and hydraulic turbine) . . . . .	508	1,460,333	(D)	(D)	(D)
36217 —	Electric motor generator sets and other rotating equipment, including hermetics with power rating less than 746 watts . . . . .	11,845,343	405,392	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36218 —	Electric motor generator sets and other rotating equipment, including hermetics with a power rating of 746 watts or more . . . . .	16,738,559	536,096	<sup>2</sup> 10,829,047	<sup>2</sup> 132,885	<sup>2</sup> 30
36219 —	Parts for motors and generators . . . . .	(X)	<sup>1</sup> 995,168	(X)	<sup>1</sup> 77,638	(X)
<b>1994</b>						
3621—	Motors and generators:					
36211 —	Fractional horsepower motors, excluding hermetics . . . . .	<sup>1</sup> 307,959	<sup>1</sup> 4,469,685	<sup>1</sup> 67,825	754,210	33,052
36212 —	Integral horsepower motors and generators, excluding hermetics . . . . .	<sup>1</sup> 9,623,638	<sup>1</sup> 1,951,441	5,847,214	<sup>1</sup> 110,961	<sup>1</sup> 1,446,573
	Alternating current:					
36212 00	Polyphase, induction greater than 1 hp . . . . .	<sup>1</sup> 1,512,373	<sup>1</sup> 1,000,996	<sup>1</sup> 47,816	<sup>1</sup> 31,411	<sup>1</sup> 9,983
36212 XX	Other . . . . .	1,230,134	133,559	-	-	-
36213 —	Motors and generators for land transportation equipment . . . . .	(X)	( <sup>1</sup> )	(X)	( <sup>1</sup> )	(X)
36214 —	Prime mover generator sets (except steam and hydraulic turbine) . . . . .	452	1,424,435	(D)	(D)	(D)
36217 —	Electric motor generator sets and other rotating equipment, including hermetics with power rating less than 746 watts . . . . .	(X)	413,689	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
36218 —	Electric motor generator sets and other rotating equipment, including hermetics with a power rating of 746 watts or more . . . . .	(X)	387,557	<sup>2</sup> 10,027,116	<sup>2</sup> 111,297	<sup>2</sup> 30
36219 —	Parts for motors and generators . . . . .	(X)	<sup>1</sup> 968,088	(X)	<sup>1</sup> 87,706	(X)

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

- <sup>1</sup>Industries 36213 and 36219 are combined to avoid disclosing data for individual companies.
- <sup>2</sup>For 1995 and 1994, interplant transfers for industries 36217 and 36218 are combined to avoid disclosing data for individual companies.

Table 25. Shipments, Exports, Imports, and Apparent Consumption of Motors and Generators: 1995 and 1994

[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup> (value at port)	Imports for consumption <sup>2</sup> (value)
		Quantity	Value f.o.b. plant		
<b>1995</b>					
36211 —	Fractional horsepower motors and generators (except hermetics) .....	310,506	4,964,697	466,932	1,710,795
36212 —	Integral horsepower motors and generators .....	9,321	2,064,107	588,900	801,300
36213 —	Motors and generators for land transportation .....	(X)	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36214 —	Prime mover generator sets (except steam or hydraulic and electric motor driven):				
	Gas/gasoline driven:				
	Less than 5 kVA (36214 03, 04) .....	320	169,177	( <sup>4</sup> )	( <sup>4</sup> )
	5 kVA and over (36214 05 to 08) .....	129	197,032	<sup>4</sup> 40,730	<sup>4</sup> 81,949
	Diesel engine-driven:				
	Less than 400 kVA (36214 41 to 45) .....	51	520,950	( <sup>5</sup> )	( <sup>5</sup> )
	400 kVA to less than 1,000 kVA (36214 46 to 48) .....	5	209,439	( <sup>5</sup> )	( <sup>5</sup> )
	1,000 kVA and over (36214 49 to 51) .....	2	325,759	<sup>5</sup> 738,801	<sup>5</sup> 53,613
	Other (36214 to 75) .....	(D)	(D)	396,364	45,651
36217, 8	Electric motor-driven generator sets, hermetics, and other rotating equipment:				
	Synchronous converters, double current generators, and electric motor-driven generator sets (36217 21, 36218 11 to 40) .....	15	25,396	( <sup>6</sup> )	( <sup>6</sup> )
	Hermetic motors (36217 97, 36218 97) .....	28	745,495	( <sup>6</sup> )	( <sup>6</sup> )
	Other rotating equipment (36217 53, 57, 98, 36218 98) .....	648	126,679	<sup>6</sup> 10,388	<sup>6</sup> 4,869
36219 —	Parts for all electric motors and generators (36219 59 to 95) .....	(X)	<sup>3</sup> 995,168	<sup>3</sup> 714,321	<sup>3</sup> 281,692
<b>1994</b>					
36211 —	Fractional horsepower motors and generators (except hermetics) .....	<sup>1</sup> 307,959	<sup>1</sup> 4,469,685	443,276	1,595,692
36212 —	Integral horsepower motors and generators .....	<sup>9</sup> 624	<sup>1</sup> 1,951,441	465,742	676,515
36213 —	Motors and generators for land transportation .....	(X)	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
36214 —	Prime mover generator sets (except steam or hydraulic and electric motor driven):				
	Gas/gasoline driven:				
	Less than 5 kVA (36214 03, 04) .....	<sup>1</sup> 272	<sup>1</sup> 152,726	( <sup>4</sup> )	( <sup>4</sup> )
	5 kVA and over (36214 05 to 08) .....	<sup>1</sup> 155	<sup>1</sup> 207,138	<sup>4</sup> 40,137	<sup>4</sup> 84,497
	Diesel engine-driven:				
	Less than 400 kVA (36214 41 to 45) .....	71	576,921	( <sup>5</sup> )	( <sup>5</sup> )
	400 kVA to less than 1,000 kVA (36214 46 to 48) .....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
	1,000 kVA and over (36214 49 to 51) .....	<sup>7</sup>	<sup>7</sup> 498,658	<sup>5</sup> 528,465	<sup>5</sup> 44,119
	Other (36214 to 75) .....	(D)	(D)	430,386	60,401
36217, 8	Electric motor-driven generator sets, hermetics, and other rotating equipment:				
	Synchronous converters, double current generators, and electric motor-driven generator sets (36217 21, 36218 11 to 40) .....	<sup>1</sup> 15	<sup>1</sup> 35,219	( <sup>6</sup> )	( <sup>6</sup> )
	Hermetic motors (36217 97, 36218 97) .....	<sup>1</sup> 21,204	588,917	( <sup>6</sup> )	( <sup>6</sup> )
	Other rotating equipment (36217 53, 57, 98, 36218 98) .....	884	<sup>1</sup> 112,805	<sup>6</sup> 9,788	<sup>6</sup> 5,465
36219 —	Parts for all electric motors and generators (36219 59 to 95) .....	(X)	<sup>3</sup> <sup>1</sup> 968,088	<sup>3</sup> 658,800	<sup>3</sup> 532,092

D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Source: Bureau of the Census Report, EM 545, *U.S. Exports*.<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.<sup>3</sup>"Motors and generators for land transportation" and "Parts for all electric motors and generators" are combined to avoid disclosing data for individual companies.<sup>4</sup>Exports and imports for "Gas/gasoline driven, less than 5 kVA" and "Gas/gasoline driven, 5 kVA and over" are combined to avoid disclosing data for individual companies.<sup>5</sup>Exports and imports for "Diesel engine-driven, less than 400 kVA," "Diesel engine-driven, 400 kVA to less than 1,000 kVA," and "1,000 kVA and over" are combined to avoid disclosing data for individual companies.<sup>6</sup>Exports and imports for "Synchronous converters, double current generators, and electric motor-driven generator sets," "Hermetic motors," and "Other rotating equipment" are combined to avoid disclosing data for individual companies.<sup>7</sup>For 1994, manufacturers' shipments for "Diesel engine-driven, 400 kVA to less than 1,000 kVA," and "1,000 kVA and over" are combined to avoid disclosing data for individual companies.

Note: Beginning in 1989, data for exports and imports were classified under a new harmonized system for better comparability.



**HISTORICAL NOTE**

Data on motors and generators have been collected by the Bureau of the Census since 1960. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Wanda Sledd, 301-457-4790.

## Chapter 10. Heavy Machinery

### FARM MACHINERY AND LAWN AND GARDEN EQUIPMENT (MA35A)

#### INTRODUCTION

These data cover firms engaged in the manufacture of farm machinery and lawn and garden equipment. Very small firms (generally less than five employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies are excluded.

The statistics were collected by mail on Bureau of the Census annual Form MA35A, Farm Machinery and Lawn and Garden Equipment. The survey panel includes all known producers of these products, except the very small firms excluded from the scope of the survey. Approximately 751 companies are included. No estimate is derived for the small firms excluded from the survey.

#### SUMMARY OF FINDINGS

During 1995, factory shipments of farm machinery and equipment, including parts and attachments, produced by original equipment manufactures (OEM), totaled \$10,089.0 million, an increase of 7 percent from 1994 shipments of \$9,417.0 million. Shipments of plows and parts increased 1 percent from \$144.7 million in 1994 to \$146.2 million in 1995. The value of shipments for harvesting machinery increased 20 percent, from \$2,201.4 million to \$2,663.2 million in 1995. Haying machinery and parts decreased 8 percent from \$784.6 million in 1994 to \$728.3 million in 1995. Shipments of farm dairy machines, sprayers and dusters, and farm elevators and farm blowers increased 8 percent, from \$709.0 in 1994 to \$766.2 in 1995.

The value of shipments for commercial turf and ground equipment, attachments and parts, was \$1,102.2 million in 1995, an 8-percent increase, from \$1,022.0 million reported for 1994. The 1995 total included commercial turf and grounds mowing equipment, \$881.2 million, an increase of 10 percent, from \$801.0 million in 1994. Other commercial turf and grounds care equipment remain unchanged from \$221.0 million in 1994 to \$221.0 million in 1995.

The value of shipments of consumer lawn, garden, and snow equipment, including parts and attachments, was \$5,869.0 million in 1995, a 2-percent increase from \$5,750.2

million in 1994. The 1995 value of consumer nonriding lawn, garden, and snow equipment increased 3 percent to \$2,748.0 million, from \$2,677.1 million in 1994. The value of consumer riding lawn, garden, and snow equipment increased 6 percent from \$2,216.0 million in 1994 to \$2,359.4 million in 1995.

#### EXPLANATION OF TERMS

**Net engine horsepower.** Net engine horsepower (nehp) is defined as net fly wheel performance as measured by the manufacturer, with all standard accessories operated, and corrected to 29.38 inches mercury Hg and temperature of 85° Fahrenheit.

**Lawn tractors and riding mowers.** A self-propelled riding vehicle, generally designed for cutting grass, that is not capable of pulling a plow.

**Garden tractors.** A self-propelled riding vehicle designed for general-purpose lawn and garden work. This vehicle is capable of pulling a plow. All attachments for garden tractors are removable.

**Turf tractors.** A self-propelled riding vehicle, typified by a low center of gravity, equipped with wide turf-tread tires.

**Parts for farm machinery and equipment.** Parts are manufactured components essential to the completeness and proper operation of a machine, vehicle, or apparatus. Parts data include only parts sold for replacement and repair. Parts sold to manufacturers for incorporation in their own products are excluded.

**Attachments for farm machinery and equipment.** Attachments are supplementary devices designed to be attached to a vehicle or apparatus. These supplementary devices either (1) vary or extend the function of the basic unit or (2) add to the convenience or effectiveness of the basic unit.

Table 1. Value of Shipments of Farm Machinery and Lawn and Garden Equipment by Type of Equipment: 1986 to 1995

[Value in millions of dollars]

Product description <sup>1</sup>	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
Wheel tractors, farm-type.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	958.6	893.4
Farm dairy machines, sprayers, dusters, elevators, and farm blowers .....	766.2	709.0	588.7	469.9	449.2	516.0	478.2	434.8	364.7	371.7
Planting, seeding, and fertilizing machinery .....	833.1	949.1	802.3	634.1	601.0	676.2	638.2	508.6	409.1	371.2
Harvesting machinery .....	2,663.2	2,201.4	2,027.6	1,863.7	2,158.0	2,302.5	1,858.8	1,422.8	1,282.3	1,230.1
Haying machinery .....	728.3	784.6	622.8	558.2	659.1	875.1	731.1	574.6	433.7	383.4
Plows and listers .....	146.2	144.7	124.3	107.4	119.6	136.0	130.8	117.7	74.6	75.3
Harrows, rollers, pulverizers, and similar equipment .....	176.0	181.0	289.4	273.4	321.6	212.4	207.8	136.9	99.9	99.2
All other farm machinery and equipment <sup>3</sup> .....	<sup>2</sup> 4,584.0	<sup>2</sup> 4,293.2	<sup>2</sup> 3,679.9	<sup>2</sup> 3,327.8	<sup>2</sup> 3,397.2	<sup>2</sup> 4,091.1	<sup>2</sup> 3,586.6	<sup>2</sup> 3,002.8	1,186.5	933.1
Commercial turf and grounds care equipment .....	1,102.2	1,022.0	882.8	781.8	724.8	707.9	633.9	595.0	514.6	412.8
Lawn and garden equipment.....	5,869.0	5,750.2	4,763.2	4,251.7	3,972.9	4,101.8	3,708.5	3,937.0	3,979.9	3,385.8

<sup>1</sup>Each type of farm machinery includes parts and attachments.<sup>2</sup>"Wheel tractors, farm-type" are included with "All other farm machinery and equipment" for years 1988 through 1995 to avoid disclosing data for individual companies.<sup>3</sup>Includes irrigation systems.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 1995 and 1994**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35231 —	Wheel tractors (except contractors' off-highway wheel tractors, garden tractors, turf tractors, and motor tillers) and attachments.....	18	(X)	( <sup>1</sup> )	(X)	( <sup>1</sup> )
	Wheel tractors, farm-type (power take-off (PTO) hp).....	(NA)	(D)	(D)	(D)	(D)
35231 01	2-wheel drive, including front wheel assist types.....	6	(D)	(D)	(D)	(D)
35231 30	4-wheel drive, including tractors with equal size tires, front and rear.....	6	5,319	499,998	4,370	407,408
35231 87	Attachments for wheel tractors, farm-type.....	11	(X)	33,078	(X)	<sup>1</sup> 35,064
35239 26	Parts for wheel tractors, farm-type.....	12	(X)	265,702	(X)	290,520
35232 —	Farm dairy machines, sprayers, dusters, elevators, and farm blowers.....	(NA)	(X)	654,868	(X)	595,792
35232 pt.	Farm dairy machines and equipment.....	14	(X)	83,186	(X)	81,110
	Mechanical installations:					
35232 04	Milking machines, complete, suspended and floor-type bucket, single and double units.....	3	(D)	(D)	(D)	(D)
35232 08	Pipeline milking units, complete, including claws, shells, inflations, and air tubes, with or without pulsator.....	7	(D)	(D)	(D)	(D)
35232 13	Other farm dairy machines and equipment.....	15	<sup>a</sup> 27,587	<sup>a</sup> 23,593	29,984	23,368
35232 16	Attachments for farm dairy machines and equipment.....	6	(X)	(D)	(X)	(D)
35239 30	Parts for farm dairy machines and equipment, replacement units only.....	12	(X)	<sup>a</sup> 26,740	(X)	24,899
35232 pt.	Sprayers and dusters.....	78	(X)	511,944	(X)	445,952
	Power sprayers, field and row crop types only:					
35232 19	Self-propelled.....	15	4,533	306,634	<sup>1</sup> 4,170	<sup>1</sup> 257,057
35232 30	Tractor mounted.....	28	7,235	16,752	6,282	9,980
	Other than tractor mounted:					
35232 40	Power take-off driven, piston pump type.....	10	689	4,060	943	3,625
35232 45	Nonpiston pump type.....	15	2,366	8,707	<sup>2</sup> 2,625	<sup>1</sup> 7,975
35232 48	Other power sprayers, over 4 g.p.m.....	11	2,406	3,553	1,380	6,258
	Power sprayers, other than row crop and field types, over 4 g.p.m.:					
35232 47	Power take-off driven.....	13	1,539	<sup>b</sup> 5,012	1,960	<sup>b</sup> 7,436
35232 49	Engine-driven.....	16	<sup>a</sup> 4,407	<sup>c</sup> 8,309	<sup>1</sup> 4,647	<sup>b</sup> 8,275
35235 50	Air carried type power sprayers (field, row crop, and orchard types).....	8	483	4,445	<sup>1</sup> 684	<sup>1</sup> 4,392
35235 51	Foggers and mist sprayers, portable.....	7	<sup>b</sup> 16,410	<sup>b</sup> 5,961	21,843	8,393
35232 58	Hand-pulled and garden-type 4 g.p.m. and under.....	16	47,371	8,340	51,091	9,079
	Sprayers, agricultural hand:					
35232 59	Under 1 gallon.....	4	537,929	2,947	428,565	2,597
	1 gallon and over:					
35232 61	Compressed air or gas.....	6	8,244,802	105,012	6,134,795	94,820
35232 62	Other, including knapsack, hose end, and flame sprayers, and sprayer pumps.....	9	5,835,190	9,212	4,391,462	8,030
35232 67	Dusters, power, and hand, all types.....	6	91,073	1,298	100,597	<sup>1</sup> 1,150
35232 68	All other sprayers.....	12	(X)	5,749	(X)	<sup>a</sup> 3,326
35232 69	Attachments for sprayers and dusters.....	23	(X)	15,953	(X)	<sup>1</sup> 13,559
35239 35	Parts for sprayers and dusters, replacement units only.....	47	(X)	75,387	(X)	<sup>1</sup> 75,594
35232 pt.	Farm elevators and blowers.....	44	(X)	59,738	(X)	68,730
	Farm elevators, portable:					
35232 70	Single and double chain.....	11	<sup>a</sup> 1,372	4,114	<sup>a</sup> 2,038	<sup>a</sup> <sup>1</sup> 4,708
35232 72	Auger type.....	12	12,215	19,233	<sup>a</sup> 15,380	<sup>b</sup> 25,751
35232 73	Other farm portable and stationary augers and elevators.....	16	35,895	19,547	<sup>1</sup> 32,005	21,431
35232 74	Other farm blowers, including forage blowers, and combination grain and forage blowers.....	7	2,098	7,225	2,306	7,035
35232 75	Attachments for farm elevators and blowers.....	15	(X)	<sup>a</sup> 9,619	(X)	9,805
35239 40	Parts for farm elevators and for grain and forage blowers, replacement units only.....	25	(X)	<sup>a</sup> 9,175	(X)	<sup>a</sup> 12,237
35233 —	Planting, seeding, and fertilizing machinery.....	131	(X)	723,975	(X)	833,942
35233 21	Corn planters, corn and cotton planters, and lister planters, pull type and mounted (total rows mounted).....	10	56,979	180,507	49,409	189,132
35233 24	Grain drills (fixed frame), all types.....	12	8,889	136,670	(D)	(D)
35233 40	Transplanters (pull-type or mounted) and broadcast seeders (end-gate, mounted and drawn).....	8	12,789	6,280	13,513	5,833
	Fertilizer distributors (pull-type or mounted):					
35233 50	Dry, including lime spreaders.....	33	<sup>a</sup> 5,377	31,574	<sup>a</sup> 5,890	32,114
35233 57	Liquid and anhydrous ammonia.....	20	<sup>b</sup> 7,547	27,959	6,833	25,125

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
35233 —	Planting, seeding, and fertilizing machinery—Con.					
35233 61	Manure spreaders, rear discharge .....	19	5,494	32,347	8,359	49,413
35233 65	Manure spreaders, side discharge .....	8	2,447	22,060	2,782	22,120
35233 69	Manure pumps, liquid .....	9	953	3,798	1,219	4,313
35233 73	Front and rear tractor-mounted loaders (farm-type), manure and general utility (except beet and sugar cane loaders) .....	15	33,340	90,632	<sup>r</sup> 29,938	<sup>r</sup> 91,568
35233 77	Row crop unit planters (quantity in rows) .....	8	48,328	36,085	30,508	23,229
35233 79	Other planting, seeding, and fertilizing machinery .....	31	56,460	115,127	(D)	(D)
35233 84	Attachments for planting, seeding, and fertilizing machinery .....	35	(X)	40,936	(X)	42,627
35239 71	Parts for planting, seeding, and fertilizing machinery, replacement units only .....	82	(X)	109,109	(X)	<sup>r</sup> 115,160
35235 —	Harvesting machinery .....	84	(X)	2,368,514	(X)	1,857,159
35235 11	Combines (harvester-threshers), grain-types only (self-propelled and pull type) .....	11	(D)	(D)	(D)	(D)
35235 21	Small grain header for combines, all sizes .....	8	(D)	(D)	(D)	(D)
35235 31	Corn heads, all sizes .....	8	(D)	(D)	(D)	(D)
35235 41	Other grain-type combines .....	6	(D)	(D)	(D)	(D)
35235 63	Field forage harvesters: Shear bar, self-propelled type and pull-type (basic machines) .....	6	1,788	36,791	2,310	42,292
35235 67	Attachments for shear bar type forage harvester .....	6	(X)	(D)	(X)	(D)
35235 70	Flail-type (horizontal knives or vertical free-swinging knives or hammers), including discharge spouts .....	4	330	2,202	339	2,274
35235 79	Other harvesting machinery, including potato diggers, cane harvesting equipment, and picker-shellers .....	55	(D)	(D)	(D)	(D)
35235 83	Attachments for harvesting machinery, including platform and seeder, reel, straw spreaders, load levelers, weed stripper, grate unit, knife grinders, and stalk walkers .....	29	(X)	97,631	(X)	87,978
35239 50	Parts for harvesting machinery, replacement units only .....	60	(X)	294,654	(X)	344,239
35236 —	Haying machinery .....	43	(X)	631,605	(X)	670,450
35236 13	Mowers, cutter bar type, including drum and disc .....	8	4,479	19,723	6,111	<sup>a</sup> 27,410
35236 23	Mower-conditioners and windrowers with conditioner auger and draper-type (pull-type and self-propelled) .....	9	15,415	191,372	16,827	210,265
35236 31	Rakes, side delivery, cylinder type, and finger wheel type .....	12	10,204	39,893	9,933	34,951
35236 55	Hay balers, hay stackers (field type), hay bale loaders, and bale throwing attachments .....	16	23,948	330,014	26,547	350,052
36236 82	Other haying machinery .....	22	36,186	20,437	30,058	<sup>2</sup> 47,772
35236 83	Other attachments for haying machinery (stripper, bale chute, and knife attachments) .....	7	(X)	30,166	(X)	( <sup>2</sup> )
35239 55	Parts for haying machinery, replacement units only .....	27	(X)	96,700	(X)	114,188
3523C —	Plows, harrows, rollers, pulverizers, cultivators, and weeders .....	(NA)	(X)	405,587	(X)	386,121
3523C pt.	Plows (primary tillage equipment) .....	72	(X)	108,975	(X)	109,533
3523C 15	Subsoilers, deep tillage .....	25	<sup>a</sup> 3,750	21,220	<sup>a</sup> 4,173	25,821
3523C 17	Terracing and ditching plows .....	9	488	1,177	<sup>a</sup> 575	<sup>a</sup> 1,458
3523C 19	Chisel plows, deep tillage (chisel or sweep type): Pull-type .....	12	1,831	21,870	1,948	23,324
3523C 21	Mounted .....	10	512	1,230	<sup>b</sup> 462	<sup>b</sup> 898
3523C 25	Other plows (except snow plows) .....	17	<sup>a</sup> 4,298	33,610	<sup>a</sup> 4,287	31,050
3523C 27	Middlebusters and disc bedders .....	9	2,320	2,628	2,181	2,225
3523C 29	Attachments for plows (coulters, jointers, root cutters, subsoilers, fertilizer distributors, etc.), excluding lister planting attachments .....	25	(X)	17,964	(X)	15,893
3523C 31	Plowshares (quantity in thousands of pounds) .....	9	12,056,770	9,276	12,973,443	8,864
35239 60	Parts for plows (except plowshares), replacement units only .....	26	(X)	37,245	(X)	35,216
3523C pt.	Harrows, rollers, pulverizers and similar equipment (secondary tillage) .....	96	(X)	158,310	(X)	161,485
3523C 41	Spike-tooth harrow sections and spring-tooth and tine-tooth harrow sections .....	22	21,250	11,181	26,925	11,146

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3523C —	Plows, harrows, rollers, pulverizers, cultivators, and weeders—Con.					
3523C pt.	Harrows, rollers, pulverizers and similar equipment (secondary tillage) . . . . .	96	(X)	158,310	(X)	161,485
3523C 44	Disc harrows, single, tandem, and offset . . . . .	24	18,422	56,144	11,881	59,185
3523C 53	Combination tillage equipment, roller/harrows, disc or coulters/field cultivators, and disc or coulters/spring tooth . . . . .	30	14,627	42,830	11,443	37,811
3523C 54	Blade terracers or scrapers (farm-size) . . . . .	38	51,425	20,239	62,949	23,091
3523C 59	Land levelers . . . . .	7	1,038	1,777	1,223	1,936
3523C 61	Other harrows, rollers, pulverizers, and similar equipment . . . . .	31	<sup>a</sup> 7,904	22,842	7,094	<sup>r</sup> 24,571
3523C 63	Attachments for harrows, rollers, pulverizers, and similar equipment . . . . .	15	(X)	3,297	(X)	3,745
35239 45	Parts for harrows, rollers, pulverizers, and similar equipment, replacement units only . . . . .	43	(X)	17,662	(X)	<sup>r</sup> 19,410
3523C pt.	Cultivators and weeders . . . . .	58	(X)	138,302	(X)	115,103
3523C 70	Corn and cotton type cultivators, shank and sweep type (front and rear mounted) . . . . .	23	7,700	37,650	8,378	37,147
3523C 80	Rotary cultivators, ground and power driven . . . . .	8	1,715	4,054	1,082	2,875
3523C 90	Field cultivators . . . . .	16	5,127	52,709	5,074	48,062
3523C 94	Other cultivators and weeders, including tool bars (basic units) . . . . .	23	4,385	<sup>a</sup> 18,077	3,357	8,191
3523C 98	Attachments for cultivators and weeders (front mounting frame, disc weeders, rear section, and drawbars) . . . . .	24	(X)	25,812	(X)	18,828
35239 65	Parts for cultivators and weeders, replacement units only . . . . .	37	(X)	54,148	(X)	39,631
3523E —	All other farm machinery and equipment (except parts) . . . . .	(NA)	(X)	<sup>1</sup> 4,067,605	(X)	<sup>1</sup> 3,742,089
3523E pt.	Stalk shredders and cutters or rotary mowers (PTO) . . . . .	43	115,123	182,316	124,880	181,814
3523E 01	Flail type (without spout) . . . . .	15	<sup>a</sup> 2,126	12,958	<sup>a</sup> 2,346	14,178
	Horizontal blade type:					
3523E 05	66 inches cutting width and under . . . . .	27	66,197	40,125	76,683	42,169
3523E 07	Over 66 inches up to 100 inches cutting width . . . . .	22	33,166	44,802	<sup>r</sup> 32,093	<sup>r</sup> 42,634
3523E 09	Over 100 inches cutting width . . . . .	16	13,634	84,431	<sup>r</sup> 13,758	<sup>r</sup> 82,833
35239 85	Parts for stalk shredders, and cutters or rotary mowers (PTO), replacement units only . . . . .	28	(X)	40,541	(X)	42,706
3523E pt.	Machines for preparing crops for market or for use . . . . .	86	(X)	226,079	(X)	249,338
3523E 11	Feed grinders and crushers, power . . . . .	16	1,864	24,834	2,259	29,170
3523E 13	Feed mixers, farm-size, stationary and portable . . . . .	19	3,006	40,681	3,888	48,140
3523E 14	Combination grinder-mixers . . . . .	9	940	10,039	2,329	20,959
	Dryers (grain, hay, and seed):					
3523E 25	Heated air crop dryers . . . . .	17	10,309	52,369	<sup>r</sup> 11,322	54,915
3525E 26	Crop drying fans (over 15,000 c.f.m. at approximately 1-inch pressure) . . . . .	10	13,237	8,694	11,569	7,730
3523E 23	Other machines for preparing crops for market or for use . . . . .	45	<sup>b</sup> 25,833	<sup>a</sup> 82,041	<sup>a</sup> <sup>r</sup> 25,622	<sup>a</sup> 77,358
3523E 24	Attachments for machines for preparing crops for market or for use . . . . .	15	(X)	7,421	(X)	11,066
35239 70	Parts for machines for preparing crops for market or for use, replacement units only . . . . .	48	(X)	29,802	(X)	36,590
3523E pt.	Farm poultry equipment . . . . .	41	(X)	211,711	(X)	234,791
3523E 31	Incubators; quantity represents egg capacity in thousands . . . . .	8	(D)	(D)	(D)	(D)
3523E 34	Brooders, floor and hanging (gas, electric, oil, coal, wood, and battery) . . . . .	10	<sup>a</sup> 158,313	<sup>b</sup> 19,700	136,638	16,607
3523E 36	Nests and cages . . . . .	9	2,000,501	27,192	2,155,078	29,474
3523E 38	Poultry feeders (trough, hanging, and mechanical) and waterers (except turkey feeders and waterers) . . . . .	19	<sup>a</sup> 16,278,326	81,751	<sup>r</sup> 17,731,564	91,581
3523E 48	Other farm poultry equipment, including turkey waterers, mechanized egg graders, and egg washers . . . . .	22	(D)	(D)	(D)	(D)
3523E 49	Attachments for farm poultry equipment . . . . .	14	(X)	12,239	(X)	11,359
35239 75	Parts for farm poultry equipment, replacement units only . . . . .	15	(X)	<sup>a</sup> 17,787	(X)	<sup>a</sup> 18,527
3523E pt.	Hog equipment . . . . .	54	(X)	115,165	(X)	141,053
3523E 50	Feeding equipment . . . . .	30	200,725	27,720	294,283	40,254
3523E 55	Handling equipment . . . . .	16	972,294	<sup>a</sup> 48,537	943,424	49,037
3523E 59	Watering equipment . . . . .	22	<sup>a</sup> 956,647	<sup>a</sup> 6,826	963,141	10,121
3523E 61	Other hog equipment . . . . .	25	948,560	<sup>a</sup> 30,012	1,071,564	39,183
3523E 62	Attachments for hog equipment . . . . .	15	(X)	<sup>b</sup> 2,070	(X)	2,458

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3523E —	All other farm machinery and equipment (except parts)—Con.					
3523E pt.	Hog equipment—Con.					
35239 88	Parts for hog equipment, replacement units only . . . . .	22	(X)	3,515	(X)	<sup>a</sup> 4,982
3523E pt.	Other barn and barnyard equipment . . . . .	105	(X)	184,872	(X)	219,244
3523E 63	Silo and grain bin unloaders, forage and grain, including sealed storage unloaders (farm-type) . . . . .	17		36,835	17,292	25,171
	Cattle and dairy barn equipment:					
3523E 64	Feeding equipment . . . . .	45		<sup>b</sup> 221,093	<sup>a</sup> 33,123	220,237
3523E 71	Handling equipment . . . . .	36		1,328,164	<sup>a</sup> 41,369	1,254,460
3523E 79	Water equipment . . . . .	32		415,962	20,483	410,894
3523E 85	Other barn and barnyard equipment . . . . .	46		<sup>a</sup> 759,237	<sup>a</sup> 61,370	961,266
3523E 86	Attachments for barn and barnyard equipment . . . . .	18	(X)	5,410	(X)	6,080
35239 80	Parts for barn and barnyard equipment, replacement units only . . . . .	35	(X)	24,927	(X)	<sup>f</sup> 29,591
3523E pt.	Farm wagons, and other farm transportation equipment . . . . .	89	(X)	<sup>1</sup> 2,810,232	(X)	<sup>1</sup> 2,377,239
3523E 88	Wagons (chassis only) and trailer gears, excluding motor trucks, 4-wheel . . . . .	40	(D)	(D)	(D)	(D)
	Boxes and racks for mounting on wagons and trailer gears:					
3523E 90	Manual unloading or dump . . . . .	11	(D)	(D)	(D)	(D)
3523E 91	Gravity unloading, grain-type only . . . . .	12	(D)	(D)	(D)	(D)
3523E 92	Power unloading . . . . .	23	(D)	(D)	(D)	(D)
3523E 94	Boxes with integral running gear, grain- and forage-type . . . . .	13	(D)	(D)	(D)	(D)
3523E 95	Other farm transportation equipment . . . . .	26	(D)	(D)	(D)	(D)
3523E 96	Attachments for farm transportation equipment . . . . .	15	(X)	(D)	(X)	(D)
35239 89	Parts for farm transportation equipment, including operator cabs for farm tractors . . . . .	46	(X)	76,960	(X)	72,832
3523E pt.	Irrigation systems . . . . .	22	(X)	337,230	(X)	338,610
3523E 98	Self-propelled irrigation systems, center-pivot; quantity is in ten-tower equivalents . . . . .	9		8,876	303,992	9,150
3523E 99	All other systems using 100-foot flexible hose feeder line and over . . . . .	12		4,697	33,238	4,560
35239 82	Parts for irrigation systems, replacement units only . . . . .	9	(X)	56,784	(X)	55,054
3523F —	Commercial turf and grounds care equipment, including parts and attachments . . . . .	(NA)	(X)	1,102,211	(X)	1,021,537
3523F pt.	Commercial turf and grounds mowing equipment . . . . .	44	(X)	881,213	(X)	800,905
3523F 01	Powered nonriding mowers . . . . .	18		64,005	92,993	58,643
3523F 03	Riding reel-type turf mowers, including greens mowers . . . . .	9		16,833	178,428	<sup>f</sup> 15,072
3523F 07	Riding rotary turf mowers . . . . .	22		50,939	323,926	47,125
3523F 09	Gang rotary cutting units, reel and rotary, individual sections . . . . .	9		44,845	59,854	46,826
3523F 11	Flail mower cutting units, including gang . . . . .	5		1,889	9,568	2,686
3523F 13	Other mowing equipment . . . . .	8		35,527	47,474	16,778
3523F 17	Parts for commercial turf and grounds mowing equipment . . . . .	34	(X)	123,013	(X)	116,759
3523F 19	Attachments for commercial turf and grounds mowing equipment . . . . .	21	(X)	45,957	(X)	42,700
3523F pt.	Other commercial turf and grounds care equipment . . . . .	44	(X)	220,998	(X)	220,632
3523F 25	Seeders, spreaders, and top dresser attachments . . . . .	10		22,109	<sup>a</sup> 15,245	22,383
3523F 27	Aerators, spikers, and pluggers . . . . .	15		10,353	31,806	10,856
3523F 29	Dethatchers . . . . .	13		6,810	5,280	<sup>f</sup> 7,261
3523F 31	Power brooms, blowers, vacuums, and sweepers . . . . .	13		23,083	20,850	<sup>f</sup> 25,267
3523F 33	Irrigation systems (except agricultural and residential) . . . . .	5		614,990	21,945	619,117
3523F 36	Other commercial turf and grounds care equipment, including trap rakes, transport trailers, and turf tractors and trucks . . . . .	24		48,297	79,541	<sup>f</sup> 45,063
3523F 41	Parts for other commercial turf and ground care equipment . . . . .	22	(X)	20,770	(X)	19,716
3523F 43	Attachments for other commercial turf and ground care equipment . . . . .	14	(X)	15,574	(X)	18,609

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment by Type: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3524 —	Lawn and garden equipment . . . . .	(NA)	(X)	5,868,940	(X)	5,750,187
35241 —	Consumer nonriding lawn, garden, and snow equipment . . . . .	60	26,053,971	2,748,014	<sup>1</sup> 26,753,653	<sup>1</sup> 2,677,088
	Lawnmowers:					
35241 02	Push-type: reel (powered and nonpowered) and rotary-gas powered . . . . .	21	4,089,495	540,962	3,882,747	530,298
35241 12	Rotary, self-propelled, gas-powered . . . . .	21	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
35241 15	Electric, all types, including battery-powered . . . . .	1	<sup>3</sup> 1,906,885	<sup>3</sup> 500,807	<sup>3</sup> 2,100,008	<sup>3</sup> 570,995
35241 20	Rotary garden motor tillers . . . . .	15	<sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>
35241 30	2-wheel tractors walking type (except rotary tillers) . . . . .	3	<sup>4</sup> 466,096	<sup>4</sup> 193,602	<sup>4</sup> 490,661	<sup>4</sup> 184,653
	Snow throwers (snow blowers) (except attachment-type):					
35241 41	Single stage . . . . .	3	<sup>a</sup> 494,251	114,096	200,607	57,274
35241 42	Dual stage . . . . .	11	778,331	329,586	567,610	259,480
	Powered lawn edgers/trimmers:					
35241 50	Fixed blade . . . . .	15	867,075	69,923	948,390	65,411
35241 52	Other than fixed blades . . . . .	12	9,598,482	508,096	<sup>1</sup> 9,954,385	<sup>1</sup> 538,648
35241 61	Shredders and shredder-grinders . . . . .	9	147,637	66,919	95,527	40,393
35241 63	Yard vacuums and blowers . . . . .	16	<sup>a</sup> 3,693,621	280,683	<sup>1</sup> 3,284,837	<sup>1</sup> 280,791
35241 91	Other consumer nonriding lawn, garden, and snow equipment . . . . .	19	4,012,098	143,340	5,228,881	149,145
35244 —	Consumer riding lawn, garden, and snow equipment . . . . .	24	1,780,664	2,359,351	1,678,504	2,215,791
	Lawn tractors and riding mowers, front engine:					
35244 03	Under 10.0 hp (under 7.5 kW) . . . . .	3	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>
35244 07	10.0 hp and over (7.5 kW and over) . . . . .	10	<sup>5</sup> 1,472,816	<sup>5</sup> 1,618,780	<sup>5</sup> 1,307,125	<sup>5</sup> 1,448,945
	Lawn tractors and riding mowers, rear engine:					
35244 09	Under 10.0 hp (under 7.5 kW) . . . . .	9	54,297	53,747	88,378	92,688
35244 11	10.0 hp and over (7.5 kW and over) . . . . .	13	92,452	138,989	121,556	175,208
	Garden tractors:					
35244 13	Under 16.0 hp (under 12.0 kW) . . . . .	5	7,988	23,242	21,749	78,533
35244 17	16.0 hp to 19.9 hp (12.0 kW to 14.9 kW) . . . . .	8	112,034	319,555	81,509	185,891
35244 19	20.0 hp and over (15.0 kW and over) . . . . .	10	41,077	205,038	58,187	234,526
35244 31	Other consumer riding lawn, garden, and snow equipment . . . . .	2	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>
35246 —	Parts and attachments for consumer lawn, garden, and snow equipment . . . . .	55	(X)	761,575	(X)	857,308
	Nonriding:					
35246 03	Parts . . . . .	40	(X)	147,034	(X)	176,884
35246 05	Attachments . . . . .	23	(X)	99,591	(X)	148,624
	Riding:					
	Parts:					
35246 11	For tractors and riding mowers . . . . .	25	(X)	257,170	(X)	254,568
35246 13	For other equipment . . . . .	7	(X)	8,190	(X)	8,901
	Attachments:					
35246 15	Rotary mower decks . . . . .	14	(X)	84,812	(X)	<sup>1</sup> 84,793
35246 17	Rotary tiller attachments . . . . .	9	(X)	7,559	(X)	6,470
35246 19	Blades, dozer . . . . .	11	(X)	16,925	(X)	21,084
35246 21	Snow throwers . . . . .	9	(X)	21,070	(X)	20,635
35246 23	Carts and wagons . . . . .	10	(X)	<sup>a</sup> 22,112	(X)	20,486
35246 25	All other attachments . . . . .	26	(X)	97,112	(X)	114,863

D Withheld to avoid disclosing data for individual companies. NA Not available. pt. Part. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Product code 35231, "Wheel tractors," is combined with product code 3523E, "All other farm machinery and equipment (except parts)" to avoid disclosing data for individual companies.

<sup>2</sup>Value of shipments of "Other attachments for haying machinery" is combined with "Other haying machinery" to avoid disclosing data for individual companies.

<sup>3</sup>Lawnmowers, rotary, self-propelled, gas-powered" is combined with "Lawnmowers, electric, all types" to avoid disclosing data for individual companies.

<sup>4</sup>"Rotary garden motor tillers" is combined with "2-wheel tractors walking-type (except rotary tillers)" to avoid disclosing data for individual companies.

<sup>5</sup>For 1994, "Lawn tractors and riding mowers, front engine, under 10.0 hp" and "Other consumer riding lawn, garden, and snow equipment" are combined with "Lawn tractors and riding mowers, front engine 10.0 hp and over" to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>10 to 25 percent of this item is estimated. <sup>b</sup>25 to 50 percent of this item is estimated. <sup>c</sup>Over 50 percent of this item is estimated.



Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Imports for consumption <sup>2</sup>		Apparent consumption	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>								
Farm-type wheel tractors.....	(D)	(D)	40,470	823,754	100,246	1,459,598	(D)	(D)
Farm dairy mechanical installations, including milking machine vacuum pumping outfits.....	(D)	(D)	2,016	6,886	11,496	4,826	(D)	(D)
Sprayers and dusters (except aerial types).....	(X)	495,991	(NA)	123,655	(NA)	23,734	(NA)	396,070
Planting machinery and fertilizer distributors, pull-type or mounted.....	(X)	683,039	17,362	61,771	116,005	61,655	(NA)	682,923
Disc harrows.....	18,422	56,144	1,702	8,951	66,682	26,356	83,402	73,549
Other harrows, rollers, pulverizers, and similar equipment.....	96,244	98,869	6,010	7,755	11,896	5,286	102,130	96,400
Combines.....	(D)	(D)	4,232	326,743	554	27,935	(D)	(D)
Other harvesting machines.....	(D)	(D)	2,987	63,149	9,884	38,736	(D)	(D)
Field forage harvesters.....	2,118	38,993	983	15,826	204	13,402	1,339	36,569
Hay mowers, mower-conditioners, and windrowers.....	135,017	393,411	19,968	51,070	39,896	74,531	154,945	416,872
Other haymaking machines.....	(X)	60,330	2,942	32,012	15,867	21,988	(NA)	50,306
Balers, including pickup balers.....	23,948	330,014	5,280	67,816	882	7,711	19,550	269,909
Plows.....	(X)	81,735	3,149	8,748	7,857	11,811	(NA)	84,798
Cultivators and weeders.....	18,927	112,490	35,020	19,219	36,237	61,386	20,144	154,657
Machinery for preparing animal feed....	5,810	75,554	4,730	33,415	15,069	9,344	16,149	51,483
Other machines for preparing crops for market or for use.....	49,379	143,104	3,201	16,196	3,445	4,077	49,623	130,985
Farm poultry incubators and brooders...	(D)	(D)	44,284	31,300	71,847	8,809	(D)	(D)
Nests and cages (poultry equipment)...	(X)	27,192	231,573	72,307	3,036	4,309	(NA)	(NA)
Other barn and barnyard equipment....	(D)	(D)	11,866	7,055	17,213	2,893	(D)	(D)
Self-propelled irrigation systems, center-pivot.....	8,876	303,992	1,153	24,677	9	105	7,732	279,420
All other self-propelled irrigation systems using 100-foot flexible hose feeder line and over.....	4,697	33,238	(NA)	129,521	(NA)	12,223	(NA)	(NA)
Farm wagons and other farm transportation equipment.....	(D)	(D)	-	-	36,163	4,823	(D)	(D)
Riding turf mowers and flail and gang mowers.....	114,506	571,776	24,090	73,280	857	4,131	91,27	502,627
Mowers for lawns, parks, or sports grounds and other commercial and turf grounds mowers.....	5,808,592	2,492,945	1,022,980	441,638	118,217	18,114	4,903,829	2,069,421
Snowblowers (snowthrowers).....	1,272,582	443,682	20,075	12,095	74,223	41,600	1,326,730	473,187
Powered lawn and hedge trimmers.....	10,465,557	578,019	1,377,914	91,325	455,022	58,422	9,542,665	545,116
<b>1994</b>								
Farm-type wheel tractors.....	(D)	(D)	26,264	624,610	101,084	1,386,099	(D)	(D)
Farm dairy mechanical installations, including milking machine vacuum pumping outfits.....	(D)	(D)	1,488	7,775	12,824	4,502	(D)	(D)
Sprayers and dusters (except aerial types).....	(X)	432,393	(NA)	128,947	(NA)	21,184	(NA)	324,630
Planting machinery and fertilizer distributors, pull-type or mounted.....	(X)	791,315	18,121	78,699	126,576	69,789	(NA)	782,405
Disc harrows.....	11,881	59,185	1,774	8,117	124,000	31,963	134,107	83,031
Other harrows, rollers, pulverizers, and similar equipment.....	109,634	98,555	14,020	11,048	17,087	6,217	112,701	93,724
Combines.....	(D)	(D)	4,694	295,706	488	27,591	(D)	(D)
Other harvesting machines.....	(D)	(D)	2,777	53,673	7,418	31,842	(D)	(D)
Field forage harvesters.....	2,649	44,566	1,408	19,095	185	12,690	1,426	38,161

See footnotes at end of table.

Table 3. **Shipments, Exports, and Imports of Farm Machinery and Equipment: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1</sup>		Imports for consumption <sup>2</sup>		Apparent consumption	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Hay mowers, mower-conditioners, and windrowers . . . . .	147,818	419,489	39,221	64,540	42,687	73,333	151,284	428,282
Other haymaking machines . . . . .	(X)	82,723	2,988	38,104	12,190	18,444	(NA)	63,063
Balers, including pickup balers . . . . .	26,547	350,052	6,574	77,925	914	6,693	20,887	278,820
Plows . . . . .	(X)	84,776	4,065	10,725	14,397	11,418	(NA)	85,469
Cultivators and weeders . . . . .	17,891	96,275	37,523	23,211	34,239	52,307	14,607	125,371
Machinery for preparing animal feed . . .	8,476	98,269	6,149	37,084	13,231	8,881	15,558	70,066
Other machines for preparing crops for market or for use . . . . .	<sup>†</sup> 48,513	140,003	4,429	14,589	5,806	7,129	49,890	132,543
Farm poultry incubators and brooders . .	(D)	(D)	38,003	25,513	19,492	4,883	(D)	(D)
Nests and cages (poultry equipment) . . .	(X)	29,474	73,288	64,295	6,612	9,755	(NA)	(NA)
Other barn and barnyard equipment . . . .	(D)	(D)	16,591	8,780	135,349	3,231	(D)	(D)
Self-propelled irrigation systems, center-pivot . . . . .	9,150	310,454	911	19,633	3	85	8,242	290,906
All other self-propelled irrigation systems using 100-foot flexible hose feeder line and over . . . . .	4,560	28,156	(NA)	137,466	(NA)	11,416	(NA)	(NA)
Farm wagons and other farm transportation equipment . . . . .	(D)	(D)	-	-	34,841	4,317	(D)	(D)
Riding turf mowers . . . . .	111,709	519,023	14,275	54,873	5,428	6,469	102,862	470,619
Mowers for lawns, parks, or sports grounds and other commercial and turf grounds mowers . . . . .	5,475,227	2,369,562	1,019,798	432,480	94,596	18,752	4,550,025	1,955,834
Snowblowers (snowthrowers) . . . . .	768,217	316,754	22,770	15,767	85,365	50,158	830,812	351,145
Powered lawn and hedge trimmers . . . . .	<sup>†</sup> 10,270,090	<sup>†</sup> 604,059	1,403,636	84,464	337,618	52,597	9,204,072	572,192

- Represents zero. D Withheld to avoid disclosing data for individual companies. NA Not available. <sup>†</sup>Revised by 5 percent or more from previously published data. X Not applicable.

<sup>1</sup>Source: Bureau of the Census report EM 545 *U.S. Exports*.

<sup>2</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

## HISTORICAL NOTE

Data on farm machinery and equipment have been collected by the Bureau of the Census since 1920; data on lawn and garden equipment since 1978. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your

local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Brian Appert, 301-457-4748.

## CONSTRUCTION MACHINERY (MA35D)

### INTRODUCTION

These data cover firms engaged in the manufacture of selected types of construction machinery. Very small firms (generally less than five employees) for which 1992 Census of Manufactures data were derived from administrative records of other government agencies are excluded. The statistics were collected by mail on Bureau of the Census annual Form MA35D, Construction Machinery. The survey panel includes all known producers of these types of products covered on the survey, except the very small firms excluded from the scope of the survey. Approximately 260 companies are included. No estimate is derived for the small firms excluded from the survey.

### SUMMARY OF FINDINGS

Shipments of the types of construction machinery included in this report, excluding crawler tractors, totaled \$11.6 billion in 1995, a 17-percent increase from the 1994 total of \$9.9 billion, also excluding crawler tractors. Shipments of contractors' off-highway wheel tractors totaled \$548.3 million, representing an 11-percent increase from the 1994 shipments of \$492.4 million. The figure for shipments of crawler, or tracklaying, tractors for 1995 was again suppressed because too few companies concentrated too large a proportion of the total shipments to allow publication. The 1995 shipments of tractor shovel loaders totaled \$3,041.8 million, an increase of 16 percent from the 1994 total of \$2,632.6 million. Shipments of power cranes, draglines, and shovels in 1995 totaled \$2,555.2 million, an increase of 13 percent from the 1994 shipments of \$2,252.5 million. The 1995 shipments of mixers, pavers, and related equipment totaled \$1,164.1 million, an increase of 8 percent from the 1994 total of \$1,079.8 million.

The 1995 shipments of scrapers, graders, compactors, rollers, rough-terrain forklifts, and off-highway trucks, trailers, and wagons totaled \$2,645.3 million, an increase of 22 percent from the 1994 total of \$2,164.2 million. The 1995 shipments of equipment for mounting on tractors (or trucks or other prime movers) totaled \$310.1 million, an increase of 8 percent from the 1994 total of \$286.6 million. The 1995 shipments of self-propelled continuous ditchers and trenchers totaled \$194.0 million, an 11-percent increase from the 1994 total of \$174.0 million. Shipments of aerial work platforms totaled \$1,128.0 million in 1995, an increase of 34 percent from the 1994 total of \$844.9 million.

### EXPLANATION OF TERMS

**Wheel tractors, contractors' off-highway type.** Wheel tractors designed primarily to be used as towing units for scrapers, trailers, wagons, and similar types of towed equipment for use on natural terrain. These units may be 2- or 4-wheel type.

**Loaders.** Wheel type, front-end load, integral design, rear engine mount. Complete machines originally conceived and designed as heavy duty, wheel type, front-end loaders, and not as wheel tractors, to receive shovel loading attachments.

**Off-highway vehicles.** Vehicles designed for operation off public highways to transport materials or equipment on mining, construction, logging, petroleum development, and similar project sites. (Vehicles which provide similar functions on smooth surfaces in and around warehouses, depots, and terminals are excluded from this survey.)

**Excavator.** A commercial earth-moving machine equipped with a bucket-mounted front-end attachment mounted on a 360-degree revolving superstructure.

**Crane.** A machine having a front-end lifting attachment and operating machinery mounted on a revolving superstructure.

**Cable-operated.** A machine with front-end attachment functions performed by wire rope.

**Hydraulic excavator.** A machine with front-end attachment functions performed hydraulically.

**Crawler mounted.** A machine with two parallel continuous crawlers or tread belts.

**Truck-mounted (rubber).** A machine that generally has two engines, one to propel the carrier and another to power the work functions. A truck- or carrier-mounted machine has two operator stations and is designed for on- and off-highway travel.

**Self-propelled (rubber).** A machine which has only one engine and one operator station. The engine may be mounted in either the upper or lower works.

**Net engine horsepower (nehp).** Net flywheel performance as measured by manufacturer, with all standard accessories installed, operated, and corrected to 29.38 inches mercury (Hg) and temperature of 85 degrees Fahrenheit.

**Hydraulic crane.** A crane with 360-degree rotation on which the boom is designed primarily for lifting the load by wire rope and can be extended, retracted, raised, and lowered hydraulically.

**Pinned-on telescopic crane.** A hydraulically powered multipurpose rotating crane with fixed or telescoping booms designed to lift and place materials by winch and load line and which is mounted onto a commercially available vehicle having a platform or body.

**Pinned-on articulated crane.** A stationary or vehicle-mounted hydraulically powered multipurpose knuckle boom crane consisting of an inner and outer boom that can fold to a stowable position. Excluded are those machines commonly known as knuckle boom loaders.

**Unmounted cranes.** These cranes are classified under "Construction machinery for mounting."

**ABBREVIATIONS AND METRIC EQUIVALENTS**

- yd<sup>3</sup> cubic yard = .7646 cubic meters (m<sup>3</sup>)
- kg kilogram = 2.205 pounds (lb)
- ft feet = .305 meters (m)
- st short ton = .907 metric tons
- nehp net engine horsepower
- tph tons per hour
- lb pounds

hp horsepower = .7457 kilowatts (kW)

Table 4. Value of Shipments of Construction Machinery: 1986 to 1995

[Millions of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
3531A 00	Contractors' off-highway wheel tractors.....	548.3	492.4	355.6	324.0	244.2	360.5	366.2	408.1	374.8	421.9
3531B 00	Crawler (or tracklaying) tractors.....	(D)	(D)	(D)	775.6	998.7	1,092.6	1,163.7	1,145.1	975.9	821.2
3531C 00	Tractor shovel loaders.....	3,041.8	2,632.6	2,354.4	1,833.1	1,855.5	2,235.9	2,212.0	2,027.6	1,782.5	1,679.0
3531E 00	Power cranes, draglines, and shovels.....	2,555.2	2,252.5	1,719.4	1,582.3	1,239.1	1,511.8	1,318.3	1,050.7	955.4	<sup>1</sup> 1,308.6
3531F 00	Mixers, pavers, and related equipment.....	1,164.1	<sup>1</sup> 1,079.8	877.1	635.8	509.6	609.6	701.8	565.3	569.9	566.2
3531G 00	Scrapers; graders; compactors; rollers; off-highway trucks, trailers, and wagons; and rough terrain forklifts....	2,645.3	2,164.2	(D)	1,560.7	1,631.6	2,023.7	1,881.3	1,524.2	1,249.9	<sup>2</sup> 2,023.8
3531N 00	Equipment for mounting on tractors.....	310.1	286.6	249.8	<sup>3</sup> 256.1	<sup>3</sup> 214.6	<sup>3</sup> 258.6	<sup>3</sup> 343.0	<sup>3</sup> 363.8	<sup>3</sup> 481.1	( <sup>2</sup> <sup>3</sup> )
3531P 20	Self-propelled continuous ditchers and trenchers.....	194.0	174.0	143.6	<sup>3</sup> 124.1	<sup>3</sup> 112.2	<sup>3</sup> 129.7	<sup>3</sup> 153.6	<sup>3</sup> 141.2	<sup>3</sup> 127.6	<sup>3</sup> 125.6
3531P 90	Aerial work platforms.....	1,128.0	844.9	637.4	<sup>3</sup> 590.3	<sup>3</sup> 568.9	<sup>3</sup> 814.9	<sup>3</sup> 799.8	<sup>3</sup> 591.6	<sup>3</sup> 529.3	(NA)

D Withheld to avoid disclosing data for individual companies. NA Not available. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Prior to 1987, data for dedicated parts for "Power cranes, draglines, and shovels, sold separately," are included in the value shown. Since 1987, attachments (such as hoe, dragline bucket, clamshell/grapple, magnet, log loader, and shovel) are still included, but "Replacement parts" are now in product code 3531M, which is not included in the MA35D.

<sup>2</sup>Data for product codes 3531G and 3531H (see footnote 3) are combined for years prior to 1987.

<sup>3</sup>Prior to 1993, with one exception, product code 3531N was published as 3531H, and product code 3531P was published as 3531K. This exception, "Snow-clearing attachments" (whose value of shipments was less than \$100 million and not well collected in the MA35D), was in old 3531H but moved to 3531K in 1992 and to 3531P in 1993. Beginning in 1992, "Snow-clearing attachments" are no longer included in MA35D (which includes all of 3531N, but only part of 3531P).

Note: For value of shipments of products not included in Current Industrial Reports, see the 1992 Census of Manufactures.

Table 5. Quantity and Value of Shipments of Selected Types of Construction Machinery: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
	Wheel tractors, contractors' off-highway type . . . . .	(X)	4,834	548,296	'4,743	492,363
	2- and 4-wheel for use on natural terrain, including towing units and loaders and bare industrial wheel tractors (2- and 4-wheel):					
3531A 13	Single axle towing tractors . . . . .	5	(D)	(D)	(D)	(D)
3531A 15	Two axle towing tractors, including 2- and 4-wheel drive . . . . .	4	(D)	(D)	(D)	(D)
3531A 34	Rubber-tired dozers, all sizes . . . . .	2	(D)	(D)	(D)	(D)
3531A 37	Wheeled log skidders, self-propelled . . . . .	6	2,549	254,743	2,562	227,228
3531B 00	Crawler tractors (except crawler loaders) . . . . .	4	(D)	(D)	(D)	(D)
	Loaders . . . . .	(X)	85,798	3,041,794	75,113	2,632,641
3531C 60	Skid steer loaders, 4-wheel drive skid steer, all sizes . . . . .	7	51,244	745,520	45,582	631,653
	Wheel loaders, rear engine mount, integral design, 4-wheel drive, nonskid steer:					
3531C 71	Under 79 nehp . . . . .	4	(D)	(D)	'528	12,667
3531C 72	80 through 149 nehp . . . . .	6	5,108	376,878	5,593	397,964
3531C 73	150 through 249 nehp . . . . .	7	4,093	496,069	2,998	331,124
3531C 74	250 nehp and over . . . . .	6	2,032	656,788	(D)	(D)
3531C 82	Crawler loaders . . . . .	3	(D)	(D)	(D)	(D)
3531C 95	Integral design tractor shovel loader/backhoes (wheel tractor-chassis shipped as part of front engine mount contractor tractor) . . . . .	6	22,326	727,087	17,737	570,595
	Power cranes, draglines, and excavators, including surface mining equipment . . . . .	(X)	66,987	2,555,249	54,199	2,252,511
	Hydraulic operated excavators:					
	Crawler mounted, rated size in metric tons:					
3531E 05	Not more than 24 metric tons . . . . .	9	9,837	827,514	6,228	713,611
3531E 06	More than 24 but not more than 40 metric tons . . . . .	6	1,474	206,850	1,243	165,743
3531E 07	More than 40 metric tons . . . . .	6	1,020	343,928	( <sup>1</sup> )	( <sup>1</sup> )
3531E 19	Wheel (rubber) mounted, all sizes . . . . .	4	(D)	(D)	1,340	1356,828
	Cranes, lattice boom, wheel (rubber) mounted:					
3531E 37	Maximum working load not more than 120 tons . . . . .	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
3531E 38	Maximum working load more than 120 tons . . . . .	4	<sup>2</sup> 38	<sup>2</sup> 27,581	<sup>2</sup> 37	<sup>2</sup> 21,855
	Cranes, hydraulic operated, telescopic boom:					
	Wheel cranes (integral), multiple control stations (rubber mounted), maximum working load of:					
3531E 51	Not more than 20 tons . . . . .	5	2,169	158,399	2,102	138,244
3531E 52	More than 20 but not more than 30 tons . . . . .	6	287	27,210	187	20,740
3531E 53	More than 30 but not more than 55 tons . . . . .	6	141	36,104	112	27,775
3531E 54	More than 55 tons . . . . .	3	111	50,950	107	46,587
3531E 57	Pinned on type, telescopic and articulated . . . . .	6	2,180	81,608	2,107	78,402
	Wheel cranes, one control station (self-propelled, rubber mounted), maximum working load of:					
3531E 68	Not more than 18 tons . . . . .	9	999	59,719	'800	50,489
3531E 65	More than 18 tons but not more than 25 tons . . . . .	4	102	14,783	'134	20,123
3531E 66	More than 25 tons . . . . .	4	716	177,447	535	127,727
	Other cranes and excavators:					
3531E 84	Pedestal or shipmounted marine cranes . . . . .	9	91	19,844	66	18,726
3531E 87	All other cranes, n.e.c., including locomotive wrecking, cable operated excavators, draglines, and crawler mounted cranes . . . . .	18	(D)	(D)	'3,814	'322,048
	Attachments for power cranes, draglines, and excavators, sold separately:					
3531E 94	Hoe . . . . .	5	14,233	31,348	10,112	25,560
3531E 95	Dragline buckets, all sizes . . . . .	6	74	9,035	114	13,921
3531E 97	Clamshell/grapple . . . . .	6	550	13,613	1,098	35,407
3531E 98	All other attachments, n.e.c. . . . .	24	28,574	91,807	24,063	'68,725
	Mixers, pavers, and related equipment . . . . .	(X)	127,070	1,164,073	'120,429	'1,073,792
	Concrete mixers (except plaster and mortar), portable, all sizes:					
3531F 21	Truck-mixer or agitator . . . . .	12	7,420	309,075	'6,776	'290,495
3531F 25	Other than truck-mixer . . . . .	8	(D)	6,758	(D)	(D)
3531F 31	Plaster and mortar mixers, all sizes . . . . .	8	14,051	27,269	12,890	23,970
3531F 33	Slipform concrete paving machines, including multi-purpose, automated curb and gutter and concrete slipform pavers, up to and including 34-foot wide . . . . .	10	338	45,556	379	61,453

See footnotes at end of table.

Table 5. Quantity and Value of Shipments of Selected Types of Construction Machinery: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3531F 34	Mixers, pavers, and related equipment—Con. Nonautomated (extruder) concrete curbers and concrete placer spreaders . . . . .	4	(D)	(D)	(D)	(D)
3531F 39	Concrete trowels . . . . .	9	11,904	20,770	10,002	15,854
3531F 40	Concrete vibrators (electric motor gasoline engine, structural high-cycle, pneumatic, etc.) . . . . .	10	81,666	35,362	79,376	34,085
3531F 42	Concrete screeds (hand-propelled or winch type) . . . . .	8	3,067	5,946	3,112	5,675
3531F 43	Concrete batching plants, bin and batch for concrete aggregate only, and bulk cement . . . . .	17	530	62,782	450	49,587
3531F 63	Concrete pumps, mobile . . . . .	4	(D)	(D)	(D)	(D)
3531F 66	Bituminous distributors . . . . .	7	584	30,503	613	24,856
3531F 71	Bituminous pavers, self-propelled: 21,999 lb gross weight and under (basic unit) . . . . .	8	871	46,395	804	40,396
3531F 75	22,000 lb gross weight and over (basic unit) . . . . .	6	718	123,272	632	104,970
3531F 80	Bituminous pavers, not self-propelled . . . . .	4	(D)	(D)	(D)	(D)
3531F 82	Asphalt plants, including cold mix central plants: Less than 7,500 lb (239 tph) . . . . .	5	40	36,288	41	23,480
3531F 84	7,500 lb and over (240 tph and over) . . . . .	5	109	139,025	109	147,100
3531F 85	Bituminous stabilization mixing equipment, including central mixing plants and mix-in-place . . . . .	6	249	58,635	227	45,114
3531F 89	Bituminous cold planers/milling machines (self-propelled) . . . . .	5	111	34,915	123	37,843
3531F 98	Other concrete and bituminous equipment, including mixers, heating kettles, heaters, circulators, and spreader boxes . . . . .	21	3,086	(D)	2,654	46,543
3531G 02	Scraper bowls . . . . .	4	1,926	131,274	1,709	124,898
3531G 11	Motor graders and light maintainers . . . . .	(X)	3,297	476,082	3,650	445,229
3531G 17	Under 144 neh. . . . .	5	(D)	134,479	1,424	147,003
3531G 17	145 neh and over . . . . .	3	(D)	341,603	2,226	298,226
3531G 21	Rollers and compactors . . . . .	(X)	7,512	368,458	7,458	361,296
3531G 21	Static smooth steel wheel rollers, tandem: Under 3 metric tons . . . . .	6	1,132	9,529	926	7,440
3531G 23	At least 3 but less than 5.5 metric tons . . . . .	2	( <sup>3</sup> )	( <sup>3</sup> )	197	4,285
3531G 26	5.5 metric tons and over . . . . .	5	<sup>3</sup> 366	<sup>3</sup> 11,582	205	8,150
3531G 32	Pneumatic tire rollers . . . . .	6	415	16,305	452	17,295
3531G 37	Vibratory single drum with one or two drive wheels: Under 5 metric tons . . . . .	6	947	25,750	616	19,204
3531G 39	At least 5 but less than 8 metric tons . . . . .	4	807	47,469	555	31,405
3531G 42	8 metric tons and over . . . . .	4	1,733	114,404	1,605	110,580
3531G 45	Vibratory double drum, two drums vibrating: Under 3 metric tons . . . . .	2	(D)	(D)	(D)	(D)
3531G 47	At least 3 but less than 5 metric tons . . . . .	3	(D)	(D)	(D)	(D)
3531G 49	At least 5 but less than 8 metric tons . . . . .	3	(D)	(D)	124	7,023
3531G 51	At least 8 but less than 11.3 metric tons . . . . .	3	(D)	(D)	(D)	(D)
3531G 53	11.3 metric tons and over . . . . .	1	(D)	(D)	(D)	(D)
3531G 56	All other compaction equipment (except hand-held); including, embankment and landfill compactors, towed roller and double drum compactors with one drum vibrating . . . . .	3	(D)	(D)	(D)	(D)
3531G 71	Off-highway trucks, truck-type tractor chassis, trailers, or wagons . . . . .	(X)	5,035	1,316,555	3,943	961,896
3531G 76	Off-highway rear dump haulers . . . . .	8	(D)	1,170,871	1,786	844,975
3531G 76	Other . . . . .	10	(D)	145,684	2,157	116,921
3531G 81	Rough terrain forklifts (integral units only) . . . . .	(X)	6,236	352,889	4,704	270,849
3531G 83	Vertical mast, 2-wheel drive . . . . .	11	2,872	153,683	2,251	129,580
3531G 85	Vertical mast, 4-wheel drive . . . . .	6	242	7,002	179	6,745
3531G 85	Telescopic handlers, 2- and 4-wheel drive . . . . .	5	3,122	192,204	2,274	134,524
3531N 06	Construction machinery for mounting . . . . .	(X)	101,843	310,122	95,447	286,576
3531N 12	Winches (towing, logging, and oil-field types) . . . . .	9	(D)	87,420	(D)	71,846
3531N 22	Backhoes, either shipped for mounting separately or already mounted on an integral unit . . . . .	9	13,793	80,187	11,130	84,913
3531N 22	All other construction machinery for mounting, including sidebooms, pipehandlers, dozers, front-end loaders, shovel loaders, logging arches, rippers, rooters, continuous ditching and trenching attachments, cranes, cable power control units, hydraulic power control units, etc. . . . .	30	(D)	142,515	(D)	129,817

See footnotes at end of table.

Table 5. Quantity and Value of Shipments of Selected Types of Construction Machinery: 1995 and 1994—Con.

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
	Ditchers and trenchers, self-propelled (integral units only) .....	(X)	9,385	193,951	8,223	174,011
	Ladder-type digging element:					
3531P 14	Under 2,000 lb gross weight .....	5	(D)	(D)	(D)	(D)
3531P 15	2,000 to 4,999 lb gross weight .....	4	(D)	51,948	(D)	50,418
3531P 16	5,000 lb gross weight and over .....	5	2,620	110,318	2,073	96,100
3531P 18	Wheel-type digging element .....	3	(D)	(D)	(D)	(D)
	Aerial work platforms .....	(X)	60,501	1,128,035	<sup>r</sup> 46,523	844,861
3531P 81	Boom type, self-propelled .....	8	9,692	485,842	6,721	331,240
3531P 83	Scissors type, self-propelled .....	11	(D)	(D)	(D)	209,883
3531P 85	Not self-propelled, boom and scissors type .....	6	(D)	(D)	(D)	<sup>r</sup> 40,254
3531P 87	Truck mounted .....	13	9,361	281,201	8,765	263,484

D Withheld to avoid disclosing data for individual companies. nehp Net engine horsepower. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. <sup>r</sup>Revised by 5 percent or more from previously published data. tph tons per hour. X Not applicable.

<sup>1</sup>Product codes 3531E 07 and 3531E 19 are combined for 1994 to avoid disclosing data for individual companies.

<sup>2</sup>Product codes 3531E 37 and 3531E 38 are combined to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 3531G 23 and 3531G 26 are combined for 1995 to avoid disclosing data for individual companies.

Table 6. Shipments, Exports, and Imports of Construction Machinery: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Product description <sup>1</sup>	Manufacturers' shipments <sup>1</sup>		Export shipments <sup>3</sup>		Imports for consumption <sup>4</sup>	
	Quantity	Value <sup>2</sup>	Quantity	Value as reported	Quantity	Value <sup>5</sup>
<b>1995</b>						
Wheel tractors, contractors' off-highway type, 2- and 4-wheel for use on natural terrain.....	(D)	(D)	1,714	51,548	5,312	30,902
Rubber-tired dozers .....	(D)	(D)	270	14,830	69	9,707
Wheeled log skidders, self-propelled.....	2,549	254,743	1,135	71,152	844	69,223
Crawler tractors (except crawler loaders).....	(D)	(D)	2,192	326,359	5,195	356,838
Wheel loaders, rear engine mount, integral design 4-wheel drive, non-skid steer.....	(D)	(D)	15,402	567,546	6,166	348,812
Skid steer loaders .....	51,244	745,520	1,276	86,123	5,311	199,689
Crawler loaders .....	(D)	(D)	77	4,090	1,147	128,767
Excavators, hydraulic operated, crawler mounted .....	12,331	1,378,292	1,960	250,621	7,930	691,143
Excavators, hydraulic operated, wheel (rubber) mounted .....	(D)	(D)	23	2,811	1,336	114,076
Cranes, lattice boom, wheel (rubber) mounted ...	38	27,581	106	15,992	63	12,738
Cranes, wheel (integral), hydraulic operated, telescopic boom, multiple control stations (rubber mounted), including pinned on type, telescopic and articulated .....	4,888	354,271	491	65,248	181	61,124
Cranes, wheel, hydraulic operated, telescopic boom, one control station (self-propelled, rubber mounted) .....	1,817	251,949	598	66,696	76	13,152
Cranes, pedestal or ship mounted.....	91	19,844	685	21,447	70	7,505
Cranes, other .....	(D)	(D)	215	54,242	447	44,220
Clamshell/grapple attachments.....	550	13,613	5,886	11,309	2,731	5,688
Dragline buckets (attachments) .....	74	9,035	-	-	179	212
Concrete mixers.....	(D)	405,884	1,997	17,371	29,923	14,580
Concrete pavers, finishers, and spreaders.....	(D)	(D)	758	17,709	370	4,703
Concrete pumps .....	(D)	(D)	1,836	28,765	1,199	13,876
Bituminous pavers, finishers, and spreaders.....	(D)	(D)	368	22,667	181	1,173
Asphalt plants and bituminous stabilization mixing equipment .....	398	233,948	760	30,852	66	1,819
Scraper bowls .....	1,926	131,274	65	339	543	12,902
Motor graders and light maintainers .....	3,297	476,082	1,778	171,729	1,045	82,356
Self-propelled vibratory compaction equipment....	5,599	331,042	1,679	62,207	6,372	96,255
Self-propelled static compaction equipment.....	1,913	37,416	1,170	46,505	234	8,749
Off-highway rear dump haulers, trucks, and truck trailers, including ridged and articulated.....	(D)	1,170,871	2,501	296,916	188	29,693
Off-highway trucks, truck-type tractor chassis, trailers, and wagons .....	(D)	145,684	1,762	242,315	883	141,384
Winches for mounting (towing, logging, and oilfield types) .....	(D)	87,420	213,374	67,163	1,364,312	44,420
Backhoes for mounting.....	13,793	80,187	1,368	5,219	3,175	2,022
Other construction machinery for mounting.....	(D)	142,515	27,916	48,748	26,371	56,642
Self-propelled continuous ditchers and trenchers (integral units), ladder-type digging element....	(D)	(D)	1,088	20,487	1	59
Self-propelled continuous ditchers and trenchers (integral units), wheel-type digging element.....	(D)	(D)	348	6,513	30	1,889
<b>1994</b>						
Wheel tractors, contractors' off-highway type, 2- and 4-wheel for use on natural terrain.....	(D)	(D)	1,145	38,020	6,846	31,711
Rubber-tired dozers .....	(D)	(D)	288	11,121	110	10,161
Wheeled log skidders, self-propelled.....	2,562	227,228	1,215	67,340	1,024	56,350
Crawler tractors (except crawler loaders).....	(D)	(D)	1,874	327,848	4,328	269,430
Wheel loaders, rear engine mount, integral design 4-wheel drive, non-skid steer.....	(D)	(D)	13,660	543,607	6,166	395,014
Skid steer loaders .....	45,582	631,653	1,921	94,111	5,198	209,829
Crawler loaders .....	(D)	(D)	140	4,781	1,645	182,565
Excavators, hydraulic operated, crawler mounted .....	( <sup>6</sup> )	( <sup>6</sup> )	1,982	233,973	6,317	557,726
Excavators, hydraulic operated, wheel (rubber) mounted .....	<sup>6</sup> 8,811	<sup>6</sup> 1,236,182	28	4,770	865	89,379

See footnotes at end of table.



Table 6. Shipments, Exports, and Imports of Construction Machinery: 1995 and 1994—Con.

[Quantity in units. Value in thousands of dollars]

Product description <sup>1</sup>	Manufacturers' shipments <sup>1</sup>		Export shipments <sup>3</sup>		Imports for consumption <sup>4</sup>	
	Quantity	Value <sup>2</sup>	Quantity	Value as reported	Quantity	Value <sup>5</sup>
<b>1994—Con.</b>						
Cranes, lattice boom, wheel (rubber) mounted . . .	37	21,855	84	14,138	145	17,980
Cranes, wheel (integral), hydraulic operated, telescopic boom, multiple control stations (rubber mounted), including pinned on type, telescopic and articulated . . . . .	4,615	311,748	456	68,444	122	44,053
Cranes, wheel, hydraulic operated, telescopic boom, one control station (self-propelled, rubber mounted) . . . . .	1,469	198,339	430	42,462	101	7,791
Cranes, pedestal or ship mounted . . . . .	66	18,726	464	10,343	310	3,855
Cranes, other . . . . .	3,814	322,048	172	72,705	295	24,480
Clamshell/grapple attachments . . . . .	1,098	35,407	4,593	8,902	2,839	4,387
Dragline buckets (attachments) . . . . .	114	13,921	-	-	142	319
Concrete mixers . . . . .	(D)	(D)	1,247	12,231	24,894	10,696
Concrete pavers, finishers, and spreaders . . . . .	(D)	(D)	1,082	31,987	430	2,343
Concrete pumps . . . . .	(D)	(D)	1,467	20,494	843	20,358
Bituminous pavers, finishers, and spreaders . . . . .	(D)	(D)	638	28,054	15	1,226
Asphalt plants and bituminous stabilization mixing equipment . . . . .	377	215,694	319	23,495	12	183
Scraper bowls . . . . .	1,709	124,898	14	207	261	22,259
Motor graders and light maintainers . . . . .	3,650	445,229	2,017	167,776	834	69,683
Self-propelled vibratory compaction equipment . . . . .	5,678	324,126	1,531	50,223	4,588	71,645
Self-propelled static compaction equipment . . . . .	1,780	37,170	1,337	37,205	283	10,005
Off-highway rear dump haulers, trucks, and truck trailers, including ridged and articulated . . . . .	1,786	857,939	39,038	259,586	441	32,209
Off-highway trucks, truck-type tractor chassis, trailers, and wagons . . . . .	2,157	116,921	1,191	186,808	16,237	126,896
Winches for mounting (towing, logging, and oil-field types) . . . . .	(D)	71,846	271,326	65,345	834,855	33,703
Backhoes for mounting . . . . .	11,130	84,913	1,151	4,540	2,695	1,767
Other construction machinery for mounting . . . . .	(D)	129,817	23,873	43,391	26,481	49,178
Self-propelled continuous ditchers and trenchers (integral units), ladder-type digging element . . . . .	(D)	(D)	1,292	20,721	-	-
Self-propelled continuous ditchers and trenchers (integral units), wheel-type digging element . . . . .	(D)	(D)	335	12,587	22	1,296

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>†</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.<sup>2</sup>Value f.o.b. plant.<sup>3</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.<sup>4</sup>Source: Bureau of the Census reports IM 145, *U.S. General Imports*, and IM 146, *U.S. Imports for Consumption*.<sup>5</sup>Represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.<sup>6</sup>Two varieties of hydraulic excavators are combined for 1994 to avoid disclosing data for individual companies.

## HISTORICAL NOTES

Data on construction machinery have been collected by the Bureau of the Census since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Richard Wiesler, 301-457-4746.

## MINING MACHINERY AND MINERAL PROCESSING EQUIPMENT (MA35F)

### INTRODUCTION

These data cover firms engaged in the manufacture of underground mining machinery; mineral processing and beneficiation machinery and equipment; crushing, pulverizing, and screening machinery; portable oil and gas and water drilling rigs; and related mining machinery and equipment, including underground drills and breakers, conveyors and hoists, and mine cars and locomotives.

The statistics were collected by mail on Bureau of the Census annual Form MA35F, Mining Machinery and Mineral Processing Equipment. The survey panel includes all known manufacturers of mining machinery and mineral processing equipment, approximately 122 companies.

### SUMMARY OF FINDINGS

In 1995, the manufacturers' value of shipments of selected types of mining machinery and related equipment totaled \$1.7 billion, an increase of 24 percent from the 1994 figure of \$1.4 billion. The 1995 total included shipments of \$99.7 million of portable crushing, pulverizing, and screening machinery, which was an 18-percent increase from the 1994 total of \$84.8 million. Underground mining machinery equipment totaled \$493.3 million in 1995, a 38-percent increase from the 1994 total of \$356.3 million. In 1995, stationary, crushing, pulverizing, and screening machinery totaled \$330.6 million, a 20-percent increase from the \$276.4 million reported in 1994. Drills and other mining machinery totaled \$392.9 million in 1995, a 15-percent increase from the \$343.0 million reported in 1994. Portable drilling rigs totaled \$402.3 million in 1995, a 25-percent increase from the \$322.2 million reported in 1994.

### EXPLANATION OF TERMS

**Mining machinery.** Heavy machinery and equipment used by the mining industry in the exploration and development of solid mineral properties. Mining is used here in the broad sense to include the extraction of solid minerals occurring naturally such as coal and ores. The term mining also includes quarrying, milling (crushing, screening, washing, flotation, etc.), and other preparations customarily done at the mine site or as a part of mining activity. Portable drilling rigs for use in oil and gas fields or for drilling water wells are also included for the purpose of this survey.

**Auger drills.** Machines that use continuous flight auger bits for removing cuttings.

**Bucket drills.** Machines that rotate a bucket and remove cuttings by lifting the bucket to be dumped.

**Cable tools.** Machines using percussion-type tools, and those that clean the hole using tubular-type bailing tools.

**Centrifugal dryers.** Devices for the removal of different densities by means of centrifugal action.

**Centrifuges.** Devices for classifying materials of different densities via centrifugal action.

**Classifiers, sizing, washing, and dewatering (excluding cyclones).** Machines for making size separations of ores, for separating ore from the vein matter, or for cleaning coal from slack.

**Cyclones, wet.** Devices designed to make a size separation or remove a constituent such as water, from a material in process via centrifugal force.

**Dense medium vessels.** Separatory vessels for the treatment of ores by the sinkfloat principle, using fluid medium, the density of which lies between that of the materials to be separated.

**Dryers, thermal.** Machines for reducing moisture content of a mineral product by means of heat.

**Feeders, apron, vibrating, and reciprocating.** Devices for the uniform feeding of coal and ores to crushers, mixers, dryers, furnaces, and conveyors.

**Filters.** Disk, drum, and pan filters for dewatering pulps and flotation concentrates.

**Flotation machines.** Machines in which finely crushed ore (mineral and valueless gangue) is agitated in water with the addition of air or other gas and a reagent (chemical or oil). This agitation causes the mineral particles to attach themselves to the air or gas bubbles that rise to the surface, where the mineral particles are removed in froth known as concentrate.

**Jigs.** Machines to separate heavier materials from lighter materials by agitation in water.

**Magnetic separators.** Devices broadly classified as concentrators, purifiers, reclaimers, and protectors. Magnets of special design fit the needs of these applications.

**Portable drilling rigs.** Drills mounted on a carrier and used on the surface (above ground).

**Pull-back capacity.** Lifting capacity of drawworks or hoisting capacity of taphead.

**Pull-down capacity.** Capacity to apply bit pressure.

**Reverse circulation.** Machines using a rotary drilling process where the drill cuttings and fluid return to the surface inside the drill stem (large diameter holes, 18" or larger).

**Rotary drills.** Machines using rotary drill pipe, continuous fluid, and a mud pump, air compressor, or combination to clear the hole of filling.

**Screens, vibrating.** Machines used for dry or wet screening applications such as sizing, washing, and dewatering of ores, coal, sand, and gravel.

**Scrubbers (all types, including drums, log washers, and attritioning machines).** Devices for mechanically removing any undesirable material from the surface of a mineral product.

**Spirals, concentrating.** A spiral chute that separates heavy particles from light particles by centrifugal action.

**Table, concentrating.** Devices for separating finely crushed particles of coal or ore from the worthless rock or vein matter by taking advantage of differences in particle density and size.

**Thickeners (excluding wet cyclones).** Devices for the separation of solids from the liquids in which they are suspended by introducing the suspension into tanks or basins to permit gravitational settling or sedimentation of the solids.

**Unit.** Complete rig, including carrier.

Table 7. **Manufacturers' Shipments of Mining Machinery and Mineral Processing Equipment by Type: 1995 and 1994**

[Quantity in units except as specified. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
3531K —	Mining machinery and mineral processing equipment. . . . .	(X)	(X)	1,718,859	(X)	<sup>1</sup> 1,382,763
	Portable crushing, screening, washing, and combination plants . . . . .	17	654	99,748	607	84,776
	Crushing plants (classification based upon the type of crusher first in the processing flow):					
3531K 41	Gyratory . . . . .	6	86	27,043	76	21,536
3531K 42	Impact . . . . .	8	44	10,169	48	13,126
3531K 43	Jaw . . . . .	11	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>
3531K 44	Roll . . . . .	1	<sup>1</sup> 78	<sup>1</sup> 24,594	<sup>1</sup> 55	<sup>1</sup> 15,965
3531K 47	Screening, washing, and other plants. . . . .	12	446	37,942	428	<sup>1</sup> 34,149
35325 —	Underground mining machinery (except parts sold separately) . . . . .	34	5,035	493,328	4,189	356,321
35325 41	Continuous mining machines, borer, ripper, auger, and drum, including roadheading machines . . . . .	11	299	151,845	238	125,086
35325 56	Face-haulage vehicles, rubber-tired, self-propelled . . . . .	8	207	48,130	127	27,521
35325 70	Support vehicles, rubber-tired or track-mounted. . . . .	17	453	33,957	256	19,160
35325 97	All other underground mining machinery, n.e.c. . . . .	25	<sup>b</sup> 4,076	259,396	3,568	184,554
35327 —	Crushing, pulverizing, and screening (except portable machinery (except parts sold separately). . . . .	46	3,919	330,649	<sup>1</sup> 3,737	276,412
	Crushers, stationary type, including skid-mounted:					
35327 11	Gyratory . . . . .	6	244	69,231	<sup>1</sup> 228	<sup>1</sup> 61,299
35327 13	Impact . . . . .	15	<sup>b</sup> 373	<sup>b</sup> 25,945	<sup>1</sup> 406	<sup>1</sup> 52,867
35327 17	Jaw . . . . .	9	121	16,956	<sup>1</sup> 89	<sup>1</sup> 12,225
35327 19	Roll . . . . .	8	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>
35327 31	Grinding mills and pulverizers . . . . .	6	<sup>2</sup> <sup>b</sup> 176	<sup>2</sup> <sup>b</sup> 111,800	<sup>2</sup> 142	<sup>2</sup> 72,048
	Screens, vibrating, stationary:					
35327 56	Horizontal . . . . .	15	984	36,257	935	25,218
35327 57	Inclined . . . . .	18	1,704	52,825	<sup>1</sup> 1,528	<sup>1</sup> 38,822
53527 58	Other, including trommell. . . . .	10	87	5,073	<sup>1</sup> 111	<sup>1</sup> 4,181
35327 59	Other crushing, pulverizing, and screening machinery, n.e.c. . . . .	9	230	12,562	298	9,752
35328 —	Drills and other mining machinery, n.e.c. (except parts). . . . .	30	13,489,539	392,869	<sup>1</sup> 12,838,891	<sup>1</sup> 343,049
	Drills and breakers (rotary and percussion):					
35328 11	Rock drills, air and hydraulic powered . . . . .	6	25,330	79,668	23,974	83,528
35328 15	Coal drills and core drills. . . . .	4	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
35328 50	Roof bolters . . . . .	8	<sup>3</sup> 9,657,245	<sup>3</sup> 76,426	<sup>3</sup> 9,446,136	<sup>3</sup> 61,225
35328 75	All other mining machinery and equipment (except parts sold separately). . . . .	25	3,806,964	236,775	<sup>1</sup> 3,368,781	<sup>1</sup> 198,296
3533A —	Portable drilling rigs and parts . . . . .	30	2,142,426	402,265	2,569,905	322,205
	Rotary, trailer- and truck-mounted with pull-back capacity:					
3533A 21	Up to 14,999 lb . . . . .	4	57	3,808	80	3,821
3533A 23	15,000 to 29,999 lb . . . . .	7	143	21,940	127	20,382
3533A 25	30,000 to 59,999 lb . . . . .	6	<sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>	<sup>(4)</sup>
3533A 28	60,000 lb and over . . . . .	3	<sup>4</sup> 263	<sup>4</sup> 58,725	<sup>4</sup> 168	<sup>4</sup> 49,597
	Rotary blasthole drills, truck-, trailer-, or track-mounted:					
3533A 35	Up to 59,999 lb . . . . .	5	142	64,824	139	46,233
3533A 38	60,000 lb and over . . . . .	4	57	70,663	44	39,817
3533A 40	Construction drills . . . . .	11	9,950	17,255	8,820	17,893
3533A 49	Other portable drilling rigs, including workover (service) rigs . . . . .	7	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>	<sup>(5)</sup>
3533A 78	Parts for portable drilling rigs . . . . .	22	<sup>5</sup> 2,131,814	<sup>5</sup> <sup>a</sup> 165,050	<sup>5</sup> 2,560,527	<sup>5</sup> 144,462

n.e.c. Not elsewhere classified. <sup>1</sup>Revised by 5 percent or more from previously published data. X Not applicable.<sup>1</sup>Product codes 3531K 43 and 3531K 44 are combined to avoid disclosing data for individual companies.<sup>2</sup>Product codes 35327 19 and 35327 31 are combined to avoid disclosing data for individual companies.<sup>3</sup>Product codes 35328 15 and 35328 50 are combined to avoid disclosing data for individual companies.<sup>4</sup>Product codes 3533A 25 and 3533A 28 are combined to avoid disclosing data for individual companies.<sup>5</sup>Product codes 3533A 49 and 3533A 78 are combined to avoid disclosing data for individual companies.Note: Percent estimation of each item is indicated as follows: <sup>a</sup>15 to 25 percent of this item is estimated. <sup>b</sup>26 to 50 percent of this item is estimated. <sup>c</sup>Over 50 percent of this item is estimated.

Table 8. **Shipments, Exports, and Imports of Selected Mining Machinery and Mineral Processing Equipment: 1995 and 1994**

[Value in thousands of dollars]

Product description <sup>1</sup>	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise <sup>1 2</sup> (value at port)	Value of imports for consumption <sup>1 3 4</sup>
<b>1995</b>			
Portable crushing plants and stationary grinding mills and pulverizers . . . . .	133,335	73,439	31,198
Sorting, screening, separating, or washing machines . . . . .	144,659	61,262	48,242
Rock breaking machines, coal or rock cutters, and tunneling machinery . . .	307,939	393,071	223,902
Mine wagon pushers, locomotive or wagon tracers, wagon tippers, and similar railway wagon handling equipment . . . . .	82,087	6,861	641
Stationary crushing machines . . . . .	115,191	19,031	34,680
<b>1994</b>			
Portable crushing plants and stationary grinding mills and pulverizers . . . . .	84,147	78,373	25,057
Sorting, screening, separating, or washing machines . . . . .	112,122	51,956	44,127
Rock breaking machines, coal or rock cutters, and tunneling machinery . . .	269,839	182,128	151,533
Mine wagon pushers, locomotive or wagon tracers, wagon tippers, and similar railway wagon handling equipment . . . . .	46,681	11,248	621
Stationary crushing machines . . . . .	130,257	29,782	15,343

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at the end of this subsection.

<sup>2</sup>Source: Bureau of the Census report FT 446, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

## HISTORICAL NOTE

Data on mining machinery and equipment have been collected by the Bureau of the Census since 1961. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.

Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Larry Blumberg, 301-457-4744.

## INTERNAL COMBUSTION ENGINES (MA35L)

### INTRODUCTION

These data cover manufacturers of internal combustion engines in the United States, except outboard, aircraft, military tank, and nondiesel automotive engines.

The statistics were collected by mail on Bureau of the Census annual Form MA35L, Internal Combustion Engines. The survey panel includes all known domestic manufacturers of the specified types of internal combustion engines, approximately 38 companies.

### SUMMARY OF FINDINGS

In 1995, a total of 23,248,340 internal combustion engines (except outboard, nondiesel automotive, aircraft and military tank) were shipped or produced and incorporated at the same plant, representing a 4-percent decrease from the 24,209,428 produced in 1994. Gasoline or gas-gasoline engines totaled 22,263,065 in 1995, 4.5 percent below the figure of 23,315,542 for 1994. The number of nonautomotive diesel, semidiesel, and dual-fuel engines produced in 1995 amounted to 242,490, an 8-percent increase from the 223,825 reported in 1994. There were 734,061 automotive diesel, semidiesel, and dual-fuel engines produced in 1995, 11 percent more than the 661,155 produced in 1994. Production of gas engines (LPG and natural) was 8,724 in 1995, 2 percent less than the 8,906 produced in 1994.

### EXPLANATION OF TERMS

**Total number of engines produced.** Represents all production of engines for sale to other companies, for transfer to other plants of the same company or for the incorporation into other products produced at the plant.

**Shipments to distributors and other companies.** Represents all shipments to affiliated and nonaffiliated distributors, plus all other shipments to nonaffiliated companies.

**Interplant transfers.** Represents the number and value of engines transferred to other plants of the reporting company for incorporation into machinery or equipment in those plants. Shipments to distributors (whether affiliated with the company or not affiliated) are excluded. Transfers to other plants of the same company are reported at market value.

**Produced and incorporated.** Represents engines produced and incorporated into other products in the same plant, such as construction and farm machinery (including tractors); engine-driven generator sets; and other products incorporating an engine manufactured in the same plant.

**Horsepower.** A unit for measuring the power of motors or engines, equal to 746 watts or to a rate of 33,000 foot-pounds per minute (the force required to raise 33,000 pounds at the rate of 1 foot per minute).

**Piston displacement.** The volume (measured in cubic inches) displaced by a stroke of a piston (one cubic inch is approximately 16.387 cubic centimeters).

**End application.** The end application or use to which the engine was destined. Engines may not be used ultimately for the specific application intended or supposed by the producer.

**Table 9. Internal Combustion Engines by Type of Engine: 1995 and 1994**

[Engines and quantity in units. Value in thousands of dollars]

Product description	Engines produced <sup>1</sup>	Total shipments and interplant transfers		Shipments to other companies		Interplant transfers		Engines produced and incorporated <sup>2</sup>
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	
<b>1995</b>								
<b>Total .....</b>	<b>23,248,340</b>	<b>14,145,049</b>	<b>10,174,977</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>9,103,291</b>
Gasoline (except automotive).....	22,263,065	13,183,133	2,101,128	12,368,157	1,833,899	814,976	267,229	9,079,932
Nonautomotive diesel.....	242,490	(D)	1,905,851	162,069	1,354,164	(D)	551,687	(D)
Automotive diesel .....	734,061	734,061	5,844,031	559,817	4,683,314	174,244	1,160,717	-
Natural gas and liquefied petroleum gas.....	8,724	(D)	323,967	(D)	(D)	(D)	(D)	(D)
<b>1994</b>								
<b>Total .....</b>	<b>24,209,428</b>	<b>15,872,205</b>	<b>9,363,615</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>8,337,223</b>
Gasoline (except automotive).....	23,315,542	14,998,668	2,259,068	14,202,488	1,959,959	796,180	299,109	8,316,874
Nonautomotive diesel.....	223,825	(D)	1,680,037	149,943	1,181,850	(D)	498,187	(D)
Automotive diesel .....	661,155	661,155	5,167,305	493,552	4,133,669	167,603	1,033,636	-
Natural gas and liquefied petroleum gas.....	8,906	(D)	257,205	(D)	(D)	(D)	(D)	(D)

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Represents total number of engines produced; incorporated into products at the same establishment or shipped.

<sup>2</sup>Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

**Table 10. Gasoline Engines by Horsepower Rating: 1995 and 1994**

[Engines and quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	Engines produced <sup>1</sup>	Total shipments and interplant transfers		Shipments to other companies		Interplant transfers		Engines produced and incorporated <sup>2</sup>
				Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	
<b>1995</b>										
35191 —	Gasoline engines .....	22	22,263,065	13,183,133	2,101,128	12,368,157	1,833,899	814,976	267,229	9,079,932
35191 01	Under 11 hp.....	13	19,863,445	(D)	(D)	(D)	(D)	633,022	57,132	(D)
35191 02	11 to under 21 hp...	5	(D)	(D)	(D)	(D)	(D)	38,468	15,612	(D)
35191 03	21 to under 61 hp...	7	84,642	83,569	87,476	(D)	(D)	(D)	(D)	(D)
35191 07	61 hp and over .....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
<b>1994</b>										
35191 —	Gasoline engines .....	21	23,315,542	14,998,668	2,259,068	14,202,488	1,959,959	796,180	299,109	8,316,874
35191 01	Under 11 hp.....	14	20,933,790	(D)	(D)	(D)	(D)	632,250	56,080	(D)
35191 02	11 to under 21 hp...	6	(D)	(D)	(D)	(D)	(D)	36,080	16,024	(D)
35191 03	21 to under 61 hp...	6	68,433	67,548	76,503	(D)	(D)	(D)	(D)	(D)
35191 07	61 hp and over .....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Represents total number of engines produced; incorporated into products at the same establishment or shipped.

<sup>2</sup>Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

Note: Horsepower is defined as maximum published horsepower rating at maximum recommended revolutions per minute (r/min).

Table 11. Nonautomotive Diesel Engines by Horsepower Rating: 1995 and 1994

[Engines and quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	Engines produced <sup>1</sup>	Total shipments and interplant transfers		Shipments to other companies		Interplant transfers		Engines produced and incorporated <sup>2</sup>
				Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	
<b>1995</b>										
35193 —	Nonautomotive diesel engines...	14	242,490	(D)	1,905,851	162,069	1,354,164	(D)	551,687	(D)
35193 31	Under 101 hp .....	9	17,630	(D)	42,751	(D)	(D)	(D)	(D)	3,645
35193 33	101 to under 151 hp .....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 35	151 to under 176 hp .....	6	36,445	(D)	(D)	20,066	91,971	(D)	(D)	(D)
35193 37	176 to under 251 hp .....	6	66,228	(D)	(D)	43,761	228,274	(D)	(D)	(D)
35193 39	251 to under 301 hp .....	5	15,819	(D)	(D)	6,910	79,667	(D)	(D)	(D)
35193 41	301 to under 401 hp .....	5	(D)	10,748	154,113	7,389	103,167	3,359	50,946	(D)
35193 43	401 to under 451 hp .....	3	6,796	(D)	(D)	6,257	102,767	(D)	(D)	(D)
35193 45	451 to under 601 hp .....	3	4,997	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 47	601 to under 701 hp .....	3	3,247	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 49	701 to under 801 hp .....	3	(D)	(D)	(D)	1,287	42,509	(D)	(D)	(D)
35193 51	801 to under 1,501 hp .....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 28	1,501 hp and over .....	7	3,693	(D)	(D)	865	259,266	(D)	(D)	(D)
<b>1994</b>										
35193 —	Nonautomotive diesel engines...	13	223,825	(D)	1,680,037	149,943	1,181,850	(D)	498,187	(D)
35193 31	Under 101 hp .....	8	(D)	(D)	48,467	(D)	(D)	(D)	(D)	3,336
35193 33	101 to under 151 hp .....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 35	151 to under 176 hp .....	6	35,566	(D)	(D)	20,346	83,416	(D)	(D)	(D)
35193 37	176 to under 251 hp .....	6	59,731	(D)	(D)	38,285	195,485	(D)	(D)	(D)
35193 39	251 to under 301 hp .....	5	11,498	(D)	(D)	5,942	63,453	(D)	(D)	(D)
35193 41	301 to under 401 hp .....	5	(D)	11,363	146,352	6,649	77,401	4,714	68,951	(D)
35193 43	401 to under 451 hp .....	3	4,671	(D)	(D)	4,258	72,076	(D)	(D)	(D)
35193 45	451 to under 601 hp .....	3	6,334	(D)	(D)	3,925	98,698	(D)	(D)	(D)
35193 47	601 to under 701 hp .....	3	3,180	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 49	701 to under 801 hp .....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
35193 51	801 to under 1,501 hp .....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 28	1,501 hp and over .....	7	(D)	(D)	(D)	866	218,504	(D)	(D)	2,477

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>Represents total number of engines produced; incorporated into products at the same establishment or shipped.

<sup>2</sup>Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

Note: Horsepower is defined as maximum published horsepower rating at maximum recommended revolutions per minute (r/min).



Table 12. Automotive Diesel Engines by Horsepower Rating: 1995 and 1994

[Engines in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Engines <sup>1</sup>	Value <sup>2</sup>	Engines <sup>1</sup>	Value <sup>2</sup>
35194 —	Automotive diesel engines.....	9	734,061	5,844,031	661,155	5,167,305
35194 11	Under 226 hp.....	9	(D)	(D)	381,824	1,750,455
35194 14	226 to under 251 hp.....	7	(D)	(D)	18,478	116,247
35194 15	251 hp and over.....	7	278,632	3,584,597	260,853	3,300,603

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Represents total number of engines shipped, including interplant transfers.<sup>2</sup>Represents value of all engines shipped, including interplant transfers.

Table 13. Gas Engines (Except Automotive) by Horsepower Rating: 1995 and 1994

[Engines and quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	Engines produced <sup>1</sup>	Total shipments including interplant transfers		Engines produced and incorporated <sup>2</sup>
				Quantity	Value f.o.b. plant	
	<b>1995</b>					
35196 —	Natural gas and liquefied petroleum gas engines..	8	8,724	(D)	323,967	(D)
35196 11	Under 501 hp.....	7	(D)	7,117	47,346	(D)
35196 12	501 hp and over.....	4	(D)	(D)	276,621	-
	<b>1994</b>					
35196 —	Natural gas and liquefied petroleum gas engines..	11	8,906	(D)	257,205	(D)
35196 11	Under 501 hp.....	10	(D)	7,504	49,232	(D)
35196 12	501 hp and over.....	4	(D)	(D)	207,973	-

- Represents zero. D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Represents total number of engines produced; incorporated into products at the same establishment or shipped.<sup>2</sup>Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

Table 14. Engines Produced by Piston Displacement and Fuel System: 1995 and 1994

Piston displacement	1995	1994
<b>Total.....</b>	<b>23,239,616</b>	<b>24,200,522</b>
Gasoline.....	22,263,065	23,315,542
Under 251 cc.....	19,420,463	20,413,417
251 cc and over.....	2,842,602	2,902,125
Nonautomotive diesel.....	242,490	223,825
Under 251 cc.....	2,450	2,459
251 to 3,700 cc.....	29,905	28,437
3,701 cc and over.....	210,135	192,929
Automotive diesel.....	734,061	661,155
Under 251 to 3,700 cc.....	194,275	174,980
3,701 cc and over.....	539,786	486,175

cc Cubic centimeters. <sup>1</sup>Revised by 5 percent or more from previously published data.

Table 15. **Engines Produced (Except Outboard, Automotive, and Aircraft) by Type of Engine and End Application: 1995 and 1994**

End application	Gasoline engines		Nonautomotive diesel engines	
	1995	1994	1995	1994
<b>Total</b> .....	<b>22,263,065</b>	<b>23,315,542</b>	<b>242,490</b>	<b>223,825</b>
Oilfield and petroleum-related generating and stationary equipment .....	-	-	(D)	(D)
Other generator sets .....	(D)	(D)	32,420	31,902
Irrigation .....	(D)	(D)	(D)	(D)
Agricultural vehicular .....	(D)	(D)	(D)	(D)
Off-highway mobile construction equipment .....	(D)	(D)	119,408	<sup>†</sup> 107,981
Marine (except outboard) .....	(D)	(D)	12,573	<sup>†</sup> 10,262
Railroad, motive power type .....	-	-	1,357	(D)
Chain saws .....	2,125,956	2,185,422	-	-
Garden tractors .....	(D)	(D)	-	-
Lawn, home, and recreational equipment .....	15,867,604	16,945,370	-	-
Other general industrial .....	1,204,412	(D)	25,406	23,200

- Represents zero. D Withheld to avoid disclosing data for individual companies. <sup>†</sup>Revised by 5 percent or more from previously published data.

Table 16. **Production, Exports, and Imports of Internal Combustion Engines: 1995 and 1994**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Manufacturers' production		Exports of domestic merchandise <sup>2</sup>		Imports for consumption <sup>3</sup>	
		Quantity	Value of shipments f.o.b. plant <sup>1</sup>	Quantity	Value at port	Quantity	Value
	<b>1995</b>						
	<b>Total</b> .....	<b>14,145,049</b>	<b>10,174,977</b>	<b>2,186,163</b>	<b>2,067,020</b>	<b>2,846,935</b>	<b>2,112,537</b>
35194	Automotive diesel engines .....	734,061	5,844,031	87,815	781,015	12,000	83,794
35193	Nonautomotive diesel engines .....	(D)	1,905,851	61,155	920,458	295,109	876,393
35191	Gasoline engines .....	13,183,133	2,101,128	2,034,854	318,461	2,507,685	1,122,814
35196	Gas and liquefied petroleum gas engines ...	(D)	323,967	2,339	47,086	32,141	29,536
	<b>1994</b>						
	<b>Total</b> .....	<b>15,872,205</b>	<b>9,363,615</b>	<b>2,217,287</b>	<b>2,022,263</b>	<b>2,520,579</b>	<b>1,815,316</b>
35194	Automotive diesel engines .....	661,155	5,167,305	91,993	834,969	12,711	67,524
35193	Nonautomotive diesel engines .....	(D)	1,680,037	56,066	816,971	274,624	759,588
35191	Gasoline engines .....	14,998,668	2,259,068	2,066,717	313,190	2,214,025	963,532
35196	Gas and liquefied petroleum gas engines ...	(D)	257,205	2,511	57,133	19,219	24,672

D Withheld to avoid disclosing data for individual companies.

<sup>1</sup>Value of shipments f.o.b. plant of production; quantities shipped as engines, including interplant transfers.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. General Imports*. These data include both import value and duty value.

**HISTORICAL NOTE**

Data on internal combustion engines have been collected by the Bureau of the Census since 1943. Historical data may be obtained from Current Industry Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are

also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact J. Stanis Batton, 301-457-4750.

## METALWORKING MACHINERY (MQ35W)

### INTRODUCTION

These data cover all companies engaged in the manufacture of industrial type metal cutting and metal forming types of metalworking machinery, including numerical control types.

The statistics were collected by mail on Bureau of the Census quarterly Form MQ35W, Metalworking Machinery. The survey panel includes all known manufacturers of metal cutting and metal forming machinery. Approximately 415 companies are included.

### SUMMARY OF FINDINGS

Shipments of metalworking machinery during 1995 totaled \$4,547.1 million, a 20-percent increase from the \$3,780.1 million shipments for 1994. Exports during the year were valued at \$626.7 million, a 6-percent increase from exports valued at \$590.9 million during 1994. The value of unfilled orders on December 31, 1995 totaled \$2,405.9 million. The December 31, 1994 unfilled orders were valued at \$2,400.5 million.

Shipments of metal cutting type machine tools in 1995 totaled \$3,036.6 million, a 23-percent increase from the \$2,463.0 million shipped during 1994. For 1995, shipments of lathes accounted for \$478.0 million; grinding and polishing machines, \$549.6 million; milling machines, \$194.8 million; and boring and drilling machines, \$251.4 million. The corresponding figures for 1994 were: lathes, \$390.4 million; grinding and polishing machines, \$443.3 million; milling machines, \$138.9 million; and boring and drilling machines, \$181.8 million.

### EXPLANATION OF TERMS

**Exports.** Includes both shipments for direct export and shipments to agent or exporters for shipment to foreign countries.

**Metal cutting type machine tools.** These are defined as new, industrial type, power-driven, complete machine tools, not supported in the hands of an operator when in use. They are used for removing metal in the form of chips, turnings, and borings. Also included are honing machines, lapping machines, and grinders. Excluded are machine tools designed primarily for home workshops, laboratories, garages, and services shops. These are small, low-priced

machine tools of light construction. Also excluded are rolling mill machinery, power-driven hand tools, wood working machinery, and rebuilt machinery.

**Metal forming type machine tools.** These are defined as new, industrial type, power-driven, complete machine tools, not supported in the hands of an operator when in use. They are used to press, forge, emboss, hammer, extrude, blank, spin, shear, or bend metal into shape.

### Numerically Controlled Machines by Type:

*Positioning.* Machines equipped with positioning numerical control systems activated by direct data input (DNC); e.g., punched tape, punched cards, magnetic tape, cassette, or manual data input (MDI). Included in this group are all machines that have been equipped with control systems in which point-to-point positioning and cutting or forming (regardless of the number of movement "axes" or auxiliary functions) are controlled automatically via numerical programs inserted into the systems. If a machine has been equipped with a control system that permits positioning and continuous path operations, it is classified as continuous path.

*Continuous path or computer numerical control.* Machine equipped with continuous path numerical program control systems activated by direct data input (CNC); e.g., punched tape, punched cards, magnetic tape, cassette, or manual data input (MDI). Included in this group are all machines equipped with control systems in which, in addition to point-to-point positioning, the path of cutting is automatically controlled by means of numerical programs inserted into the systems. If a machine has been equipped with a control system that permits positioning and continuous path operations, it is classified as continuous path.

*Digital readout systems including dial or plugboard.* Machines equipped with digital readout systems or dial or plugboard type of prerecorded motion program control systems. Included in this group are all machines equipped with control systems in which positioning or continuous path are automatically commanded by numerical programs fed into the system, by an operator, through dials, plugs, switches, or any other numerical method.

Table 17. Value of Shipments, Including Exports, of Metalworking Machinery by Class of Product: 1986 to 1995

[Thousands of dollars]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
	<b>Metalworking machinery . . . . .</b>	<b>4,547,133</b>	<b>3,780,074</b>	<b>3,222,456</b>	<b>3,073,862</b>	<b>3,171,748</b>	<b>3,426,081</b>	<b>3,514,224</b>	<b>2,858,174</b>	<b>2,668,685</b>	<b>2,709,800</b>
	Metal cutting type <sup>1</sup> . . . . .	3,036,592	2,463,001	2,084,864	1,999,668	2,138,713	2,371,266	2,428,520	1,734,781	1,780,737	1,911,628
3541D <sup>2</sup> pt.	Boring machines <sup>2</sup> . . . . .	172,417	129,835	84,667	97,975	77,655	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	83,916
3541D <sup>2</sup> pt.	Drilling machines <sup>2</sup> . . . . .	78,936	51,987	37,076	37,472	37,374	<sup>3</sup> 184,118	<sup>3</sup> 183,151	<sup>3</sup> 133,860	<sup>3</sup> 154,665	40,040
35413	Gear cutting machines . . . . .	137,121	100,612	87,662	79,600	115,226	102,678	97,304	48,897	59,608	57,313
35414	Grinding and polishing machines (except gear-tooth grinding, lapping, polishing, and buffing machines) . . . . .	549,580	443,262	360,894	335,121	378,946	433,574	419,754	359,821	384,711	419,659
35415	Lathes <sup>4</sup> . . . . .	478,003	390,843	305,488	258,885	317,087	355,632	343,223	282,480	283,505	261,973
35416	Milling machines <sup>5</sup> . . . . .	194,757	138,852	180,174	210,403	201,137	214,254	206,248	184,482	206,910	169,221
3541A	Machining centers (multi-function numerically controlled machines) . . . . .	698,780	552,358	485,375	377,941	361,799	436,999	442,226	334,469	217,839	213,405
3541B	Station type machines . . . . .	477,021	455,138	374,772	434,705	450,366	502,066	562,887	225,376	299,570	517,736
3541C	Other metal cutting machine tools (except those designed primarily for home workshops, laboratories, etc.) . . . . .	246,237	200,114	166,248	166,535	195,654	141,945	173,727	165,396	173,929	148,365
	Metal forming type . . . . .	1,510,541	1,277,187	1,139,581	1,074,194	1,033,035	1,064,815	1,085,704	1,123,393	887,948	798,172
35421 pt.	Punching and shearing machines . . . . .	326,318	294,441	213,402	172,872	180,756	200,050	200,104	167,347	141,965	122,253
35421 pt.	Bending and forming machines . . . . .	256,882	253,219	255,299	270,044	204,357	229,271	217,891	204,939	173,380	169,853
35422	Presses (except forging) . . . . .	379,203	376,398	345,653	288,248	297,889	319,436	316,549	356,528	265,630	293,090
35423 pt.	Forging machines . . . . .	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	73,947	58,478	( <sup>6</sup> )	42,735	36,715
35423 pt.	Other metal forming type machines . . . . .	<sup>6</sup> 548,138	<sup>6</sup> 393,015	<sup>6</sup> 325,227	<sup>6</sup> 342,830	<sup>6</sup> 350,033	274,985	292,682	<sup>6</sup> 394,579	264,238	176,261

pt. Part.

<sup>1</sup>Data for "All lathes, turning machines" and "All milling machines, valued at under \$3,025 each" are included with "Metal cutting type" for 1995.<sup>2</sup>Prior to the 1987 Census of Manufactures, the boring machine product code was identified as 35411, and the drilling machine product code was identified as 35412.<sup>3</sup>For 1987 through 1990, "Boring machines" have been combined with "Drilling machines" to avoid disclosing data for individual companies.<sup>4</sup>For 1991 through 1994, product code 35415, "Lathes," excludes the value for product code 35415 09, "All lathes valued under \$3,025 each."<sup>5</sup>For 1991 through 1994, product code 35416, "Milling machine," excludes the value for product code 35416 09, "All milling machines valued under \$3,025 each."<sup>6</sup>For 1991 through 1995, and 1988, "Forging machines" have been combined with "Other metal forming machines" to avoid disclosing data for individual companies.

Table 18. Total Shipments and Unfilled Orders: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1995			1994		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
	Metalworking machinery . . . . .	(X)	174,683	4,547,133	2,405,916	171,554	3,780,074	2,400,452
	Metal cutting type machine tools . . . . .	(X)	117,743	3,036,592	1,544,323	101,139	2,463,001	1,596,893
	Metal forming type machine tools . . . . .	(X)	56,940	1,510,541	861,593	70,415	1,317,073	803,559
	Metal cutting type machine tools valued over \$3,025 . . .	(X)	36,353	2,984,910	1,541,056	27,939	2,422,468	1,593,271
	Metal cutting type machine tools valued at \$3,025 and under <sup>1,2</sup> . . . . .	(X)	81,390	51,682	3,267	73,200	40,533	3,622
3541D 00	Boring and drilling machines . . . . .	49	10,465	251,353	103,351	9,944	181,822	110,915
3541D 10	All boring machines valued under \$3,025 each . . . .	-	(X)	(X)	(X)	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
3541D 15	Boring machines valued at \$3,025 each or more: Horizontal boring, drilling, and milling machines, including floor, table, and rail mounted . . . . .	5	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
3541D 40	Precision boring machines, including horizontal and vertical boring machines . . . . .	13	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	1,066	129,163	85,725
3541D 45	Jig boring and all other boring machines (except boring lathes) . . . . .	1	<sup>3</sup> c <sup>1</sup> ,374	<sup>3</sup> 172,417	<sup>3</sup> a <sup>63</sup> ,210	<sup>3</sup> 27	<sup>3</sup> b <sup>67</sup> 2	<sup>3</sup> 235
3541D 05	All drilling machines valued under \$3,025 each . . . .	16	7,299	<sup>a</sup> 9,421	253	7,278	9,282	552
3541D 15	Drilling machines valued at \$3,025 each or more: Vertical upright drilling machines, including plain upright and heavy duty . . . . .	9	426	4,210	484	616	4,760	<sup>c</sup> 996
3541D 25	Radial drilling machines, including plain and universal . . . . .	-	(X)	(X)	(X)	(X)	(X)	(X)
3541D 35	Deep hole drilling machines . . . . .	4	<sup>c</sup> 96	<sup>b</sup> 13,851	<sup>c</sup> 3,692	<sup>a</sup> 68	<sup>a</sup> 8,542	<sup>a</sup> 6,084
3541D 45	Multiple spindle drilling machines: Adjustable joint and fixed center types . . . . .	8	288	<sup>a</sup> 4,066	( <sup>4</sup> )	248	4,307	2,025
3541D 55	All other automatic multiple spindle drilling machines . . . . .	6	70	9,905	( <sup>4</sup> )	91	11,999	13,066
3541D 65	All other drilling machines, n.e.c. . . . .	8	<sup>c</sup> 912	<sup>c</sup> 37,483	<sup>4</sup> b <sup>35</sup> ,712	<sup>c</sup> 550	<sup>c</sup> 13,097	<sup>c</sup> 2,232
35413 00	Gear cutting machines, including gear hobbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines . . . . .	10	421	137,121	94,917	298	100,612	79,257
35414 00	Grinding, polishing, buffing, honing, and lapping machines . . . . .	95	66,439	549,580	309,778	61,100	443,262	301,883
35414 10	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each . . . . .	20	59,890	23,475	1,699	55,533	<sup>b</sup> 19,803	<sup>b</sup> 2,566
	All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more: External cylindrical grinding machines: Plain, including angular wheel types . . . . .	3	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
35414 11	Universal . . . . .	4	<sup>5</sup> 137	<sup>5</sup> 37,263	<sup>5</sup> 19,004	<sup>5</sup> 102	<sup>5</sup> 25,712	<sup>5</sup> 18,822
35414 13	Roll, chucking, centerless, and other cylindrical grinding machines . . . . .	14	<sup>b</sup> 628	170,878	129,000	<sup>a</sup> 606	135,794	142,375
35414 33	Surface grinding machines, rotary table type, horizontal and vertical . . . . .	8	<sup>c</sup> 682	<sup>b</sup> 19,902	<sup>b</sup> 14,492	<sup>b</sup> 600	<sup>a</sup> 15,943	10,007
35414 34	Surface grinding machines, reciprocating table type, including face grinders, horizontal and vertical . . . . .	10	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
35414 37	Surface grinding machines, reciprocating table type, including face grinders, hand surface type . . . . .	5	<sup>6</sup> 1,140	<sup>6</sup> 19,540	<sup>6</sup> b <sup>8</sup> ,151	<sup>6</sup> 944	<sup>6</sup> 15,747	<sup>6</sup> 5,481
35414 42	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders . . . . .	7	<sup>b</sup> 524	22,081	( <sup>7</sup> )	433	21,572	18,694
35414 52	Tool and cutter grinding machines . . . . .	16	746	85,184	<sup>7</sup> 40,569	583	57,503	10,767
35414 55	All other grinding machines, n.e.c., including internal cylindrical type, planer type, and thread grinding machines . . . . .	22	<sup>b</sup> 1,012	<sup>b</sup> 67,502	<sup>a</sup> 33,046	538	59,121	35,233
35414 75	Honing and lapping machines, internal, including combination bore, hone, and external . . . . .	6	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	758	42,128	24,827
35414 79	Flat surface lapping machines (except gear lapping) . . . . .	4	<sup>8</sup> 969	<sup>8</sup> a <sup>62</sup> ,905	<sup>8</sup> c <sup>31</sup> ,971	229	6,167	2,401
35414 84	All other honing and lapping machines or polishing and buffing machines, including speed lathes and multistation type . . . . .	16	711	40,850	31,846	774	43,772	30,710

See footnotes at end of table.

Table 18. Total Shipments and Unfilled Orders: 1995 and 1994—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1995			1994		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
	Metalworking machinery—Con.							
	Metal cutting type machine tools valued at \$3,025 and under —Con.							
35415 00	Lathes .....	(X)	4,643	478,003	152,098	3,662	390,407	132,986
	Numerically controlled:							
	Horizontal .....	13	3,416	351,234	83,661	2,616	295,987	83,902
35415 15	Multiple spindle NC turning machine. ....	(X)	(X)	(X)	(X)	<sup>(9)</sup>	<sup>(9)</sup>	<sup>(9)</sup>
	Single spindle NC turning machines:							
35415 16	Small .....	(X)	(X)	(X)	(X)	2,173	219,700	42,156
35415 17	Medium .....	(X)	(X)	(X)	(X)	412	64,531	25,239
35415 18	Large .....	(X)	(X)	(X)	(X)	<sup>9</sup> 31	<sup>9</sup> 11,756	<sup>9</sup> 16,507
35415 22	Vertical NC turning machines .....	9	234	74,007	46,017	88	47,445	26,857
	Nonnumerically controlled turning machines .....	15	<sup>1</sup> 993	<sup>1</sup> 52,762	<sup>1</sup> 22,420	<sup>1</sup> 958	<sup>1</sup> 46,975	<sup>1</sup> 22,227
35415 09	All lathes (turning machines) valued under \$3,025 each. ....	1	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>
	All lathes (turning machines) valued at \$3,025 each or more:							
35415 23	Engine or toolroom lathes, all types .....	4	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>	<sup>(10)</sup>
	Automatic lathes:							
35415 83	Single spindle .....	2	<sup>10</sup> 85	<sup>10</sup> a7,045	<sup>10</sup> c2,935	<sup>10</sup> 41	<sup>10</sup> 5,260	<sup>10</sup> 3,725
	Multiple spindle:							
35415 88	Bar (screw) machines .....	2	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>	<sup>(11)</sup>
35415 67	Chucking machines .....	2	<sup>11</sup> 249	<sup>11</sup> 29,324	<sup>11</sup> 16,139	<sup>11</sup> 158	<sup>11</sup> 22,273	<sup>11</sup> 16,543
35415 57	All other horizontal turning machines, including turret lathes and automatic between center lathes. ....	5	<sup>c</sup> 531	<sup>b</sup> 6,860	<sup>(12)</sup>	<sup>(12)</sup>	<sup>(12)</sup>	<sup>(12)</sup>
35415 86	All vertical turning machines. ....	4	<sup>a</sup> 128	<sup>b</sup> 9,533	<sup>12</sup> c3,346	<sup>12</sup> b759	<sup>12</sup> b19,442	<sup>12</sup> a1,959
35416 00	Milling machines .....	27	<sup>2</sup> 4,747	<sup>2</sup> 194,757	<sup>2</sup> 119,738	<sup>2</sup> 4,087	<sup>2</sup> 138,852	<sup>2</sup> 121,247
35416 09	All milling machines valued under \$3,025 each. ....	6	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>
	All milling machines valued at \$3,025 or more:							
35416 23	General-purpose, knee milling machines all types .....	7	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>
	Automatic and manufacturing:							
35416 32	Single spindle, multiple spindle, and special-purpose machines. ....	7	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>
35416 53	Profile machines and duplicators. ....	2	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>	<sup>(13)</sup>
35416 62	All other milling machines, n.e.c., including planer type and thread milling machines .....	12	<sup>13</sup> 4,747	<sup>13</sup> 194,757	<sup>13</sup> 119,738	<sup>13</sup> 4,087	<sup>13</sup> 138,852	<sup>13</sup> 121,247
3541A 00	Machining centers .....	26	7,305	698,780	193,791	5,362	552,358	233,426
	Drill, mill, and bore, vertical (automatic tool change):							
3541A 05	Y-axis travel less than 20 inches .....	10	2,978	173,766	36,965	2,073	133,982	29,822
3541A 07	Y-axis travel 20 inches through 26 inches .....	9	2,503	204,959	34,475	1,688	139,359	33,255
3541A 09	Y-axis travel over 26 inches .....	6	542	74,572	22,709	326	51,230	14,491
	Drill, mill, and bore, horizontal (automatic tool change):							
3541A 11	Y-axis travel 27 inches .....	(X)	(X)	(X)	(X)	<sup>b</sup> 354	70,028	24,163
3541A 13	Y-axis travel 27 inches through 40 inches .....	(X)	(X)	(X)	(X)	<sup>(14)</sup>	<sup>(14)</sup>	<sup>(14)</sup>
3541A 15	Y-axis travel over 40 inches .....	(X)	(X)	(X)	(X)	<sup>14</sup> 215	<sup>14</sup> 134,786	<sup>14</sup> 97,436
3541A 19	All other machining centers including special machining centers, special adapting of standard machining centers, and machining centers with indexing turret .....	8	629	31,250	27,421	706	22,973	34,259
3541B 00	Station type machines .....	20	464	477,021	480,353	430	455,138	571,542
3541B 31	Dial or rotary, trunnion, and center column .....	11	242	256,932	174,943	242	246,451	307,384
3541B 35	Transfer .....	9	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>	<sup>(15)</sup>
3541B 37	Other station type, n.e.c. ....	3	<sup>15</sup> b222	<sup>15</sup> 220,089	<sup>15</sup> 305,410	<sup>15</sup> 188	<sup>15</sup> 208,687	<sup>15</sup> 264,158

See footnotes at end of table.

Table 18. Total Shipments and Unfilled Orders: 1995 and 1994—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1995			1994		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
	Metalworking machinery—Con.							
	Metal cutting type machine tools valued at \$3,025 and under —Con.							
3541C 00	Other metal cutting machine tools . . . . .	67	18,696	246,237	90,104	14,803	200,114	45,637
3541C 41	Other metal cutting machine tools, n.e.c., valued under \$3,025 . . . . .	14	<sup>b</sup> 9,638	<sup>b</sup> 15,046	1,122	7,488	9,512	495
	Other metal cutting machine tools, n.e.c., valued at \$3,025 each or more:							
3541C 51	Broaching machines . . . . .	7	<sup>c</sup> 89	<sup>c</sup> 10,641	<sup>c</sup> 7,983	<sup>c</sup> 139	<sup>c</sup> 19,058	7,254
	Sawing and cutoff machines:							
3541C 53	Power hack saws . . . . .	2	<sup>(16)</sup>	<sup>(16)</sup>	<sup>(16)</sup>	<sup>(16)</sup>	<sup>(16)</sup>	<sup>(16)</sup>
3541C 55	Circular cutoff saws (cold) . . . . .	5	188	8,371	<sup>(17)</sup>	175	10,810	<sup>c</sup> 103
3541C 59	Band saws . . . . .	13	4,201	52,654	<sup>17</sup> 11,441	<sup>a</sup> 3,657	<sup>a</sup> 44,039	<sup>b</sup> 6,269
3541C 61	All other sawing and cutoff machines . . . . .	10	<sup>16</sup> 609	<sup>16</sup> 25,061	<sup>16</sup> <sup>c</sup> 24,121	<sup>16</sup> 542	<sup>16</sup> 16,639	<sup>16</sup> 10,718
3541C 64	Spark erosion, ultrasonic, and electrolytic machines, all types . . . . .	10	1,156	70,590	12,635	913	51,400	14,304
3541C 91	Miscellaneous metal cutting machine tools . . . . .	24	<sup>b</sup> 2,815	<sup>b</sup> 63,874	32,802	<sup>b</sup> 1,889	<sup>b</sup> 48,656	6,494
	Metal forming type machine tools valued over \$3,025 . . . . .	(X)	22,854	1,482,874	859,238	20,398	1,277,187	799,255
	Metal forming type machine tools valued at \$3,025 and under . . . . .	(X)	34,086	27,667	2,355	50,017	39,886	4,304
35421 00	Punching, shearing, bending, and forming machines . . . . .	87	15,654	583,200	237,913	19,762	547,660	205,395
35421 08	All punching and shearing machines valued under \$3,025 each . . . . .	12	<sup>c</sup> 866	<sup>b</sup> 1,497	<sup>c</sup> 131	<sup>b</sup> 1,828	<sup>b</sup> 2,564	<sup>b</sup> 175
	All punching and shearing machines valued at \$3,025 each or more:							
	Power operated only:							
35421 11	Punches, including combination punching and shearing machines . . . . .	17	<sup>b</sup> 3,341	<sup>a</sup> 44,888	5,222	2,625	37,057	8,888
35421 16	Punching machines fixed position and two axes positioning table . . . . .	7	584	<sup>a</sup> 145,822	<sup>a</sup> 26,468	597	147,221	<sup>a</sup> 21,430
	Plate shearing machines:							
35421 12	Mechanical . . . . .	6	223	42,567	<sup>(18)</sup>	196	37,556	<sup>(18)</sup>
35421 14	Hydraulic . . . . .	12	<sup>b</sup> 1,164	<sup>b</sup> 37,118	<sup>18</sup> <sup>a</sup> 55,937	<sup>a</sup> 1,100	<sup>a</sup> 28,731	<sup>18</sup> 48,240
35421 19	Other power-operated punching and shearing machines . . . . .	11	1,471	54,426	15,685	1,256	41,312	14,628
35421 33	All bending and forming machines, power operated, valued under \$3,025 each . . . . .	7	2,271	<sup>a</sup> 4,084	<sup>a</sup> 315	6,169	9,565	594
	All bending and forming machines, power operated, valued at \$3,025 each or more:							
35421 34	Press brakes, all types . . . . .	9	<sup>b</sup> 1,429	<sup>b</sup> 72,342	15,136	<sup>a</sup> 1,143	<sup>a</sup> 54,645	14,712
35421 37	Bending rolls, sheet, and plate . . . . .	7	<sup>c</sup> 464	<sup>b</sup> 7,658	<sup>a</sup> 998	400	16,543	11,719
35421 35	Bending rolls, angles, bars, shapes, and tubes . . . . .	5	<sup>(19)</sup>	<sup>(19)</sup>	<sup>(19)</sup>	<sup>(19)</sup>	<sup>(19)</sup>	<sup>(19)</sup>
35421 43	Rotary bending and forming machines, including rotary head . . . . .	10	<sup>19</sup> <sup>b</sup> 867	<sup>19</sup> 63,006	<sup>19</sup> <sup>b</sup> 42,176	<sup>19</sup> 1,647	<sup>19</sup> 62,437	<sup>19</sup> 31,319
35421 47	Ram and press bending machines . . . . .	5	250	5,025	<sup>(20)</sup>	248	5,978	1,242
35421 49	Other bending and forming machines, including folders . . . . .	24	2,724	<sup>a</sup> 104,767	<sup>20</sup> <sup>b</sup> 75,845	2,553	104,051	52,448
35422 00	Presses (except forgings) . . . . .	48	5,045	379,203	376,502	10,947	376,398	345,654
35422 01	All presses valued under \$3,025 each . . . . .	7	<sup>(21)</sup>	<sup>(21)</sup>	<sup>(21)</sup>	<sup>a</sup> 7,158	<sup>a</sup> 5,056	2,020
	All presses valued at \$3,025 each or more:							
	Mechanical presses:							
	Open back inclinable, gap type:							
35422 12	50 tons and under . . . . .	7	347	5,872	1,912	323	5,050	1,460
35422 02	51 tons to 120 tons . . . . .	7	154	9,264	3,137	147	10,414	5,818
35422 03	121 tons and over . . . . .	4	39	4,432	<sup>(21)</sup>	50	9,290	1,734
	Vertical straight sided and arch frame single action:							
35422 16	Single point . . . . .	1	<sup>(22)</sup>	<sup>(22)</sup>	<sup>(22)</sup>	<sup>(22)</sup>	<sup>(22)</sup>	<sup>(22)</sup>
	Two point:							
35422 17	300 tons and under . . . . .	6	<sup>22</sup> 211	<sup>22</sup> 42,748	<sup>22</sup> 21,874	<sup>22</sup> 183	<sup>22</sup> 40,451	<sup>22</sup> 25,576
35422 18	301 tons and over . . . . .	4	46	29,086	19,528	31	21,059	25,383
35422 45	Automatic presses, strip or coil field . . . . .	8	426	117,524	77,610	437	99,208	89,321
35422 53	All other mechanical presses . . . . .	4	<sup>21</sup> 1,864	<sup>21</sup> 69,292	<sup>21</sup> 166,298	118	94,710	113,427

See footnotes at end of table.

Table 18. Total Shipments and Unfilled Orders: 1995 and 1994—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1995			1994		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
35422 00	Metalworking machinery—Con. Metal forming type machine tools valued at \$3,025 and under—Con. Presses (except forgings)—Con. All presses valued under \$3,025 each or more—Con. Hydraulic presses:							
35422 56	Vertical single action, all tonnages: Housing or straight side type .....	5	<sup>(23)</sup>	<sup>(23)</sup>	<sup>(23)</sup>	<sup>(23)</sup>	<sup>(23)</sup>	<sup>(23)</sup>
35422 57	Column type (open rod).....	8	<sup>23</sup> <sup>b</sup> 176	<sup>23</sup> <sup>b</sup> 41,485	<sup>23</sup> 26,046	<sup>23</sup> <sup>a</sup> 111	<sup>23</sup> 20,210	<sup>23</sup> 26,341
35422 58	Gap or C-frame: 15 tons and under .....	8	<sup>b</sup> 683	<sup>b</sup> 7,847	<sup>b</sup> 544	611	6,403	<sup>c</sup> 1,151
35422 59	16 tons to 35 tons.....	6	<sup>b</sup> 101	<sup>a</sup> 4,683	<sup>(24)</sup>	89	5,833	2,164
35422 60	Over 35 tons .....	7	<sup>b</sup> 76	<sup>b</sup> 6,007	2,398	<sup>a</sup> 68	<sup>a</sup> 5,679	<sup>c</sup> 2,395
35422 92	Other hydraulic and pneumatic presses, including horizontal.....	14	<sup>b</sup> 922	<sup>b</sup> 40,963	<sup>24</sup> <sup>b</sup> 57,155	1,621	53,035	48,864
35423 20	Forging machines, including forging presses and die stamping presses .....	4	<sup>(25)</sup>	<sup>(25)</sup>	<sup>(25)</sup>	<sup>(25)</sup>	<sup>(25)</sup>	<sup>(25)</sup>
35423 00	All other metal forming type machine tools .....	52	36,241	548,138	247,178	39,706	393,015	252,510
35423 97	All other metal forming type machine tools valued under \$3,025 each .....	5	30,949	22,086	1909	34,862	22,701	1,515
35423 43	All other metal forming type machine tools valued at \$3,025 each or more:							
35423 30	Thread rolling machinery.....	6	<sup>b</sup> 167	<sup>c</sup> 28,967	<sup>c</sup> 3,493	<sup>a</sup> 101	<sup>b</sup> 17,662	<sup>b</sup> 2,763
35423 55	Metal container-making machinery .....	8	1,149	168,961	85,905	1,017	105,171	77,836
35423 49	Die casting machines, all types .....	5	<sup>(26)</sup>	<sup>(26)</sup>	19,202	147	61,452	39,918
35423 93	Riveting machines.....	9	<sup>26</sup> <sup>b</sup> 1,258	<sup>26</sup> 117,494	<sup>c</sup> 2,177	<sup>b</sup> 1,181	<sup>a</sup> 27,095	<sup>b</sup> 4,481
35423 93	All other metal forming type machine tools, n.e.c.....	30	<sup>25</sup> <sup>b</sup> 2,718	<sup>25</sup> 210,630	<sup>25</sup> 134,492	<sup>25</sup> <sup>a</sup> 2,398	<sup>25</sup> <sup>a</sup> 158,934	<sup>25</sup> 125,997

- Represents zero. n.e.c. Not elsewhere classified. X Not applicable.

<sup>1</sup>Data for "All lathes valued under \$3,025 each" are included in the total for "Metal cutting type machine tools valued under \$3,025."  
<sup>2</sup>Data for "Milling machines under \$3,025" are included in the total for "Metal cutting type machines under \$3,025."  
<sup>3</sup>Product codes 3541D 10, 3541D 15, and 3541D 40 are combined with product code 3541D 45 to avoid disclosing data for individual companies.  
<sup>4</sup>Unfilled orders for product codes 3541D 45 and 3541D 55 are combined with product code 3541D 65 to avoid disclosing data for individual companies.  
<sup>5</sup>Product code 3541A 11 and product code 3541A 13 are combined to avoid disclosing data for individual companies.  
<sup>6</sup>Product code 3541A 34 and product code 3541A 37 are combined to avoid disclosing data for individual companies.  
<sup>7</sup>Unfilled orders for product code 3541A 42 and product code 3541A 52 are combined to avoid disclosing data for individual company.  
<sup>8</sup>Product code 3541A 75 and product code 3541A 79 are combined to avoid disclosing data for individual companies.  
<sup>9</sup>Product code 3541A 15 and product code 3541A 18 are combined to avoid disclosing data for individual companies.  
<sup>10</sup>Product code 3541A 23 and product code 3541A 83 are combined to avoid disclosing data for individual companies.  
<sup>11</sup>Product code 3541A 88 and product code 3541A 67 are combined to avoid disclosing data for individual companies.  
<sup>12</sup>Product code 3541A 57 and product code 3541A 86 are combined to avoid disclosing data for individual companies.  
<sup>13</sup>Product codes 3541A 23, 3541A 32, 3541A 53, and 3541A 62 are combined to avoid disclosing data for individual companies.  
<sup>14</sup>Product codes 3541A 13 and product code 3541A 15 are combined to avoid disclosing data for individual companies.  
<sup>15</sup>Product codes 3541B 35 and product code 3541B 37 are combined to avoid disclosing data for individual companies.  
<sup>16</sup>Product codes 3541C 53 and product code 3541C 61 are combined to avoid disclosing data for individual companies.  
<sup>17</sup>Unfilled orders for product codes 3541C 55 and 3541C 59 are combined to avoid disclosing data for individual companies.  
<sup>18</sup>Unfilled orders for product codes 35421 12 and 35421 14 are combined to avoid disclosing data for individual companies.  
<sup>19</sup>Product codes 35421 35 and product code 35421 43 are combined to avoid disclosing data for individual companies.  
<sup>20</sup>Unfilled orders for product codes 35421 47 and 35421 49 are combined to avoid disclosing data for individual companies.  
<sup>21</sup>Product codes 35422 01 and 35422 03 are combined with 35422 53 to avoid disclosing data for individual companies.  
<sup>22</sup>Product codes 35422 16 and product code 35422 17 are combined to avoid disclosing data for individual companies.  
<sup>23</sup>Product codes 35422 56 and product code 35422 57 are combined to avoid disclosing data for individual companies.  
<sup>24</sup>Unfilled orders for product codes 35422 59 and 35422 92 are combined to avoid disclosing data for individual companies.  
<sup>25</sup>Product codes 35423 20 and product code 35423 93 are combined to avoid disclosing data for individual companies.  
<sup>26</sup>Manufacturers' shipments for product codes 35423 55 and 35423 49 are combined to avoid disclosing data for individual companies.

Note: Percent of estimation of each item is indicated as follows: <sup>a</sup>16 to 25 percent of this item is estimated. <sup>b</sup>26 to 50 percent of this item is estimated. <sup>c</sup>Over 50 percent of this item is estimated.



Table 19. Total Shipments of Numerically Controlled Machines and Exports: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Product description	1995			1994		
	Shipments of numerically controlled machines		Export shipments value <sup>1</sup>	Shipments of numerically controlled machines		Export shipments value <sup>1</sup>
	Quantity	Value		Quantity	Value	
Metalworking machinery .....	17,052	2,196,526	626,653	13,174	1,685,994	590,862
Metal cutting type machine tools .....	14,845	1,902,410	364,192	11,200	1,417,845	<sup>2</sup> 355,728
Boring and drilling machines .....	243	87,050	5,586	186	45,919	3,339
Gear cutting machines .....	298	117,547	48,616	241	91,446	34,595
Grinding, polishing, buffing, and lapping machines .....	923	252,801	76,942	733	207,118	58,553
Valued under \$3,025 each .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Universal external cylindrical grinding machines .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Surface grinding machines, all types .....	<sup>3</sup> 820	<sup>3</sup> 244,723	<sup>3</sup> 59,026	<sup>3</sup> 642	<sup>3</sup> 186,494	<sup>3</sup> 38,248
Honing, lapping, polishing, and buffing machines .....	103	8,078	17,916	91	20,624	20,305
Horizontal NC turning machines, valued at \$3,025 or more .....	3,416	351,235	21,038	2,616	295,987	30,396
Small single spindle NC turning machines* .....	(X)	(X)	(X)	2,173	219,700	(D)
Medium single spindle NC turning machines* .....	(X)	(X)	(X)	412	64,531	(D)
Multiple spindle and large single spindle NC turning machines* .....	(X)	(X)	(X)	31	11,756	(D)
Vertical NC turning machines, valued at \$3,025 or more .....	234	74,007	8,798	88	47,445	( <sup>2</sup> )
Nonnumerically controlled turning machines, valued at \$3,025 or more .....	(X)	(X)	4,780	(X)	(X)	4,142
Milling machines .....	1,760	153,577	21,397	1,483	103,395	23,209
Machining centers .....	7,305	698,780	<sup>4</sup> 137,308	5,356	552,358	<sup>4</sup> 81,471
Drill, mill, and bore, vertical (automatic tool change) .....	6,023	453,297	88,334	4,087	324,571	42,732
Y-axis travel less than 20 inches .....	2,978	173,766	(D)	2,073	133,982	(D)
Y-axis travel 20 inches through 26 inches .....	2,503	204,959	38,898	1,688	139,359	15,335
Y-axis travel over 26 inches .....	542	74,572	(D)	326	51,230	(D)
Drill, mill, and bore, horizontal (automatic tool change) .....	653	214,233	34,036	569	204,814	27,270
Y-axis travel less than 27 inches* .....	(X)	(X)	(X)	354	70,028	( <sup>4</sup> )
Y-axis travel 27 inches through 40 inches* .....	(X)	(X)	(X)	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Y-axis travel over 40 inches* .....	(X)	(X)	(X)	<sup>5</sup> 215	<sup>5</sup> 134,786	<sup>5</sup> 27,270
All other machining centers .....	629	31,250	( <sup>4</sup> )	700	22,973	( <sup>4</sup> )
Station type machines .....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Other metal cutting machine tools, n.e.c. ....	<sup>6</sup> 666	<sup>6</sup> 167,413	<sup>6</sup> 39,727	<sup>6</sup> 497	<sup>6</sup> 74,177	<sup>6</sup> 116,086
Metal forming type machine tools .....	2,207	294,116	262,461	1,974	268,149	235,134
Punching, shearing, bending, and forming machines .....	1,243	217,496	95,052	1,052	173,328	99,239
Punching and shearing machines .....	716	155,503	42,696	601	128,786	36,032
All bending and forming machines, power operated .....	527	61,993	52,356	451	44,542	62,332
Presses (except forging) .....	162	46,084	33,869	166	66,149	33,453
All other metal forming type machine tools .....	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
Forging machines .....	<sup>7</sup> 802	<sup>7</sup> 30,536	<sup>7</sup> 133,540	<sup>7</sup> 56	<sup>7</sup> 28,672	<sup>7</sup> 102,442

\* Revised. Comparable data not available for revised fourth quarter 1995. D Withheld to avoid disclosing data for individual companies.  
n.e.c. Not elsewhere classified. X Not applicable.

<sup>1</sup>Data includes the value of all types of machines exported, as reported by MQ35W survey panel.

<sup>2</sup>Data included in total for "Metal cutting type machine tools."

<sup>3</sup>"Valued under \$3,025 each" and "Universal external cylindrical grinding machines" are included with "Surface grinding machines, all types" to avoid disclosing data for individual companies.

<sup>4</sup>Data included in total for "Machining centers."

<sup>5</sup>"Y-axis travel 27 inches through 40 inches" and "Y-axis travel over 40 inches" are combined to avoid disclosing data for individual companies.

<sup>6</sup>"Station type machines" and "Other metal cutting machine tools, n.e.c." are combined to avoid disclosing data for individual companies.

<sup>7</sup>"All other metal forming type machine tools" and "Forging machines" are combined to avoid disclosing data for individual companies.

Table 20. Shipments, Exports, and Imports of Metalworking Machinery: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3</sup>	
	Quantity	Value	Quantity	Value at port	Quantity	Value <sup>4</sup>
<b>1995</b>						
Boring and drilling machines, excluding multifunction NC machines, machining centers:						
Boring machines:						
Valued under \$3,025 each.....	(X)	(X)	4,683	1,263	3,575	3,139
Valued at \$3,025 each or more .....	1,374	172,417	726	46,577	1,221	68,629
Drilling machines:						
Valued under \$3,025 each.....	7,299	9,421	7,664	4,238	180,832	20,565
Valued at \$3,025 each or more .....	1,792	69,515	567	23,865	1,393	48,814
Gear cutting machines .....	421	137,121	594	8,947	852	53,819
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	59,890	23,475	26,647	8,732	837,029	29,482
Valued at \$3,025 each or more .....	5,838	485,255	1,529	93,464	9,438	332,412
Lathes (turning machines) under \$3,025 .....	(D)	(D)	647	585	11,774	9,991
Horizontal NC turning machines.....	3,416	351,234	393	42,547	6,834	680,505
Vertical NC turning machines .....	234	74,007	161	26,286	366	55,971
Nonnumerically controlled turning machines:						
Engine or toolroom lathes, all types .....	( <sup>5</sup> )	( <sup>5</sup> )	124	3,303	4,991	47,223
Single spindle automatic lathes .....	<sup>5</sup> 85	<sup>5</sup> 7,045	25	789	280	4,677
Multiple spindle automatic lathes .....	249	29,324	48	5,449	102	17,671
All other horizontal turning machines .....	531	6,860	336	4,495	333	12,583
All vertical lathes and vertical boring machines .....	128	9,533	218	6,071	887	25,690
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	6,663	9,513	11,030	13,042
Valued at \$3,025 each or more .....	4,747	194,757	762	34,562	6,950	90,297
Machining centers (multifunction NC machines):						
Drill, mill, and bore, vertical (automatic tool change):						
Y-axis travel less than 20 inches and 20 inches through 26 inches.....	5,481	378,725	235	26,467	3,325	289,729
Y-axis travel 26 inches and over .....	542	74,572	33	7,304	470	63,276
Drill, mill, and bore, horizontal (automatic tool change).....	653	214,233	21	5,201	982	278,519
Other machining centers .....	629	31,250	424	36,313	269	99,673
Station type machines .....	464	477,021	192	63,204	300	76,178
Other metal cutting machine tools:						
Valued under \$3,025 each.....	9,638	15,046	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more .....	9,058	231,191	4,660	124,881	6,558	311,130
Punching and shearing machines:						
Valued under \$3,025 each.....	866	1,497	5,019	1,893	5,407	1,937
Valued at \$3,025 each or more .....	6,783	324,821	1,344	62,878	2,043	137,730
Bending and forming machines:						
Valued under \$3,025 each.....	2,271	4,084	12,581	6,543	22,670	4,292
Valued at \$3,025 each or more .....	5,734	252,798	2,084	71,169	4,101	210,214
Presses (except forging presses).....	5,045	379,203	2,507	2,923	4,369	194,051
Forging machines, including presses .....	(D)	(D)	334	68,726	1,364	128,941
All other metal forming type machine tools:						
Valued under \$3,025 each.....	30,949	22,086	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more:						
Die casting machines .....	(D)	(D)	498	18,120	1,495	75,277
Thread rolling machines.....	167	28,967	60	4,258	63	5,457
Other metal forming machines .....	2,718	210,630	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.

Table 20. Shipments, Exports, and Imports of Metalworking Machinery: 1995 and 1994—Con.

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3</sup>	
	Quantity	Value	Quantity	Value at port	Quantity	Value <sup>4</sup>
<b>1994</b>						
Boring and drilling machines, excluding multifunction NC machines, machining centers:						
Boring machines:						
Valued under \$3,025 each.....	(D)	(D)	1,665	1,619	6,509	3,254
Valued at \$3,025 each or more .....	1,093	129,835	174	11,156	877	48,517
Drilling machines:						
Valued under \$3,025 each.....	7,278	9,282	2,708	1,903	242,138	23,748
Valued at \$3,025 each or more .....	1,573	42,705	927	34,891	1,560	47,854
Gear cutting machines .....	298	100,612	756	29,131	675	60,551
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	55,533	19,803	16,420	4,489	1,011,978	33,159
Valued at \$3,025 each or more .....	5,567	423,459	4,034	150,247	7,349	274,816
Lathes (turning machines) under \$3,025 .....	(D)	(D)	726	1,013	13,373	9,469
NC turning machines (horizontal).....	2,616	295,987	394	47,766	4,944	491,648
Vertical NC turning machines .....	88	47,445	228	38,213	167	39,763
Nonnumerically controlled turning machines:						
Horizontal spindle lathes .....	( <sup>6</sup> )	( <sup>6</sup> )	43	576	3,752	34,296
Single spindle automatic lathes .....	<sup>6</sup> 41	<sup>6</sup> 5,260	21	527	254	3,435
Multiple spindle automatic lathes .....	158	22,273	21	2,146	81	13,377
All other horizontal turning machines .....	( <sup>7</sup> )	( <sup>7</sup> )	224	5,863	380	7,002
All other vertical turning machines.....	<sup>7</sup> 759	<sup>7</sup> 19,442	165	7,722	443	22,117
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	6,130	9,117	8,999	10,632
Valued at \$3,025 each or more .....	4,087	138,852	631	50,078	5,299	73,259
Machining centers (multifunction NC machines):						
Drill, mill, and bore, vertical (automatic tool change):						
Y-axis travel less than 20 inches and 20 inches through 26 inches.....	3,761	273,341	118	16,782	2,489	198,991
Y-axis travel 26 inches and over .....	326	51,230	42	6,640	322	38,157
Drill, mill, and bore, horizontal (automatic tool change).....	569	204,814	7	6,262	1,019	263,796
Other machining centers .....	706	22,973	293	27,338	143	31,340
Station type machines .....	430	455,138	243	115,401	282	64,225
Other metal cutting machine tools:						
Valued under \$3,025 each.....	7,488	9,512	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more .....	7,315	190,602	4,947	154,335	5,398	242,350
Punching and shearing machines:						
Valued under \$3,025 each.....	1,828	2,564	2,494	2,090	4,076	1,828
Valued at \$3,025 each or more .....	5,774	291,877	1,818	66,135	1,667	99,771
Bending and forming machines:						
Valued under \$3,025 each.....	6,169	9,565	6,382	4,712	12,881	4,037
Valued at \$3,025 each or more .....	5,991	243,654	1,857	68,078	3,122	148,248
Presses (except forging presses).....	10,947	376,398	4,235	86,199	19,815	187,144
Forging machines, including presses .....	(D)	(D)	295	70,788	1,720	135,524

See footnotes at end of table.

Table 20. **Shipments, Exports, and Imports of Metalworking Machinery: 1995 and 1994—Con.**

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3</sup>	
	Quantity	Value	Quantity	Value at port	Quantity	Value <sup>4</sup>
<b>1994—Con.</b>						
All other metal forming type machine tools:						
Valued under \$3,025 each. . . . .	34,862	22,701	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines . . . . .	147	61,452	327	10,117	1,035	36,734
Other metal forming machines . . . . .	4,697	308,862	(NA)	(NA)	(NA)	(NA)

D Withheld to avoid disclosing data for individual companies.    NA Not available.    X Not applicable.

<sup>1</sup>For comparison of SIC-based product codes, schedule B export numbers, and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. General Imports for Consumption*.

<sup>4</sup>Dollar value represents c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

<sup>5</sup>Manufacturers' shipments for "Engine or toolroom lathes, all types" are included with "Single spindle automatic lathes" to avoid disclosing data for individual companies.

<sup>6</sup>Manufacturers' shipments for "Horizontal spindle lathes" are included with "Single spindle automatic lathes" to avoid disclosing data for individual companies.

<sup>7</sup>Manufacturers' shipments for "All other horizontal turning machines" are included with "All other vertical turning machines" to avoid disclosing data for individual companies.

## HISTORICAL NOTE

Data on metalworking machinery have been collected by the Bureau of the Census since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## FUNDING

The survey is funded, in part, by the Association for Manufacturing Technologies.

## CONTACT FOR DATA USERS

For additional information about these data, contact Larry Blumberg, 301-457-4744.

## TRUCK TRAILERS (M37L)

### INTRODUCTION

These data cover all companies engaged in the manufacture, in the United States, of truck trailers with a rating of 10,000 pounds or more per axle. Truck trailers with a rating of less than 10,000 pounds per axle are excluded.

The statistics were collected by mail on Bureau of the Census monthly Form M37L, Truck Trailers. The panel for this survey consists of all known manufacturers of truck trailers meeting the required specifications, approximately 156 companies.

Participation in the monthly survey is voluntary. However, annual reports are required from those companies that do not report monthly. The annual summary includes revisions of monthly data originally estimated for companies that only report annually.

### SUMMARY OF FINDINGS

The value of factory shipments of complete truck trailers was \$5,151.2 million in 1995, an increase of 25 percent from shipments of \$4,113.7 million in 1994. Quantity of complete truck trailer shipments for 1995 was 279,144 units, an increase of 19 percent from shipments of 234,287 units in 1994.

Complete trailer vans shipped in 1995 increased 24 percent in quantity and 32 percent in value from the 1994 levels. The quantity of tank-type trailers shipped in 1995

increased 15 percent from 1994. The 1995 value of tank-type trailers increased 18 percent from the 1994 level. Shipments of platform trailers in 1995 increased 6 percent in units and 13 percent in value from the 1994 levels.

### EXPLANATION OF TERMS

**Truck trailers.** A property-carrying vehicle, or chassis thereof, drawn by a truck or truck-tractor and having one or more axles. Only trailers with a rating of 10,000 pounds or more per axle are included in this survey. Trailers that are produced on a purchased or leased chassis are included. The value of these trailers includes the value of the purchased or leased chassis.

**Complete trailers.** A trailer in which the body is permanently attached on the chassis. New trailer chassis shipped with detachable trailers are not included.

**Detachable trailer bodies.** A detachable trailer generally is designed to be used with trailer chassis, except when transported on ships or rail cars (minimum size 8'x 8'x 10'). This includes all trailer bodies that are manufactured separately as trailer bodies without chassis or running gear.

**Detachable trailer chassis and running gear.** Includes all trailer chassis and running gear manufactured for use with detachable trailer bodies, whether shipped with such trailer bodies or not.

Table 21. Quantity of Shipments of Truck Trailers: 1986 to 1995

[Number of units]

Product code	Product description	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986
37151	Complete trailers .....	279,144	234,287	185,741	165,268	122,361	149,117	181,478	186,483	180,142	167,312
	Vans .....	215,420	174,237	141,764	127,205	84,626	103,894	130,163	131,991	135,380	120,647
	Tank .....	5,492	4,758	3,877	3,750	4,113	4,444	4,789	5,075	4,636	4,370
	Platform .....	22,797	21,459	16,102	13,432	11,585	13,479	18,411	17,648	14,975	13,064
	All other complete trailers.....	35,435	33,833	23,998	20,881	22,037	27,300	28,115	31,769	25,151	29,231
	Detachable trailer bodies .	7,757	2,598	12,207	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	5,223	438	417
	Detachable trailer chassis .	46,979	57,570	25,483	123,408	124,491	117,214	124,779	37,729	23,014	15,360
Dollies and converter gear.....	4,601	2,986	2,486	3,899	3,097	2,272	2,668	2,917	4,614	4,567	

<sup>1</sup>"Detachable trailer bodies" and "Detachable trailer chassis" were combined for 1989 through 1992 to avoid disclosing data for individual companies.

**Table 22. Quantity of Shipments of Truck Trailers by Month and Type of Trailer: 1995**

[Number of units]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailers and chassis (except detachables) . . . . .	156	279,144	22,564	22,910	28,957	23,033	24,848	24,259	20,776	23,142	23,358	22,609	22,032	20,656
	Vans . . . . .	(NA)	215,420	17,262	17,532	22,496	17,317	18,682	18,773	15,918	18,056	18,348	17,600	17,087	16,349
	Closed top:														
	Insulated (refrigerated) . . . . .	(NA)	31,715	2,643	2,581	2,903	2,485	3,016	2,866	2,229	2,788	2,509	2,907	2,509	2,279
37151 02	Steel . . . . .	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
37151 14	Aluminum . . . . .	7	<sup>1</sup> 31,715	<sup>1</sup> 2,643	<sup>1</sup> 2,581	<sup>1</sup> 2,903	<sup>1</sup> 2,485	<sup>1</sup> 3,016	<sup>1</sup> 2,866	<sup>1</sup> 2,229	<sup>1</sup> 2,788	<sup>1</sup> 2,509	<sup>1</sup> 2,907	<sup>1</sup> 2,509	<sup>1</sup> 2,279
37151 60	FRP . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Semi-insulated (non-refrigerated) . . . . .	(NA)	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 04	Steel . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37151 16	Aluminum . . . . .	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 62	FRP . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Drop frame type (12 inches or more drop) . . . . .	(NA)	26,481	2620	2432	2777	2569	2734	2531	2723	2754	2350	2317	2347	2327
37151 05	Steel . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37151 15	Aluminum . . . . .	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 64	FRP . . . . .	1	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	16	15	15	15	15	16
	Livestock . . . . .	(NA)	1,708	139	136	156	135	130	122	158	154	159	148	137	134
37151 07	Steel . . . . .	1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
37151 17	Aluminum . . . . .	5	<sup>4</sup> 1,708	<sup>4</sup> 139	<sup>4</sup> 136	<sup>4</sup> 156	<sup>4</sup> 135	<sup>4</sup> 130	<sup>4</sup> 122	<sup>4</sup> 158	<sup>4</sup> 154	<sup>4</sup> 159	<sup>4</sup> 148	<sup>4</sup> 137	<sup>4</sup> 134
	All other closed-top dry freight vans, including curtain . . . . .	(NA)	167,648	13,301	13,788	17,976	13,537	14,187	14,577	12,073	13,592	14,471	13,530	13,499	13,117
	Steel . . . . .	(NA)	4,995	420	392	448	381	423	570	389	391	388	435	383	383
37151 10	Less than 30 feet long . . . . .	1	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
37151 11	30 feet or greater . . . . .	4	<sup>5</sup> 4,995	<sup>5</sup> 420	<sup>5</sup> 392	<sup>5</sup> 448	<sup>5</sup> 381	<sup>5</sup> 423	<sup>5</sup> 570	<sup>5</sup> 389	<sup>5</sup> 375	<sup>5</sup> 391	<sup>5</sup> 388	<sup>5</sup> 435	<sup>5</sup> 383
	Aluminum . . . . .	(NA)	152,685	12,069	12,611	16,482	12,265	12,924	13,195	10,847	12,435	13,234	12,287	12,294	12,042
37151 23	Less than 30 feet long . . . . .	9	17,185	<sup>1</sup> 1,171	<sup>1</sup> 1,382	<sup>2</sup> 2,000	<sup>1</sup> 1,442	<sup>1</sup> 1,517	<sup>1</sup> 1,763	<sup>1</sup> 1,373	<sup>1</sup> 1,754	<sup>1</sup> 1,337	<sup>1</sup> 1,215	<sup>1</sup> 1,146	<sup>1</sup> 1,085
37151 25	30 feet or greater . . . . .	13	135,500	<sup>1</sup> 10,898	<sup>1</sup> 11,229	<sup>1</sup> 14,482	<sup>1</sup> 10,823	<sup>1</sup> 11,407	11,432	9,474	10,681	11,897	11,072	11,148	10,957
	FRP . . . . .	(NA)	9,968	812	785	1,046	891	840	812	837	782	846	855	770	692
37151 67	Less than 30 feet long . . . . .	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
37151 69	30 feet or greater . . . . .	9	<sup>3</sup> 9,968	<sup>3</sup> 812	<sup>3</sup> 785	<sup>3</sup> 1,046	<sup>3</sup> 891	<sup>3</sup> 840	<sup>3</sup> 812	<sup>3</sup> 837	<sup>3</sup> 782	<sup>3</sup> 846	<sup>3</sup> 855	<sup>3</sup> 770	<sup>3</sup> 692
	Open tops, including lowside grain and fruit . . . . .	(NA)	7,868	559	595	684	591	615	677	735	768	859	698	595	492
37151 12	Steel . . . . .	2	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
37151 26	Aluminum . . . . .	14	<sup>6</sup> 7,868	<sup>6</sup> 559	<sup>6</sup> 595	<sup>6</sup> 684	<sup>6</sup> 591	<sup>6</sup> 615	<sup>6</sup> 677	<sup>6</sup> 735	<sup>6</sup> 768	<sup>6</sup> 859	<sup>6</sup> 698	<sup>6</sup> 595	<sup>6</sup> 492
37151 70	FRP . . . . .	1	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
	Tanks . . . . .	(NA)	5,492	439	486	546	499	481	491	462	488	428	378	417	377
37151 27	For flammable liquids (except casing head transport, including aircraft refuelers), all materials . . . . .	6	1,675	<sup>1</sup> 140	<sup>1</sup> 144	<sup>1</sup> 144	<sup>1</sup> 144	<sup>1</sup> 140	<sup>1</sup> 136	<sup>1</sup> 142	<sup>1</sup> 142	<sup>1</sup> 138	<sup>1</sup> 140	<sup>1</sup> 143	<sup>1</sup> 122
37151 30	Coated for chemicals and acids, all materials . . . . .	5	2,405	187	201	243	240	242	240	211	<sup>2</sup> 248	<sup>1</sup> 168	<sup>1</sup> 119	<sup>1</sup> 160	<sup>1</sup> 146
37151 28	For asphalt, all materials . . . . .	4	500	49	59	90	52	43	48	37	29	32	17	23	21
37151 32	All other, including noncoated for chemicals and acids, high pressure, food and milk, sanitary, and cryogenics, all materials . . . . .	8	912	<sup>1</sup> 63	<sup>1</sup> 82	<sup>1</sup> 69	<sup>1</sup> 63	<sup>1</sup> 56	<sup>1</sup> 67	<sup>1</sup> 72	<sup>1</sup> 69	<sup>1</sup> 90	<sup>1</sup> 102	<sup>1</sup> 91	<sup>1</sup> 88
37151 33	Bulk commodity and dry materials, including pneumatic and mechanical discharge, both tank and hopper types (except van) . . . . .	12	2,589	<sup>2</sup> 219	<sup>2</sup> 219	<sup>2</sup> 221	<sup>2</sup> 215	<sup>2</sup> 217	<sup>2</sup> 215	<sup>2</sup> 211	<sup>2</sup> 216	<sup>2</sup> 214	<sup>2</sup> 213	<sup>2</sup> 214	<sup>2</sup> 215
37151 35	Pole, logging, and pipe . . . . .	10	1,596	<sup>1</sup> 97	123	103	142	136	128	<sup>1</sup> 148	130	137	148	160	144
37151 37	Platform . . . . .	24	22,797	1,900	1,924	2,437	2,038	2,202	1,972	1,680	1,840	1,939	1,809	1,754	1,302
	Low-bed heavy haulers, over 10-ton capacity, excluding tilt-bed trailers . . . . .	(NA)	13,054	1,190	1,138	1,354	1,237	1,309	1,038	891	1,010	947	1,038	973	929
37151 38	Under 40-ton capacity . . . . .	33	8,707	<sup>1</sup> 777	<sup>1</sup> 764	<sup>1</sup> 923	<sup>1</sup> 863	<sup>1</sup> 907	<sup>1</sup> 694	<sup>1</sup> 562	<sup>1</sup> 665	<sup>1</sup> 620	<sup>1</sup> 702	<sup>1</sup> 633	<sup>1</sup> 597
37151 39	40-ton capacity and over . . . . .	20	4,347	<sup>1</sup> 413	<sup>1</sup> 374	<sup>1</sup> 431	<sup>1</sup> 374	<sup>1</sup> 402	<sup>1</sup> 344	<sup>1</sup> 329	<sup>1</sup> 345	<sup>1</sup> 327	<sup>1</sup> 336	<sup>1</sup> 340	<sup>1</sup> 332
	Dump trailers and dump chassis, highway type (rear, side, and bottom dump, including nonpneumatic hoppers . . . . .	(NA)	9,552	756	812	1,023	862	1,048	947	771	713	607	689	703	621
37151 40	For materials . . . . .	32	7,147	<sup>1</sup> 558	<sup>1</sup> 604	<sup>1</sup> 755	<sup>1</sup> 647	<sup>1</sup> 743	<sup>1</sup> 705	<sup>1</sup> 564	<sup>1</sup> 556	489	<sup>1</sup> 552	<sup>1</sup> 502	<sup>1</sup> 472
37151 42	For other, including demolition and excavation . . . . .	15	2,405	<sup>1</sup> 198	<sup>1</sup> 208	<sup>1</sup> 268	<sup>1</sup> 215	<sup>1</sup> 305	<sup>1</sup> 242	<sup>1</sup> 207	<sup>1</sup> 157	<sup>1</sup> 118	<sup>1</sup> 137	<sup>1</sup> 201	<sup>1</sup> 149

See footnotes at end of table.

Table 22. Quantity of Shipments of Truck Trailers by Month and Type of Trailer: 1995—Con.

[Number of units]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
37151 44	Complete trailers and chassis (except detachables)—Con.														
	Automobile transport trailers . . . . .	7	892	'76	'73	'78	'73	74	'76	'73	78	'74	'72	'77	'68
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis). . . . .	31	7,752	'625	603	'699	'650	'699	619	'622	'611	'664	'662	'647	'651
37151 53	Detachable trailer bodies (containers), sold separately . . . . .	8	7,757	'733	'694	'739	'609	'608	'646	'531	'644	'608	'643	'696	'606
37151 54	Detachable trailer chassis and running gear, sold separately. . . . .	20	46,979	'3,339	'3,917	'5,798	'4,366	'4,384	'4,087	'3,030	'3,656	'4,013	'3,405	'3,283	'3,701
37151 45	Dollies and converter gear . . . . .	15	4,601	'403	'395	'412	'406	'427	'412	'387	'348	'366	'380	'350	'315

- Represents zero. FRP Fiberglass reinforced plastics plywood. NA Not available. 'Revised by 5 percent or more from previously published data.

<sup>1</sup>Product codes 37151 02 and 37151 14 are combined to avoid disclosing data for individual companies.

<sup>2</sup>Semi-insulated (nonrefrigerated)" and product codes 37151 16 and 37151 15 are combined with "Drop frame type (12 inches or more drop)" to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 37151 64 and 37151 67 are combined with product code 37151 69 to avoid disclosing data for individual companies.

<sup>4</sup>Product code 37151 07 is combined with product code 37151 17 to avoid disclosing data for individual companies.

<sup>5</sup>Product code 37151 10 is combined with product code 37151 11 to avoid disclosing data for individual companies.

<sup>6</sup>Product codes 37151 12 and 37151 70 are combined with product code 37151 26 to avoid disclosing data for individual companies.

Table 23. Value of Shipments of Truck Trailers by Month and Type of Trailer: 1995

[Thousands of dollars]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailers and chassis (except detachables) . . . . .	156	5,151,187	413,270	417,891	513,780	421,091	459,500	445,600	385,977	430,934	431,711	426,976	416,921	387,536
	Vans . . . . .	(NA)	3,770,056	298,217	301,448	375,965	298,179	325,993	325,014	277,846	318,953	326,190	319,748	308,927	293,576
	Closed top:														
	Insulated (refrigerated) . . . . .	(NA)	769,872	61,006	61,343	68,143	58,277	72,392	70,153	53,984	68,625	62,603	72,099	63,556	57,691
37151 02	Steel . . . . .	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
37151 14	Aluminum . . . . .	7	<sup>1</sup> 769,872	<sup>1</sup> 61,006	<sup>1</sup> 61,343	<sup>1</sup> 68,143	<sup>1</sup> 58,277	<sup>1</sup> 72,392	<sup>1</sup> 70,153	<sup>1</sup> 53,984	<sup>1</sup> 68,625	<sup>1</sup> 62,603	<sup>1</sup> 72,099	<sup>1</sup> 63,556	<sup>1</sup> 57,691
37151 60	FRP . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Semi-insulated (nonrefrigerated) . . . . .	(NA)	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 04	Steel . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37151 16	Aluminum . . . . .	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1,400
37151 62	FRP . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Drop frame type (12 inches or more drop) . . . . .	(NA)	<sup>2</sup> 126,829	<sup>2</sup> 12,033	<sup>2</sup> 8,610	<sup>2</sup> 14,255	<sup>2</sup> 10,964	<sup>2</sup> 13,528	<sup>2</sup> 10,582	<sup>2</sup> 12,971	<sup>2</sup> 13,096	<sup>2</sup> 7,605	<sup>2</sup> 7,193	<sup>2</sup> 8,234	<sup>2</sup> 7,758
37151 05	Steel . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37151 15	Aluminum . . . . .	3	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 64	FRP . . . . .	1	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
	Livestock . . . . .	(NA)	50,981	4,035	3,952	4,711	3,918	3,768	3,500	4,914	4,728	4,999	4,576	4,017	3,863
37151 07	Steel . . . . .	1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
37151 17	Aluminum . . . . .	5	<sup>4</sup> 50,981	<sup>4</sup> 4,035	<sup>4</sup> 3,952	<sup>4</sup> 4,711	<sup>4</sup> 3,918	<sup>4</sup> 3,768	<sup>4</sup> 3,500	<sup>4</sup> 4,914	<sup>4</sup> 4,728	<sup>4</sup> 4,999	<sup>4</sup> 4,576	<sup>4</sup> 4,017	<sup>4</sup> 3,863
	All other closed-top dry freight vans, including curtain . . . . .	(NA)	2,642,111	207,274	213,724	274,126	211,602	222,455	226,616	189,462	215,464	232,677	219,792	218,961	209,958
37151 10	Steel . . . . .	(NA)	73,595	6,200	5,775	6,743	5,613	6,242	8,552	5,729	5,490	5,756	5,635	6,457	5,403
	Less than 30 feet long . . . . .	1	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
37151 11	30 feet or greater . . . . .	4	<sup>5</sup> 73,595	<sup>5</sup> 6,200	<sup>5</sup> 5,775	<sup>5</sup> 6,743	<sup>5</sup> 5,613	<sup>5</sup> 6,242	<sup>5</sup> 8,552	<sup>5</sup> 5,729	<sup>5</sup> 5,490	<sup>5</sup> 5,756	<sup>5</sup> 5,635	<sup>5</sup> 6,457	<sup>5</sup> 5,403
37151 23	Aluminum . . . . .	(NA)	2,441,925	190,762	197,931	253,648	194,633	205,894	207,964	173,294	199,776	215,970	203,687	202,500	195,866
	Less than 30 feet long . . . . .	9	204,132	<sup>1</sup> 3,687	<sup>1</sup> 5,718	<sup>2</sup> 3,072	<sup>1</sup> 7,244	17,639	<sup>2</sup> 1,187	<sup>1</sup> 6,408	21,141	16,237	<sup>1</sup> 5,022	14,152	<sup>1</sup> 2,625
37151 25	30 feet or greater . . . . .	13	2,237,793	<sup>1</sup> 177,075	182,213	<sup>2</sup> 30,576	177,389	188,255	<sup>1</sup> 86,777	<sup>1</sup> 56,886	178,635	199,733	<sup>1</sup> 88,665	<sup>1</sup> 88,348	<sup>1</sup> 83,241
37151 67	FRP . . . . .	(NA)	126,591	10,312	10,018	13,735	11,356	10,319	10,100	10,439	10,198	10,951	10,470	10,004	8,689
	Less than 30 feet long . . . . .	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
37151 69	30 feet or greater . . . . .	9	<sup>3</sup> 126,591	<sup>3</sup> 10,312	<sup>3</sup> 10,018	<sup>3</sup> 13,735	<sup>3</sup> 11,356	<sup>3</sup> 10,319	<sup>3</sup> 10,100	<sup>3</sup> 10,439	<sup>3</sup> 10,198	<sup>3</sup> 10,951	<sup>3</sup> 10,470	<sup>3</sup> 10,004	<sup>3</sup> 8,689
	Open tops, including low-side grain and fruit . . . . .	(NA)	180,263	13,869	13,819	14,730	13,418	13,850	14,163	16,515	17,040	18,306	16,088	14,159	14,306
37151 12	Steel . . . . .	2	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
37151 26	Aluminum . . . . .	14	<sup>6</sup> 180,263	<sup>6</sup> 13,869	<sup>6</sup> 13,819	<sup>6</sup> 14,730	<sup>6</sup> 13,418	<sup>6</sup> 13,850	<sup>6</sup> 14,163	<sup>6</sup> 16,515	<sup>6</sup> 17,040	<sup>6</sup> 18,306	<sup>6</sup> 16,088	<sup>6</sup> 14,159	<sup>6</sup> 14,306
37151 70	FRP . . . . .	1	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
37151 27	Tanks . . . . .	(NA)	236,186	18,731	20,310	22,686	21,399	21,025	21,064	19,820	20,831	18,697	16,898	18,266	16,459
	For flammable liquids (except casing head transport, including aircraft refuelers), all materials . . . . .	6	74,382	<sup>6</sup> 6,175	<sup>6</sup> 6,371	<sup>6</sup> 6,358	<sup>6</sup> 6,330	<sup>6</sup> 6,101	<sup>5</sup> 9,588	<sup>6</sup> 6,248	<sup>6</sup> 6,319	<sup>6</sup> 6,155	<sup>6</sup> 6,430	<sup>6</sup> 6,524	<sup>5</sup> 5,413
37151 30	Coated for chemicals and acids, all materials . . . . .	5	106,336	8,204	8,641	10,389	10,584	10,737	10,538	9,251	<sup>1</sup> 10,540	<sup>7</sup> 5,561	<sup>5</sup> 5,592	<sup>7</sup> 3,381	<sup>6</sup> 9,918
37151 28	For asphalt, all materials . . . . .	4	15,534	1,495	1,732	2,692	1,614	1,495	1,502	1,172	872	1,088	535	661	676
37151 32	All other, including noncoated for chemicals and acids, high pressure, food and milk, sanitary, and cryogenics, all materials . . . . .	8	39,934	<sup>2</sup> 2,857	<sup>3</sup> 5,566	<sup>3</sup> 2,247	<sup>2</sup> 2,871	<sup>2</sup> 2,692	<sup>3</sup> 3,066	<sup>3</sup> 3,149	<sup>3</sup> 3,100	<sup>3</sup> 3,893	<sup>4</sup> 4,341	<sup>3</sup> 3,700	<sup>3</sup> 3,452
37151 33	Bulk commodity and dry materials, including pneumatic and mechanical discharge, both tank and hopper types (except van) . . . . .	12	70,331	<sup>5</sup> 8,897	<sup>5</sup> 8,875	<sup>5</sup> 9,951	<sup>5</sup> 8,827	<sup>5</sup> 8,898	<sup>5</sup> 8,834	<sup>5</sup> 7,366	<sup>5</sup> 8,895	<sup>5</sup> 8,873	<sup>5</sup> 8,825	<sup>5</sup> 8,863	<sup>5</sup> 8,857
37151 35	Pole, logging, and pipe . . . . .	10	17,399	1,093	1,358	<sup>1</sup> 1,178	<sup>1</sup> 1,513	1,463	1,373	<sup>1</sup> 6,381	1,440	1,447	1,544	1,852	1,500
37151 37	Platform . . . . .	24	361,263	<sup>2</sup> 9,479	<sup>3</sup> 0,038	37,647	<sup>3</sup> 2,044	35,268	31,004	<sup>2</sup> 7,341	29,021	31,198	29,357	<sup>2</sup> 7,873	<sup>2</sup> 0,993

See footnotes at end of table.



Table 23. Value of Shipments of Truck Trailers by Month and Type of Trailer: 1995—Con.

[Thousands of dollars]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailers and chassis (except detachables)—Con.														
	Low-bed heavy haulers, over 10-ton capacity, excluding tilt-bed trailers . . . . .	(NA)	332,504	30,254	28,617	33,041	30,589	31,849	26,564	24,023	26,631	24,321	25,771	26,024	24,820
37151 38	Under 40-ton capacity . . . . .	33	146,485	'13,056	'12,621	'14,831	'14,740	'14,847	'11,657	'9,576	11,688	'10,249	'11,558	'11,286	'10,376
37151 39	40-ton capacity and over . . . . .	20	186,019	'17,198	'15,996	'18,210	'15,849	'17,002	'14,907	'14,447	'14,943	'14,072	'14,213	'14,738	'14,444
	Dump trailers and dump chassis, highway type (rear, side, and bottom dump, including non-pneumatic hoppers) . . . . .	(NA)	250,219	19,478	21,131	27,675	22,173	28,032	24,835	20,281	18,773	14,907	18,686	19,043	15,205
37151 40	For materials . . . . .	32	177,762	'13,728	'14,791	'19,843	'16,234	18,760	'18,189	'14,383	13,698	11,467	13,877	11,975	10,817
37151 42	For other, including demolition and excavation . . . . .	15	72,457	'5,750	'6,340	'7,832	'5,939	'9,272	'6,646	'5,898	'5,075	'3,440	'4,809	'7,068	'4,388
37151 44	Automobile transport trailers . . . . .	7	42,085	'3,539	'3,409	'3,572	'3,465	3,476	'3,582	'3,495	3,558	'3,524	3,444	'3,658	'3,363
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis) . . . . .	31	71,144	'6,582	'5,705	'6,065	'5,902	'6,496	'6,330	'5,797	'5,832	'5,554	'5,703	'5,415	'5,763
37151 53	Detachable trailer bodies (containers), sold separately . . . . .	8	97,465	'8,918	'8,509	'9,262	'7,624	'7,441	'8,033	'6,599	'8,042	'7,704	'8,353	'9,216	'7,764
37151 54	Detachable trailer chassis and running gear, sold separately . . . . .	20	329,255	'23,137	'26,986	'39,299	'30,130	'29,630	'29,408	'21,195	'26,072	'29,074	'24,311	'23,467	'26,546
37151 45	Dollies and converter gear . . . . .	15	42,874	'3,871	'3,771	'3,828	'3,573	'3,777	'3,652	'3,460	'3,450	'3,374	'3,546	'3,455	'3,117

- Represents zero. FRP Fiberglass reinforced plastics/plywood. NA Not available. 'Revised by 5 percent or more from previously published data.

<sup>1</sup>Product codes 37151 02 and 37151 14 are combined to avoid disclosing data for individual companies.

<sup>2</sup>Semi-insulated (nonrefrigerated) and product codes 37151 16 and 37151 15 are combined with "Drop frame type (12 inches or more drop)" to avoid disclosing data for individual companies.

<sup>3</sup>Product codes 37151 64 and 37151 67 are combined with product code 37151 69 to avoid disclosing data for individual companies.

<sup>4</sup>Product code 37151 07 is combined with product code 37151 17 to avoid disclosing data for individual companies.

<sup>5</sup>Product code 37151 10 is combined with product code 37151 11 to avoid disclosing data for individual companies.

<sup>6</sup>Product codes 37151 12 and 37151 70 are combined with product code 37151 26 to avoid disclosing data for individual companies.

Table 24. Quantity of Shipments of Truck Trailers by Month and Type of Trailer: 1994

[Number of units]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailers and chassis (except detachables) . . . . .	168	234,287	16,957	18,401	20,500	19,029	17,971	20,120	17,587	21,054	20,790	21,099	20,302	20,477
	Vans . . . . .	(NA)	174,237	12,587	13,799	15,300	13,729	12,829	15,194	12,776	15,557	15,588	15,848	15,282	15,748
	Closed top:														
	Insulated (refrigerated) . .	(NA)	27,183	1,911	2,163	2,609	2,088	1,921	2,389	1,827	2,525	2,392	2,459	2,449	2,450
37151 02	Steel . . . . .	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
37151 14	Aluminum . . . . .	12	127,183	11,911	12,163	12,609	12,088	11,921	12,389	11,827	12,525	12,392	12,459	12,449	12,450
37151 60	FRP . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Semi-insulated (nonrefrigerated) . . . . .	(NA)	1,179	37	58	128	149	60	134	64	140	46	131	88	144
37151 04	Steel . . . . .	2	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 16	Aluminum . . . . .	6	2,179	237	258	2128	2,149	260	2,134	264	2,140	246	2,131	288	2,144
37151 62	FRP . . . . .	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
	Drop frame type (12 inches or more drop) . .	(NA)	6,681	425	548	782	491	667	498	620	599	534	508	511	498
37151 05	Steel . . . . .	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
37151 15	Aluminum . . . . .	10	3,681	3425	3,548	3,782	3,491	3,667	3,498	3,620	3,599	3,534	3,508	3,511	3,498
37151 64	FRP . . . . .	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
	Livestock . . . . .	(NA)	2,773	208	228	225	234	215	208	255	240	260	241	237	222
37151 07	Steel . . . . .	5	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
37151 17	Aluminum . . . . .	8	4,273	4208	4,228	4,225	4,234	4,215	4,208	4,255	4,240	4,260	4,241	4,237	4,222
	All other closed-top dry freight vans, including curtain . . . . .	(NA)	129,182	9,493	10,327	11,033	10,160	9,414	11,376	9,254	11,234	11,719	11,838	11,468	11,866
	Steel . . . . .	(NA)	5,382	584	342	405	1,272	422	510	389	332	279	292	278	277
37151 10	Less than 30 feet long . . . . .	3	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
37151 11	30 feet or greater . . .	9	5,382	5,584	5,342	5,405	5,1272	5,422	5,510	5,389	5,332	5,279	5,292	5,278	5,277
	Aluminum . . . . .	(NA)	113,268	8,142	9,240	9,805	8,036	8,214	9,998	8,132	10,072	10,587	10,410	10,107	10,525
37151 23	Less than 30 feet long . . . . .	14	14,353	1,087	1,312	1,497	873	956	1,572	1,076	1,299	1,434	1,327	1,039	881
37151 25	30 feet or greater . . .	17	98,915	7,055	7,928	8,308	7,163	7,258	8,426	7,056	8,773	9,153	9,083	9,068	9,644
	FRP . . . . .	(NA)	10,532	767	745	823	852	778	868	733	830	853	1,136	1,083	1,064
37151 67	Less than 30 feet long . . . . .	7	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
37151 69	30 feet or greater . . .	12	6,10,532	6,767	6,745	6,823	6,852	6,778	6,868	6,733	6,830	6,853	6,1,136	6,1,083	6,1,064
	Open tops including low-side grain and fruit . . . . .	(NA)	7,239	513	475	523	607	552	589	756	819	637	671	529	568
37151 12	Steel . . . . .	6	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
37151 26	Aluminum . . . . .	19	7,239	7,513	7,475	7,523	7,607	7,552	7,589	7,756	7,819	7,637	7,671	7,529	7,568
37151 70	FRP . . . . .	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tanks . . . . .	(NA)	4,758	370	393	427	420	407	384	383	411	389	411	379	384
37151 27	For flammable liquids (except casing head transport, including aircraft refuelers), all materials . . . . .	9	1,650	139	142	142	130	132	131	128	135	145	153	136	137
37151 30	Coated for chemicals and acids, all materials . . . . .	10	2,131	164	186	191	186	186	174	174	175	165	191	169	170
37151 28	For asphalt, all materials . . .	7	412	10	28	53	64	48	34	35	43	31	16	22	28
37151 32	All other, including non-coated for chemicals and acids, high pressure, food and milk, sanitary, and cryogenics, all materials . . . . .	9	565	57	37	41	40	41	45	46	58	48	51	52	49
37151 33	Bulk commodity and dry materials, including pneumatic and mechanical discharge, both tank and hopper types (except van) . .	16	2,665	237	222	224	222	218	218	219	220	221	222	222	220
37151 35	Pole, logging, and pipe . . . . .	17	982	85	89	90	90	78	76	65	81	84	80	86	78
37151 37	Platform . . . . .	26	21,459	1,462	1,562	1,875	1,858	1,859	1,686	1,622	2,087	1,954	1,981	1,833	1,680
	Low-bed heavy haulers, over 10-ton capacity, excluding tilt-bed trailers . . .	(NA)	10,708	744	801	904	950	930	971	859	935	944	898	941	831
37151 38	Under 40-ton capacity . . . . .	44	8,195	563	601	685	730	728	774	660	715	711	679	726	623
37151 39	40-ton capacity and over . . .	28	2,513	181	200	219	220	202	197	199	220	233	219	215	208

See footnotes at end of table.

Table 24. Quantity of Shipments of Truck Trailers by Month and Type of Trailer: 1994—Con.

[Number of units]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailers and chassis (except detachables)—Con.														
	Dump trailers and dump chassis, highway type (rear, side, and bottom dump, including nonpneumatic hoppers) . . . .	(NA)	10,710	755	843	945	1,053	949	901	885	994	846	904	834	801
37151 40	For materials . . . . .	40	7,309	527	569	680	722	635	598	603	636	591	601	578	569
37151 42	For other, including demolition and excavation . . . .	18	3,401	228	274	265	331	314	303	282	358	255	303	256	232
37151 44	Automobile transport trailers . . . . .	10	1,766	377	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	366	344	336	343
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis) . . . . .	38	7,002	340	<sup>8</sup> 692	<sup>8</sup> 735	<sup>8</sup> 707	<sup>8</sup> 701	<sup>8</sup> 690	<sup>8</sup> 778	<sup>8</sup> 769	398	411	389	392
37151 53	Detachable trailer bodies (containers), sold separately.	12	2,598	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	1,247	( <sup>9</sup> )	1,351	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
37151 54	Detachable trailer chassis and running gear, sold separately . . . . .	18	57,570	<sup>9</sup> 4,752	<sup>9</sup> 5,806	<sup>9</sup> 6,627	<sup>9</sup> 5,214	<sup>9</sup> 5,027	<sup>9</sup> 4,867	3,365	<sup>9</sup> 4,606	3,831	<sup>9</sup> 4,678	<sup>9</sup> 4,591	<sup>9</sup> 4,206
37151 45	Dollies and converter gear . . . .	17	2,986	225	202	219	264	278	236	235	212	287	359	258	211

- Represents zero. NA Not available. FRP Fiberglass reinforced plastics/plywood.

<sup>1</sup>Product code 37151 02 is combined with product code 37151 14 to avoid disclosing data for individual companies.  
<sup>2</sup>Product codes 37151 04 and 37151 62 are combined with product code 37151 16 to avoid disclosing data for individual companies.  
<sup>3</sup>Product codes 37151 05 and 37151 64 are combined with product code 37151 15 to avoid disclosing data for individual companies.  
<sup>4</sup>Product code 37151 07 is combined with product code 37151 17 to avoid disclosing data for individual companies.  
<sup>5</sup>Product code 37151 10 is combined with product code 37151 11 to avoid disclosing data for individual companies.  
<sup>6</sup>Product code 37151 67 is combined with product code 37151 69 to avoid disclosing data for individual companies.  
<sup>7</sup>Product code 37151 12 is combined with product code 37151 26 to avoid disclosing data for individual companies.  
<sup>8</sup>Product code 37151 44 is combined with product code 37151 49 to avoid disclosing data for individual companies.  
<sup>9</sup>Product code 37151 53 is combined with product code 37151 54 to avoid disclosing data for individual companies.

Table 25. Value of Shipments of Truck Trailers by Month and Type of Trailer: 1994

[Thousands of dollars]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailers and chassis (except detachables)	168	4,113,682	298,084	317,565	355,299	336,998	311,979	346,526	312,159	374,143	362,367	372,497	361,241	364,824
	Vans	(NA)	2,859,434	205,019	220,343	246,859	227,965	206,596	245,824	210,459	258,745	254,701	262,962	256,204	263,757
	Closed top:														
	Insulated (refrigerated)	(NA)	620,702	44,780	48,083	58,125	47,017	41,252	53,461	42,977	57,812	55,602	57,282	56,544	57,767
37151 02	Steel	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
37151 14	Aluminum	12	<sup>1</sup> 620,702	<sup>1</sup> 44,780	<sup>1</sup> 48,083	<sup>1</sup> 58,125	<sup>1</sup> 47,017	<sup>1</sup> 41,252	<sup>1</sup> 53,461	<sup>1</sup> 42,977	<sup>1</sup> 57,812	<sup>1</sup> 55,602	<sup>1</sup> 57,282	<sup>1</sup> 56,544	<sup>1</sup> 57,767
37151 60	FRP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Semi-insulated (non-refrigerated)	(NA)	22,376	674	1,196	2,364	2,654	1,120	2,581	1,230	2,787	892	2,336	1,610	2,932
37151 04	Steel	2	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
37151 16	Aluminum	6	<sup>2</sup> 22,376	<sup>2</sup> 674	<sup>2</sup> 1,196	<sup>2</sup> 2,364	<sup>2</sup> 2,654	<sup>2</sup> 1,120	<sup>2</sup> 2,581	<sup>2</sup> 1,230	<sup>2</sup> 2,787	<sup>2</sup> 892	<sup>2</sup> 2,336	<sup>2</sup> 1,610	<sup>2</sup> 2,932
37151 62	FRP	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
	Drop frame type (12 inches or more drop)	(NA)	125,618	7,811	10,336	14,096	9,644	12,090	9,991	10,683	10,907	10,163	10,033	10,150	9,714
37151 05	Steel	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
37151 15	Aluminum	10	<sup>3</sup> 125,618	<sup>3</sup> 7,811	<sup>3</sup> 10,336	<sup>3</sup> 14,096	<sup>3</sup> 9,644	<sup>3</sup> 12,090	<sup>3</sup> 9,991	<sup>3</sup> 10,683	<sup>3</sup> 10,907	<sup>3</sup> 10,163	<sup>3</sup> 10,033	<sup>3</sup> 10,150	<sup>3</sup> 9,714
37151 64	FRP	3	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
	Livestock	(NA)	50,210	3,402	4,060	3,981	4,284	3,681	3,403	4,973	4,487	5,166	4,453	4,442	3,878
37151 07	Steel	5	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
37151 17	Aluminum	8	<sup>4</sup> 50,210	<sup>4</sup> 3,402	<sup>4</sup> 4,060	<sup>4</sup> 3,981	<sup>4</sup> 4,284	<sup>4</sup> 3,681	<sup>4</sup> 3,403	<sup>4</sup> 4,973	<sup>4</sup> 4,487	<sup>4</sup> 5,166	<sup>4</sup> 4,453	<sup>4</sup> 4,442	<sup>4</sup> 3,878
	All other closed-top dry freight vans, including curtain	(NA)	1,893,454	137,839	146,690	158,054	152,057	137,960	164,980	136,340	166,064	169,487	173,890	171,675	178,418
	Steel	(NA)	80,854	8,386	4,620	5,913	17,653	6,780	7,576	5,944	5,473	4,576	4,799	4,576	4,558
37151 10	Less than 30 feet long	3	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
37151 11	30 feet or greater	9	<sup>5</sup> 80,854	<sup>5</sup> 8,386	<sup>5</sup> 4,620	<sup>5</sup> 5,913	<sup>5</sup> 17,653	<sup>5</sup> 6,780	<sup>5</sup> 7,576	<sup>5</sup> 5,944	<sup>5</sup> 5,473	<sup>5</sup> 4,576	<sup>5</sup> 4,799	<sup>5</sup> 4,576	<sup>5</sup> 4,558
	Aluminum	(NA)	1,684,644	119,685	132,999	141,901	123,676	121,695	146,781	121,495	150,366	154,340	155,763	154,439	161,504
37151 23	Less than 30 feet long	14	141,416	10,407	12,658	14,502	8,543	9,547	15,277	10,895	12,771	13,960	13,711	10,524	8,621
37151 25	30 feet or greater	17	<sup>1</sup> 1,543,228	<sup>1</sup> 109,278	<sup>1</sup> 120,341	<sup>1</sup> 127,399	<sup>1</sup> 115,133	<sup>1</sup> 112,148	<sup>1</sup> 131,504	<sup>1</sup> 110,600	<sup>1</sup> 137,595	<sup>1</sup> 140,380	<sup>1</sup> 142,052	<sup>1</sup> 143,915	<sup>1</sup> 152,883
	FRP	(NA)	127,956	9,768	9,071	10,240	10,728	9,485	10,623	8,901	10,225	10,571	13,328	12,660	12,356
37151 67	Less than 30 feet long	7	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
37151 69	30 feet or greater	12	<sup>6</sup> 127,956	<sup>6</sup> 9,768	<sup>6</sup> 9,071	<sup>6</sup> 10,240	<sup>6</sup> 10,728	<sup>6</sup> 9,485	<sup>6</sup> 10,623	<sup>6</sup> 8,901	<sup>6</sup> 10,225	<sup>6</sup> 10,571	<sup>6</sup> 13,328	<sup>6</sup> 12,660	<sup>6</sup> 12,356
	Open tops, including low side grain and fruit	(NA)	147,074	10,513	9,978	10,239	12,309	10,493	11,408	14,256	16,688	13,391	14,968	11,783	11,048
37151 12	Steel	6	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
37151 26	Aluminum	19	<sup>7</sup> 147,074	<sup>7</sup> 10,513	<sup>7</sup> 9,978	<sup>7</sup> 10,239	<sup>7</sup> 12,309	<sup>7</sup> 10,493	<sup>7</sup> 11,408	<sup>7</sup> 14,256	<sup>7</sup> 16,688	<sup>7</sup> 13,391	<sup>7</sup> 14,968	<sup>7</sup> 11,783	<sup>7</sup> 11,048
37151 70	FRP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tanks	(NA)	199,674	15,298	16,489	17,572	17,118	16,801	16,099	15,955	17,585	16,414	17,064	16,678	16,601
37151 27	For flammable liquids (except casing head transport, including aircraft refuelers), all materials	9	69,520	5,782	5,972	6,148	5,470	5,621	5,555	5,421	5,545	5,988	5,958	5,971	6,089
37151 30	Coated for chemicals and acids, all materials	10	90,913	6,812	7,789	8,035	7,780	7,845	7,477	7,310	7,753	7,240	8,106	7,368	7,398
37151 28	For asphalt, all materials	7	14,000	401	1,127	1,667	2,127	1,550	1,127	1,139	1,625	984	521	822	910
37151 32	All other, including non-coated for chemicals and acids, high pressure, food and milk, sanitary, and cryogenics, all materials	9	25,241	2,303	1,601	1,722	1,741	1,785	1,940	2,085	2,662	2,202	2,479	2,517	2,204
37151 33	Bulk commodity and dry materials, including pneumatic and mechanical discharge, both tank and hopper types (except van)	16	71,100	6,242	5,825	5,971	5,948	5,860	5,843	5,844	5,890	5,912	5,948	5,949	5,868
37151 35	Pole, logging, and pipe	17	12,922	1,163	1,187	1,148	1,103	1,001	984	887	1,065	1,099	1,091	1,123	1,071
37151 37	Platform	26	320,386	22,282	23,508	28,656	27,615	26,767	24,418	23,173	31,006	29,070	29,339	28,264	26,288
	Low-bed heavy haulers, over 10-ton capacity, excluding tilt-bed trailers	(NA)	241,013	17,778	18,830	19,977	20,337	20,381	20,597	19,341	20,536	21,141	20,821	21,624	19,650
37151 38	Under 40-ton capacity	44	129,765	9,524	10,070	10,437	10,974	11,503	11,573	10,469	10,734	11,152	10,914	11,962	10,453
37151 39	40-ton capacity and over	28	111,248	8,254	8,760	9,540	9,363	8,878	9,024	8,872	9,802	9,989	9,907	9,662	9,197

See footnotes at end of table.

Table 25. Value of Shipments of Truck Trailers by Month and Type of Trailer: 1994—Con.

[Thousands of dollars]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Complete trailer and chassis (except detachables)—Con.														
	Dump trailers and dump chassis, highway type (rear, side, and bottom dump), including nonpneumatic hoppers. . . . .	(NA)	274,298	18,874	20,774	23,464	26,944	24,365	22,704	23,956	26,061	21,810	23,735	21,126	20,485
37151 40	For materials . . . . .	40	181,090	12,881	13,649	16,867	17,814	15,618	14,564	16,351	16,205	14,338	14,983	13,965	13,855
37151 42	For other, including demolition and excavation . . . . .	18	93,208	5,993	7,125	6,597	9,130	8,747	8,140	7,605	9,856	7,472	8,752	7,161	6,630
37151 44	Automobile transport trailers. . . . .	10	31,244	7,292	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	7,053	5,824	5,274	5,801
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis). . . . .	38	103,611	4,136	<sup>8</sup> 10,609	<sup>8</sup> 11,652	<sup>8</sup> 9,968	<sup>8</sup> 10,208	<sup>8</sup> 10,057	<sup>8</sup> 12,544	<sup>8</sup> 13,255	5,167	5,713	4,999	5,303
37151 53	Detachable trailer bodies (containers), sold separately . . . . .	12	28,762	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	13,803	( <sup>9</sup> )	14,959	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
37151 54	Detachable trailer chassis and running gear, sold separately . . . . .	18	436,680	<sup>9</sup> 37,341	<sup>9</sup> 45,806	<sup>9</sup> 49,514	<sup>9</sup> 39,966	<sup>9</sup> 38,629	<sup>9</sup> 38,619	20,752	<sup>9</sup> 36,670	24,529	<sup>9</sup> 35,779	<sup>9</sup> 35,772	<sup>9</sup> 33,303
37151 45	Dollies and converter gear . . . . .	17	14,462	1,093	946	1,177	1,240	1,216	1,130	1,197	1,049	1,329	1,722	1,188	1,175

- Represents zero. NA Not available. FRP Fiberglass reinforced plastic/plywood.

<sup>1</sup>Product code 37151 02 is combined with product code 37151 14 to avoid disclosing data for individual companies.  
<sup>2</sup>Product codes 37151 04 and 37151 62 are combined with product code 37151 16 to avoid disclosing data for individual companies.  
<sup>3</sup>Product codes 37151 05 and 37151 64 are combined with product code 37151 15 to avoid disclosing data for individual companies.  
<sup>4</sup>Product code 37151 07 is combined with product code 37151 17 to avoid disclosing data for individual companies.  
<sup>5</sup>Product code 37151 10 is combined with product code 37151 11 to avoid disclosing data for individual companies.  
<sup>6</sup>Product code 37151 67 is combined with product code 37151 69 to avoid disclosing data for individual companies.  
<sup>7</sup>Product code 37151 12 is combined with product code 37151 26 to avoid disclosing data for individual companies.  
<sup>8</sup>Product code 37151 44 is combined with product code 37151 49 to avoid disclosing data for individual companies.  
<sup>9</sup>Product code 37151 53 is combined with product code 37151 54 to avoid disclosing data for individual companies.

Table 26. Quantity and Value of Shipments of Truck Trailers and Vans by Type of Material: 1995 and 1994

[Quantity in units. Value in thousands of dollars]

Month	Total		FRP		Steel		Aluminum	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>								
<b>Total .....</b>	<b>215,420</b>	<b>3,770,056</b>	<b>9,968</b>	<b>126,591</b>	<b>4,995</b>	<b>73,595</b>	<b>200,457</b>	<b>3,569,870</b>
January .....	17,262	298,217	812	10,312	420	6,200	16,030	281,705
February .....	17,532	301,448	785	10,018	392	5,775	16,355	285,655
March .....	22,496	375,965	1,046	13,735	448	6,743	21,002	355,487
April .....	17,317	298,179	891	11,356	381	5,613	16,045	281,210
May .....	18,682	325,993	840	10,319	423	6,242	17,419	309,432
June .....	18,773	325,014	812	10,100	570	8,552	17,391	306,362
July .....	15,918	277,846	837	10,439	389	5,729	14,692	261,678
August .....	18,056	318,953	782	10,198	375	5,490	16,899	303,265
September .....	18,348	326,190	846	10,951	391	5,756	17,111	309,483
October .....	17,600	319,748	855	10,470	388	5,635	16,357	303,643
November .....	17,087	308,927	770	10,004	435	6,457	15,882	292,466
December .....	16,349	293,576	692	8,689	383	5,403	15,274	279,484
<b>1994</b>								
<b>Total .....</b>	<b>174,237</b>	<b>2,859,434</b>	<b>10,644</b>	<b>130,070</b>	<b>6,880</b>	<b>96,510</b>	<b>156,713</b>	<b>2,632,854</b>
January .....	12,587	205,019	776	9,910	712	9,788	11,099	185,321
February .....	13,799	220,343	754	9,214	465	5,831	12,580	205,298
March .....	15,300	246,859	832	10,383	531	7,296	13,937	229,180
April .....	13,729	227,965	862	10,903	1,396	19,067	11,471	197,995
May .....	12,829	206,596	787	9,661	533	7,744	11,509	189,191
June .....	15,194	245,824	876	10,783	633	8,809	13,685	226,232
July .....	12,776	210,459	740	9,043	502	6,932	11,534	194,484
August .....	15,557	258,745	837	10,367	465	7,045	14,255	241,333
September .....	15,588	254,701	864	10,785	400	5,804	14,324	238,112
October .....	15,848	262,962	1,149	13,589	429	6,209	14,270	243,164
November .....	15,282	256,204	1,091	12,824	413	6,146	13,778	237,234
December .....	15,748	263,757	1,076	12,608	401	5,839	14,271	245,310

FRP Fiberglass reinforced plastics/plywood.

**HISTORICAL NOTE**

Data on truck trailers have been collected by the Bureau of the Census since 1942. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository

Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Carol Beasley, 301-457-4781.

# Chapter 11.

## Aerospace

### AEROSPACE ORDERS (MA37D)

#### INTRODUCTION

These data cover establishments primarily engaged in the development and/or manufacture of aerospace products, including aircraft, aircraft engines, aircraft parts and accessories, missiles and space vehicle systems, missile and space vehicle engines or propulsion units, and parts and subassemblies for missiles and space vehicles. An establishment is "primarily engaged" in aerospace if the value of aerospace products and services produced by that establishment exceeds the value of the establishment's production of other goods and services. Company plants or divisions in which the primary activity is other than the development and/or manufacture of aerospace products and services are not included in this survey.

#### SUMMARY OF FINDINGS

The backlog of orders for aircraft, missiles, space vehicles, and engines, as of December 31, 1995, was \$194.6 billion. This was a 1-percent increase from the 1994 backlog of \$192.6 billion.

Net new orders received during 1995 were \$104.6 billion, an 18-percent increase from the \$88.7 billion received in 1994. Net sales, receipts, and/or billings in 1995 totaled \$101.2 billion, a 3-percent decrease from the \$104.3 billion reported in 1994.

#### EXPLANATION OF TERMS

**Shipments (or net sales).** Represents consolidated company sales, receipts, or billings, net after discounts and allowances. For firms reporting only for specific aerospace divisions or plants, it includes the value of the division or plant sales only. It includes all sales from aerospace production and receipts for research and development performed for others. Transfers to other reporting units (for example, separate aerospace divisions of the same company) are included.

Work performed under a fixed price contract is reported as a shipment if the product is delivered during the year. Work done on a cost-plus contract reflects cost incurred plus a portion of the profits for the contract (value of work

done) during the year. Value of work done may be based on (a) multiplying the estimated percentage of work completed during the year by the contract price, or (b) net billings for work done during the year.

**Net new orders.** Includes (a) the sales value of orders received during the current reporting period for products and services to be delivered at some future date; (b) the sales value of orders for immediate delivery that have resulted in sales or shipments during the current reporting period; and (c) the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. The sales value of cancellations of existing orders is deducted. Only those orders that are supported by binding legal documents, such as signed contracts or letter contracts, are included as orders. In the case of letter contracts, the full amount of sales value is included if the parties concerned are in substantial agreement on this amount; otherwise, only the funds specifically authorized to be expended are included.

**Backlog, end of year (unfilled orders).** Includes all orders as defined above that have not yet been reflected as shipments. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the end of the prior period, plus net new orders received, less net shipments.

**Prime contracts and subcontracts.** Separate dollar values are reported for prime contracts and those received under subcontracts. All subcontracts, including those where it is known that the prime contract was let by a government, are reported as subcontracts received from "other customers."

**Military and nonmilitary.** The term "military" refers to complete aircraft, aircraft engines, missile systems, space vehicle systems, engines and/or propulsion units for missile systems or space vehicles, and other aerospace related activities for military applications, whether for tactical, strategic, or support functions. The term "nonmilitary" refers to the same products not built to military specifications.

## TYPE OF CUSTOMER

**U.S. Government (military).** Includes contracts with the Department of Defense (DOD) and other U.S. Government agencies for products built to military specifications. Contracts for which the ultimate customer is a foreign customer such as contracts made under the Foreign Military Assistance Program, are excluded.

**Other governments (military).** Includes contracts for products built to military specifications for governments other than the United States. It includes contracts through DOD or other U.S. Government agencies for which the

ultimate customer is a foreign government. Contracts for foreign governments not to military specifications are classified as "nonmilitary" to other customers.

**U.S. Government (nonmilitary).** Includes contracts with any U.S. Government agency for products not built to military specifications.

**Other customers (nonmilitary).** Includes contracts for products not built to military specifications for all customers other than U.S. Government agencies. It includes both domestic and foreign commercial customers, as well as foreign governments.

Table 1. **Value of Backlog of Orders, Net New Orders, and Net Sales Reported by Manufacturers of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts: 1986 to 1995**

[Millions of dollars]

Year <sup>1</sup>	Net new orders during year <sup>2</sup>	Net sales during year	Backlog, end of year
1995 .....	104,707	101,153	194,649
1994 .....	88,706	104,296	192,561
1993 .....	79,770	109,926	211,814
1992 .....	100,306	118,736	236,076
1991 .....	122,485	123,862	245,241
1990 .....	145,965	136,646	250,079
1989 .....	173,635	122,148	252,401
1988 .....	147,128	113,548	191,518
1987 .....	121,224	110,301	158,650
1986 .....	110,836	105,577	148,212

<sup>1</sup>Data for 1989 are not comparable with earlier years and were previously unavailable. The extent of this noncomparability is unknown.

<sup>2</sup>These totals represent new orders received during the year, less terminations during the year.



**Table 2. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts by United States Government and Other Customers: 1991 to 1995**

[Millions of dollars]

Year	Net new orders <sup>1</sup> (prime contracts and subcontracts)			Net sales, receipts, or billings			Backlog, end of year		
	Total	United States Government <sup>2</sup>	Other customers	Total	United States Government <sup>2</sup>	Other customers	Total	United States Government <sup>2</sup>	Other customers
1995 .....	104,707	44,163	60,544	101,153	50,127	51,026	194,649	62,214	132,435
1994 .....	88,706	50,444	38,262	104,296	57,141	47,155	192,561	68,660	123,901
1993 .....	79,770	45,169	34,601	109,926	54,808	55,118	211,814	77,329	134,485
1992 .....	100,306	53,485	46,821	118,736	59,362	59,374	236,076	82,655	153,421
1991 .....	122,485	66,410	56,075	123,862	67,180	56,682	245,241	86,566	158,675

<sup>1</sup>These data represent new orders received during the year, less terminations during the year.

<sup>2</sup>These data represent prime contracts only. All subcontracts, including those where it is known that the prime contract was let by the U.S. Government, are reported as subcontracts from "Other customers."

Note: Detail items may not add to total because of independent rounding.

**Table 3. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts by Military and Nonmilitary: 1991 to 1995**

[Millions of dollars]

Year	Net new orders <sup>1</sup> (prime contracts and subcontracts)			Net sales, receipts, or billings			Backlog, end of year		
	Total	Military	Nonmilitary	Total	Military	Nonmilitary	Total	Military	Nonmilitary
1995 .....	104,707	46,802	57,905	101,153	52,456	48,697	194,649	77,405	117,244
1994 .....	88,706	53,268	35,438	104,296	58,012	46,284	192,561	84,445	108,116
1993 .....	79,770	49,541	30,229	109,926	56,102	53,824	211,814	91,751	120,063
1992 .....	100,306	57,383	42,923	118,736	61,410	57,326	236,076	92,139	143,937
1991 .....	122,485	63,017	59,468	123,862	67,089	56,773	245,241	89,517	155,724

<sup>1</sup>These data represent new orders received during the year, less terminations during the year.

Note: Detail items may not add to total because of independent rounding.

Table 4. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts: 1995 and 1994

[Millions of dollars]

Product description	Number of companies	Net new orders			Shipments (or net sales)	Backlog, end of year
		Total	Prime contract	Subcontract		
<b>1995</b>						
<b>Total</b> .....	<b>59</b>	<b>104,707</b>	<b>103,482</b>	<b>1,225</b>	<b>101,153</b>	<b>194,649</b>
Military .....	(NA)	46,802	46,802	(NA)	52,456	77,405
U.S. Government .....	36	36,906	36,906	(NA)	42,691	53,679
Other governments .....	25	9,896	9,896	(NA)	9,765	23,726
Nonmilitary .....	(NA)	57,905	56,680	1,225	48,697	117,244
U.S. Government .....	20	7,257	7,257	(NA)	7,436	8,535
Other customers .....	42	50,648	49,423	1,225	41,261	108,709
Complete aircraft and parts .....	(NA)	43,217	43,025	192	41,493	114,287
Military .....	(NA)	16,235	16,235	(NA)	19,584	36,777
Nonmilitary .....	(NA)	26,982	26,790	192	21,909	77,510
Aircraft engines and parts .....	(NA)	12,186	12,185	(NA)	12,039	17,593
Military .....	(NA)	3,551	3,551	(NA)	3,229	4,738
Nonmilitary .....	(NA)	8,635	<sup>1</sup> 8,635	( <sup>1</sup> )	8,810	12,855
Missile systems and parts, excluding propulsion units .....	(NA)	3,178	<sup>1</sup> 3,178	( <sup>1</sup> )	4,732	4,833
Military .....	(NA)	3,178	3,178	(NA)	4,732	4,833
U.S. Government .....	14	2,548	2,548	(NA)	3,807	3,945
Other governments .....	7	630	630	(NA)	925	888
Space vehicle systems and parts, excluding propulsion units .....	(NA)	12,775	<sup>1</sup> 12,775	( <sup>1</sup> )	11,077	14,625
Military .....	(NA)	4,674	4,674	(NA)	4,782	5,872
Nonmilitary .....	(NA)	8,101	<sup>1</sup> 8,101	( <sup>1</sup> )	6,295	8,753
U.S. Government .....	11	2,466	2,466	(NA)	3,090	1,080
Other customers .....	9	5,635	<sup>1</sup> 5,635	( <sup>1</sup> )	3,205	7,673
Engines and/or propulsion units for missile systems and space vehicles, including parts <sup>2</sup> .....	(NA)	2,357	<sup>1</sup> 2,357	( <sup>1</sup> )	2,410	6,161
Military .....	(NA)	294	294	(NA)	1,102	792
Nonmilitary .....	(NA)	2,062	<sup>1</sup> 2,062	( <sup>1</sup> )	1,308	5,369
Other aircraft, space vehicle, and missile activities <sup>3</sup> .....	(NA)	11,476	10,502	974	10,143	17,733
Military .....	(NA)	7,345	7,345	(NA)	6,756	10,631
U.S. Government .....	(NA)	4,681	4,681	(NA)	5,098	7,852
Other governments .....	(NA)	2,664	2,664	(NA)	1,658	2,779
Nonmilitary .....	(NA)	4,131	3,157	974	3,387	7,102
Research and development (under contract) .....	(NA)	5,035	4,976	59	6,240	6,510
Military .....	(NA)	4,121	4,121	(NA)	5,165	5,398
U.S. Government .....	26	3,686	3,686	(NA)	4,936	5,035
Other governments .....	9	435	435	(NA)	229	363
Nonmilitary .....	(NA)	914	855	59	1,075	1,112
All other products and services .....	(NA)	14,484	14,484	(NA)	13,019	12,906
Military .....	(NA)	7,404	7,404	(NA)	7,106	8,363
U.S. Government .....	22	6,562	6,562	(NA)	6,251	7,094
Other governments .....	15	842	842	(NA)	855	1,269
Nonmilitary .....	(NA)	7,080	<sup>1</sup> 7,080	( <sup>1</sup> )	5,913	4,543
U.S. Government .....	14	2,791	2,791	(NA)	1,850	2,022
Other customers .....	25	4,289	<sup>1</sup> 4,289	( <sup>1</sup> )	4,063	2,521

See footnotes at end of table.

Table 4. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts: 1995 and 1994—Con.

[Millions of dollars]

Product description	Number of companies	Net new orders			Shipments (or net sales)	Backlog, end of year
		Total	Prime contract	Subcontract		
<b>1994<sup>r</sup></b>						
<b>Total</b> .....	<b>59</b>	<b>88,706</b>	<b>86,722</b>	<b>1,984</b>	<b>104,296</b>	<b>192,561</b>
Military .....	(NA)	53,268	53,268	(NA)	58,012	84,445
U.S. Government .....	37	45,025	45,025	(NA)	51,075	60,829
Other governments .....	28	8,243	8,243	(NA)	6,937	23,616
Nonmilitary .....	(NA)	35,438	33,454	1,984	46,284	108,116
U.S. Government .....	20	5,419	5,419	(NA)	6,066	7,831
Other customers .....	44	30,019	28,035	1,984	40,218	100,285
Complete aircraft and parts .....	(NA)	32,660	<sup>1</sup> 32,660	( <sup>1</sup> )	43,303	112,501
Military .....	(NA)	19,806	19,806	(NA)	20,127	40,206
U.S. Government .....	18	15,210	15,210	(NA)	16,958	22,045
Other governments .....	12	4,596	4,596	(NA)	3,169	18,161
Nonmilitary .....	(NA)	12,854	<sup>1</sup> 12,854	( <sup>1</sup> )	23,176	72,295
Aircraft engines and parts .....	(NA)	10,858	10,295	563	11,250	17,428
Military .....	(NA)	3,546	3,546	(NA)	3,525	4,418
Nonmilitary .....	(NA)	7,312	6,749	563	7,725	13,010
Missile systems and parts, excluding propulsion units .....	(NA)	2,785	<sup>1</sup> 2,785	( <sup>1</sup> )	5,294	5,823
Military .....	(NA)	2,785	2,785	(NA)	5,294	5,823
U.S. Government .....	14	2,257	2,257	(NA)	4,256	4,640
Other governments .....	7	528	528	(NA)	1,038	1,183
Space vehicle systems and parts, excluding propulsion units .....	(NA)	9,041	<sup>1</sup> 9,041	( <sup>1</sup> )	10,594	12,888
Military .....	(NA)	4,896	4,896	(NA)	5,707	6,732
Nonmilitary .....	(NA)	4,145	<sup>1</sup> 4,145	( <sup>1</sup> )	4,887	6,156
U.S. Government .....	11	2,115	2,115	(NA)	2,397	1,185
Other customers .....	9	2,030	<sup>1</sup> 2,030	( <sup>1</sup> )	2,490	4,971
Engines and/or propulsion units for missile systems and space vehicles, including parts <sup>2</sup> ..	(NA)	1,879	1,851	28	2,518	6,035
Military .....	(NA)	484	484	(NA)	1,123	1,390
Nonmilitary .....	(NA)	1,395	1,367	28	1,395	4,645
Other aircraft, space vehicle, and missile activities <sup>3</sup> .....	(NA)	11,400	10,485	915	9,241	16,607
Military .....	(NA)	7,354	7,354	(NA)	6,061	10,205
Nonmilitary .....	(NA)	4,046	3,131	915	3,180	6,402
Research and development (under contract) .....	(NA)	6,919	6,819	100	7,157	7,035
Military .....	(NA)	5,570	5,570	(NA)	5,920	5,394
U.S. Government .....	25	5,370	5,370	(NA)	5,750	5,236
Other governments .....	8	200	200	(NA)	170	158
Nonmilitary .....	(NA)	1,349	1,249	100	1,237	1,641
U.S. Government .....	13	1,086	1,086	(NA)	964	1,500
Other customers .....	9	263	163	100	273	141
All other products and services .....	(NA)	13,164	12,786	378	14,939	14,244
Military .....	(NA)	8,827	8,827	(NA)	10,255	10,277
U.S. Government .....	25	8,328	8,328	(NA)	9,185	9,065
Other governments .....	15	499	499	(NA)	1,070	1,212
Nonmilitary .....	(NA)	4,337	3,959	378	4,684	3,967
U.S. Government .....	10	784	784	(NA)	1,090	396
Other customers .....	21	3,553	3,175	378	3,594	3,571

NA Not available. <sup>r</sup>Revised.<sup>1</sup>"Net new orders under subcontract" are included with "Prime contract net new orders" to avoid disclosing data for individual companies.<sup>2</sup>Data for "Engines and/or propulsion units for space vehicles, including parts," are included with data for "Engines and/or units for missile systems, including parts."<sup>3</sup>Data for "Other missile activities" are included with data for "Other aircraft and space vehicles."

Note: Net new orders represent new orders received during the year, less terminations during the year. In some cases current backlog will not equal backlog for previous period, plus current net new orders, minus current shipments. This is primarily due to respondents changing their accounting procedures from one year to the next. Data for these respondents were not changed to force a balance. Significant imbalances due to reporting errors were investigated and corrected. Detail items may not add to total because of independent rounding.

**HISTORICAL NOTE**

Data on the development and production of aerospace products have been collected by the Bureau of the Census since 1948. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959), available at your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

**FUNDING**

This survey is funded by the Aerospace Industries Association of America, Incorporated.

**CONTACT FOR DATA USERS**

For additional information about these data, contact Rick Keach, 301-457-4800.

## CIVIL AIRCRAFT AND ENGINES (M37G)

### INTRODUCTION

These data cover the manufacture of complete civilian aircraft and aircraft engines in the United States. Parts sold separately are excluded.

### SUMMARY OF FINDINGS

In 1995, the value of complete civil aircraft shipments decreased by 7.65 percent to \$19,084.3 million, from the 1994 level of \$20,665.6 million. Shipments of complete civil aircraft engines increased by 8.45 percent to \$4,331.8 million, from the 1994 level of \$3,994.2 million.

### EXPLANATION OF TERMS

**Shipments.** Represents physical shipments from domestic establishments. All products sold, transferred to other plants of the same company, or shipped on consignment are included whether for domestic use or export. Products bought and resold without further manufacture are excluded.

**Aircraft.** Includes lighter-than-air aircraft (balloons and airships), as well as heavier-than-air aircraft, however propelled, but does not include spacecraft.

**Military.** Refers to new aircraft and aircraft engines built for military applications, whether for tactical, strategic, or support functions. All aircraft and aircraft engines built for nonmilitary applications are considered as nonmilitary, or civil, and are reported in this survey.

**Civil.** This term refers to all aircraft and aircraft engines not built for military applications. All civil (including general aviation and commercial type) aircraft, regardless of end use, are included.

**Fixed-wing (powered) aircraft.** Aircraft having wings fixed to the airplane fuselage, which are outspread in flight and powered by engines.

**Rotary lift aircraft.** Any heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors (helicopters, auto-giros, etc.).

**Turbofan.** A turbojet engine whose thrust has been increased by the addition of a low pressure compressor (fan). The turbofan engine can have an oversized low-pressure compressor at the front with part of the flow bypassing the rest of the engine (front fan or forwardfan) or it can have a separate fan driven by a turbine stage (aft-fan).

**Turbojet.** Jet engines incorporating a turbine-driven air compressor to take in and compress the air for the combustion (or the heated air) being used both to rotate the turbine and to create a thrust-producing jet.

**Turboprop.** Engines in which the main propulsive force is supplied by a gas turbine-driven conventional propeller. Additional propulsive force may be supplied from the discharge turbine exhaust gas.

Table 5. Quantity and Value of Shipments of Complete Civil Aircraft: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Product code	Product description	Number of companies	1995		1994	
			Quantity	Value	Quantity	Value
37215 00	Complete civil aircraft.....	26	4,461	19,084,250	3,852	20,665,569
	Civil aircraft (fixed wing, powered).....	14	1,517	18,894,603	1,424	20,513,431
37215 04	Unladen weight not exceeding 2,000 kg (4,409 lb) ..	11	936	705,965	822	582,174
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb) but not exceeding 15,000 kg (33,069 lb).....	4	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>	<sup>(1)</sup>
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb) ..	3	<sup>1</sup> 581	<sup>1</sup> 18,188,638	<sup>1</sup> 602	<sup>1</sup> 19,931,257
	Helicopters (rotary wing) .....	4	264	159,680	351	130,220
37215 32	Unladen weight not exceeding 2,000 kg (4,409 lb) ..	4	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>	<sup>(2)</sup>
37215 34	Unladen weight exceeding 2,000 kg (4,409 lb).....	1	<sup>2</sup> 264	<sup>2</sup> 159,680	<sup>2</sup> 351	<sup>2</sup> 130,220
37215 30	Other civil aircraft (nonpowered) and kits. ....	9	2,680	29,967	2,077	21,918
37242 00	Complete civil aircraft engines .....	12	11,255	4,331,776	10,971	3,994,195
37242 01	Spark-ignition reciprocating or rotary internal combustion .....	6	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
	Turbojet and turbofan:					
37242 03	Of a thrust not exceeding 25 kN (5,620 lb) .....	2	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
37242 05	Of a thrust exceeding 25 kN (5,620 lb) .....	6	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
	Turboshaft (turbo propeller):					
37242 07	Of a power not exceeding 1,100 kW (820 hp) ...	3	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>
37242 09	Of a power exceeding 1,100 kW (820 hp).....	4	<sup>3</sup> 11,255	<sup>3</sup> 4,331,776	<sup>3</sup> 10,971	<sup>3</sup> 3,994,195

kN Kilonewtons. kW Kilowatts.

<sup>1</sup>Product code 37215 05 is combined with 37215 07 to avoid disclosing data for individual companies.<sup>2</sup>Product code 37215 32 is combined with 37215 34 to avoid disclosing data for individual companies.<sup>3</sup>Product codes 37242 01, 37242 03, 37242 05, and 37242 07 are combined with product code 37242 09 to avoid disclosing data for individual companies.

Table 6. Quantity and Value of Shipments of Complete Civil Aircraft by Month: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Year and month	Civil aircraft						Helicopters (rotary wing)		Other civil aircraft (nonpowered)	
	Unladen weight less than 2,000 kg		Unladen weight between 2,000 and 15,000 kg		Unladen weight greater than 15,000 kg					
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>1995</b>										
January .....	50	14,102	( <sup>1</sup> )	( <sup>1</sup> )	<sup>139</sup>	<sup>11,044,081</sup>	28	11,855	<sup>186</sup>	<sup>1,938</sup>
February .....	<sup>61</sup>	<sup>39,997</sup>	( <sup>1</sup> )	( <sup>1</sup> )	<sup>142</sup>	<sup>11,612,105</sup>	20	11,783	203	<sup>2,472</sup>
March .....	<sup>76</sup>	47,980	( <sup>1</sup> )	( <sup>1</sup> )	<sup>161</sup>	<sup>2,134,864</sup>	<sup>26</sup>	<sup>18,792</sup>	209	2,569
April .....	<sup>64</sup>	<sup>34,291</sup>	( <sup>1</sup> )	( <sup>1</sup> )	<sup>143</sup>	<sup>11,882,207</sup>	<sup>24</sup>	<sup>12,184</sup>	203	<sup>2,468</sup>
May .....	<sup>81</sup>	65,237	( <sup>1</sup> )	( <sup>1</sup> )	<sup>133</sup>	<sup>1,306,461</sup>	<sup>22</sup>	<sup>11,214</sup>	209	<sup>2,747</sup>
June .....	<sup>92</sup>	93,291	( <sup>1</sup> )	( <sup>1</sup> )	<sup>169</sup>	<sup>2,300,688</sup>	<sup>27</sup>	18,778	<sup>238</sup>	<sup>2,456</sup>
July .....	<sup>60</sup>	23,222	( <sup>1</sup> )	( <sup>1</sup> )	<sup>130</sup>	<sup>1,017,287</sup>	<sup>26</sup>	<sup>12,808</sup>	<sup>242</sup>	<sup>2,703</sup>
August .....	<sup>81</sup>	53,763	( <sup>1</sup> )	( <sup>1</sup> )	<sup>140</sup>	<sup>1,246,786</sup>	<sup>20</sup>	<sup>11,621</sup>	<sup>241</sup>	<sup>2,681</sup>
September .....	<sup>96</sup>	100,771	( <sup>1</sup> )	( <sup>1</sup> )	<sup>174</sup>	<sup>1,505,703</sup>	<sup>22</sup>	<sup>12,172</sup>	<sup>236</sup>	<sup>2,444</sup>
October .....	<sup>73</sup>	52,438	( <sup>1</sup> )	( <sup>1</sup> )	<sup>135</sup>	<sup>1,850,770</sup>	<sup>15</sup>	<sup>16,749</sup>	<sup>239</sup>	<sup>2,586</sup>
November .....	<sup>81</sup>	61,264	( <sup>1</sup> )	( <sup>1</sup> )	<sup>137</sup>	<sup>1,554,047</sup>	<sup>16</sup>	<sup>10,638</sup>	<sup>237</sup>	<sup>2,440</sup>
December .....	<sup>121</sup>	119,609	( <sup>1</sup> )	( <sup>1</sup> )	<sup>178</sup>	<sup>1,733,639</sup>	<sup>18</sup>	<sup>11,086</sup>	<sup>237</sup>	<sup>2,463</sup>
<b>1994</b>										
January .....	46	18,330	( <sup>1</sup> )	( <sup>1</sup> )	<sup>134</sup>	<sup>1,310,386</sup>	26	6,833	172	1,855
February .....	56	29,833	( <sup>1</sup> )	( <sup>1</sup> )	<sup>137</sup>	<sup>1,302,714</sup>	26	6,760	169	1,810
March .....	82	68,229	( <sup>1</sup> )	( <sup>1</sup> )	<sup>170</sup>	<sup>3,120,309</sup>	36	9,199	170	1,779
April .....	77	34,511	( <sup>1</sup> )	( <sup>1</sup> )	<sup>135</sup>	<sup>1,351,346</sup>	30	7,713	164	1,729
May .....	73	60,644	( <sup>1</sup> )	( <sup>1</sup> )	<sup>140</sup>	<sup>1,159,985</sup>	31	12,691	168	1,790
June .....	77	52,515	( <sup>1</sup> )	( <sup>1</sup> )	<sup>152</sup>	<sup>2,366,173</sup>	30	13,484	165	1,772
July .....	50	20,018	( <sup>1</sup> )	( <sup>1</sup> )	<sup>135</sup>	<sup>1,039,496</sup>	20	7,873	165	1,670
August .....	63	30,563	( <sup>1</sup> )	( <sup>1</sup> )	<sup>142</sup>	<sup>1,659,475</sup>	28	12,553	187	2,058
September .....	89	97,014	( <sup>1</sup> )	( <sup>1</sup> )	<sup>176</sup>	<sup>2,018,481</sup>	30	12,772	185	1,815
October .....	57	28,884	( <sup>1</sup> )	( <sup>1</sup> )	<sup>138</sup>	<sup>1,974,944</sup>	27	12,839	177	1,891
November .....	65	48,398	( <sup>1</sup> )	( <sup>1</sup> )	<sup>143</sup>	<sup>1,542,420</sup>	34	13,638	182	1,915
December .....	87	93,235	( <sup>1</sup> )	( <sup>1</sup> )	<sup>100</sup>	<sup>2,085,528</sup>	33	13,865	173	1,834

<sup>1</sup>Revised by 5 percent or more from previously published data.<sup>1</sup>"Unladen weight between 2,000 and 15,000 kg" and "Unladen weight greater than 15,000 kg" are combined to avoid disclosing data for individual companies.

Table 7. Quantity and Value of Shipments of Complete Civil Aircraft Engines: 1995 and 1994

[Quantity in number of units. Value in thousands of dollars]

Year and month	Complete civil aircraft engines <sup>1</sup>	
	Quantity	Value
<b>1995</b>		
January . . . . .	'1,022	'350,172
February . . . . .	'915	'359,277
March . . . . .	1,032	'392,235
April . . . . .	'868	'343,699
May . . . . .	'892	'323,378
June . . . . .	'997	'386,601
July . . . . .	'870	'271,693
August . . . . .	'1,037	'332,360
September . . . . .	'905	'434,348
October . . . . .	'962	'373,223
November . . . . .	'914	'327,097
December . . . . .	'841	'437,693
<b>1994</b>		
January . . . . .	707	279,765
February . . . . .	703	253,316
March . . . . .	804	295,037
April . . . . .	851	335,318
May . . . . .	795	271,265
June . . . . .	946	489,195
July . . . . .	871	265,760
August . . . . .	966	277,582
September . . . . .	1,088	361,389
October . . . . .	1,141	400,038
November . . . . .	1,084	361,929
December . . . . .	1,015	403,601

<sup>1</sup>Revised by 5 percent or more from previously published data.

<sup>1</sup>"Spark-ignition reciprocating or rotary internal combustion," "Turbojet and turbofan," and "Turbo propellers" are combined to avoid disclosing data for individual companies.



Table 8. **Shipments, Exports, and Imports, of Complete Civil Aircraft and Aircraft Engines: 1995**

[Quantity in number of units. Value in thousands of dollars]

Product code <sup>1</sup>	Product description	Manufacturers' shipments		Exports of domestic merchandise <sup>1 2</sup>		Imports for consumption <sup>1 3</sup>	
		Quantity	Value (f.o.b. plant)	Quantity	Value at port	Quantity	Value
37215 02	Civil aircraft (fixed wing, powered): Unladen weight not exceeding 2,000 kg (4,409 lb) .....	936	705,965	290	59,649	158	19,000
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb) .....	( <sup>4</sup> )	( <sup>4</sup> )	156	540,032	152	1,442,828
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb) .....	<sup>4</sup> 581	<sup>4</sup> 18,188,638	137	10,605,547	22	983,338
37215 31	Helicopters (rotary wing) .....	264	159,680	210	170,402	206	301,668
37242 00	Complete civil aircraft engines .....	11,255	4,331,776	3,595	1,684,428	4,237	1,827,165

<sup>1</sup>For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at end of this subsection.

<sup>2</sup>Source: Bureau of the Census report EM 545, *U.S. Exports*.

<sup>3</sup>Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

<sup>4</sup>Product code 37215 05 is combined with 37215 07 to avoid disclosing data for individual companies.

## HISTORICAL NOTE

Data on civilian aircraft and aircraft engines have been collected by the Bureau of the Census since 1946. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at

your local Federal Depository Library. Historical data are also available on microfiche; contact Customer Services, 301-457-4100.

## CONTACT FOR DATA USERS

For additional information about these data, contact Richard Keach, 301-457-4800.

## Appendix A. Survey Scope and Methodology

Survey	Publica- tion period <sup>1</sup>	Reporting require- ment (V/M) <sup>2</sup>	Title	Survey panel (number)	Received coverage rate <sup>3</sup> / range <sup>4</sup>	Active response rate <sup>5</sup> / range <sup>4</sup>	Data collected and/or published <sup>6</sup>
M20A	M	V	Flour Milling Products .....	225	4	8	P, I
MA20D	A	V	Confectionery .....	488	7	2	S
M20J	M	M	Fats and Oils: Oilseed Crushings .....	151	9	8	P, I, C
M20K	M	M	Fats and Oils: Production, Consumption, and Stocks .....	1155	7	7	P, I, C
MQ22D	Q	V	Consumption on the Woolen System and Worsted Combing ..	154	5	5	C, P
MA22F	A	M	Yarn Production .....	627	8	6	P
MA22K	A	M	Knit Fabrics Production .....	598	7	3	P, M
M22P	M	M	Consumption on the Cotton System and Stocks .....	790	8	7	C, I, M, SH
MA22Q	A	M	Carpet and Rugs .....	208	9	5	S
MQ22T	Q	M	Broadwoven Fabrics (Gray) .....	365	8	7	P, M, LH
MQ23A	Q	M	Apparel .....	1100	5	7	P, SV
MA23D	A	M	Gloves and Mittens .....	214	8	4	S
MQ23X	Q	M	Bed and Bath Furnishings .....	229	8	5	S, P, I, UO
MA31A	A	M	Footwear .....	345	9	6	S, P
MQ31A	Q	V	Footwear .....	375	4	5	S, P
MA24T	A	M	Lumber Production and Mill Stocks .....	2000	5	6	P, I
MA32C	A	M	Refractories .....	200	7	2	S
MQ32D	Q	V	Clay Construction Products .....	220	5	2	S, P
MQ34E	Q	V	Plumbing Fixtures .....	115	0	2	S, I
MA28A	A	M	Inorganic Chemicals .....	950	8	7	S, P, PC
MQ28A	Q	V	Inorganic Chemicals .....	400	6	7	P, I
MA28B	A	M	Inorganic Fertilizer Materials and Related Products .....	234	8	6	S, P, PC, I
MQ28B	Q	V	Fertilizer Materials .....	208	6	7	P, QS, I
MA28C	A	M	Industrial Gases .....	838	8	5	S, P
MQ28C	Q	V	Industrial Gases .....	585	6	4	P
MA28F	A	M	Paint, Varnish, and Lacquer .....	975	8	4	S
MQ28F	Q	V	Paint, Varnish, and Lacquer .....	210	5	4	S
MA28G	A	M	Pharmaceutical Preparations, Except Biologicals .....	618	8	5	SV
MQ32A	Q	V	Flat Glass .....	6	6	5	PC, I, S, P
MA32E	A	M	Consumer, Scientific, Technical, and Industrial Glassware ....	253	8	4	S
M32G	M	V	Glass Containers .....	14	8	0	SQ, P, I
MA33A	A	M	Iron and Steel Castings .....	581	9	8	S
MA33B	A	M	Steel Mill Products .....	658	7	6	C, S, R
M33D	M	V	Aluminum Ingot and Mill Products .....	267	0	2	SQ, R, I
MA33E	A	M	Nonferrous Castings .....	795	6	7	S
M33J	M	V	Inventories of Steel Producing Mills .....	10	0	9	SQ, I
MA33L	A	M	Insulated Wire and Cable .....	269	9	9	S
MA35R	A	M	Computers and Office and Accounting Machines .....	1196	3	8	S
MA36A	A	M	Switchgear, Switchboard Apparatus, Relays, and Industrial Control .....	1036	9	7	S
MQ36C	Q	V	Fluorescent Lamp Ballasts .....	14	9	1	S
MA36K	A	M	Wiring Devices and Supplies .....	571	9	7	S
MA36L	A	V	Electric Lighting Fixtures .....	485	7	0	S
MA36P	A	M	Communication Equipment .....	1530	7	4	S
MA36Q	A	M	Semiconductors, Printed Circuit Boards, and Related Equipment .....	3764	9	9	S
MA38B	A	M	Selected Instruments and Related Products .....	2967	6	9	S
MA38R	A	M	Electromedical and Irradiation Equipment (Including X-Ray) ..	364	8	5	S
MA36E	A	M	Electric Housewares and Fans .....	147	7	9	S
MA36F	A	M	Major Household Appliances .....	157	9	9	S
MA36M	A	M	Consumer Electronics .....	232	8	4	S
MA34K	A	V	Steel Shipping Drums and Pails .....	65	9	4	S

See footnotes at end of table.

Survey	Publica- tion period <sup>1</sup>	Reporting require- ment (V/M) <sup>2</sup>	Title	Survey panel (number)	Received coverage rate <sup>3</sup> / range <sup>4</sup>	Active response rate <sup>5</sup> / range <sup>4</sup>	Data collected and/or published <sup>6</sup>
MA35J	A	M	Selected Industrial Air Pollution Control Equipment . . . . .	156	9	4	NOQ, NOV, S, UO, UOQ
MA35M	A	M	Air-Conditioning and Refrigeration Equipment . . . . .	369	9	8	S
MA35N	A	M	Fluid Power Products, Including Aerospace . . . . .	502	7	5	S
MA35P	A	M	Pumps and Compressors . . . . .	514	7	5	S
MA35Q	A	M	Antifriction Bearings . . . . .	155	9	9	S
MA35U	A	V	Vending Machines (Coin-Operated) . . . . .	58	9	6	S
MA36H	A	M	Motors and Generators . . . . .	416	9	7	S
MA35A	A	M	Farm Machinery and Lawn and Garden Equipment . . . . .	928	8	5	S
MA35D	A	M	Construction Machinery . . . . .	478	8	7	S
MA35F	A	M	Mining Machinery and Mineral Processing Equipment . . . . .	180	8	7	S
MA35L	A	M	Internal Combustion Engines . . . . .	57	9	8	PC, IPT, S, CC, P
MQ35W	Q	V	Metalworking Machinery . . . . .	465	6	3	S, UO
M37L	M	V	Truck Trailers . . . . .	144	9	7	S
MA37D	A	M	Aerospace Orders . . . . .	79	9	8	NOV, R, UO
M37G	M	V	Civil Aircraft and Engines . . . . .	31	8	5	S

<sup>1</sup>Publication period: A = Annual; M = Monthly (data reflects twelfth month); Q = Quarterly (data reflects fourth quarter)

<sup>2</sup>Reporting requirement will be either voluntary or mandatory, V or M, respectively.

<sup>3</sup>Received coverage rate is ratio of value of shipments of establishments responding to survey to total value of shipments of that survey. For example, the 80 to 84 percent response in the M37G survey accounts for between 95 and 98 percent of total value of shipments of products collected in that survey.

<sup>4</sup>Coverage and response rate ranges:

Response rate	Range (percent)
9	99+
8	95 to 98
7	90 to 94
6	85 to 89
5	80 to 84
4	75 to 79
3	70 to 74
2	65 to 69
1	60 to 64
0	59 or less

<sup>5</sup>Active response rate is ratio of number of establishments responding to survey to total active establishments of that survey. For monthly and quarterly surveys this is calculated on monthly or quarterly portion rather than mandatory annual counterpart. Both response rate and coverage rate would be higher if the annual portion were included.

<sup>6</sup>Data collected and/or published:

Code	Description	Code	Description
C	Consumption	SV	Shipments (value)
I	Inventory (stock)	UO	Unfilled (backlog) orders (value)
NOQ	New orders (quantity)	UOQ	Unfilled (backlog) orders (quantity)
NOV	New orders (value)	M	Machinery in place
P	Production (quantity)	EX	Exports
PC	Produced and consumed (quantity)	IPT	Interplant transfers
PV	Production (value)	T	Total (shipments and exports)
R	Receipts (value)	CC	Total (commercial shipments)
S	Shipments (quantity and value)	LH	Loom hours
SQ	Shipments (quantity)	SH	Spindle hours