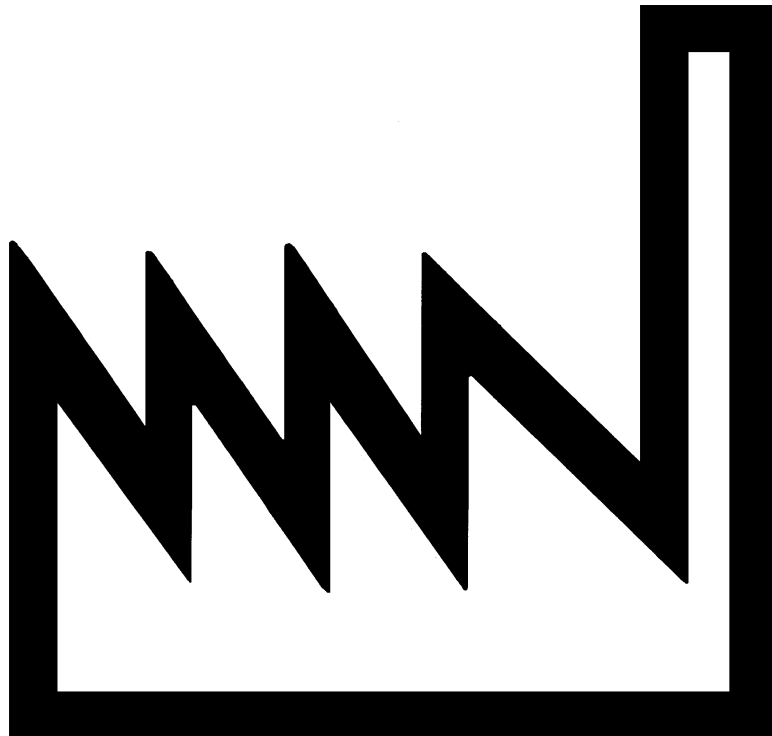


MP/94

Current Industrial Reports

Manufacturing Profiles: 1994



U.S. Department of Commerce
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Manufacturing Profiles: 1994



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Introduction

GENERAL

This publication presents all the data compiled in the Current Industrial Reports (CIR) program for data year 1994. These data were originally released electronically from March through December 1995. This publication replaces all of the individual reports issued in the CIR series for 1994.

Current data are released electronically on Internet for all individual surveys as they become available. To access the Census Bureau's homepage through Internet, use the following location: <http://www.census.gov>. The individual reports can be accessed by choosing "current economic indicators"; then follow the menu prompts. 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

1.1 FLOUR MILLING PRODUCTS

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 by-products 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: 1984 to 1994

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
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
1984	299,832	675,271	5,426	135.1	36.2

Table 2. Commercial Wheat Milling Production, by Month: 1994 and 1993

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 ¹ (1,000 cwt. sacks)	Wheat flour mill stocks ¹ (1,000 cwt. sacks)	Average pounds per cwt. sack of flour	
						Wheat	Millfeed
1994							
Total	392,519	884,707	7,185,908	(X)	(X)	135.2	36.6
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	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
1993							
Total	387,419	871,408	6,963,400	(X)	(X)	135.0	35.9
December	33,838	76,347	617,115	1,370	5,611	135.4	36.5
November	34,002	76,987	618,526	(NA)	(NA)	135.9	36.4
October	33,525	75,790	603,199	(NA)	(NA)	135.6	36.0
September	32,873	74,142	594,086	1,360	5,882	135.3	36.1
August	33,333	75,231	606,634	(NA)	(NA)	135.4	36.4
July	30,670	69,217	558,509	(NA)	(NA)	135.4	36.4
June	30,286	67,872	543,755	1,348	6,197	134.5	35.9
May	30,954	69,596	551,593	(NA)	(NA)	134.9	35.6
April	31,999	71,964	570,943	(NA)	(NA)	134.9	35.7
March	34,099	76,240	607,238	1,332	4,863	134.2	35.6
February	31,268	69,956	555,033	(NA)	(NA)	134.2	35.5
January	30,572	68,066	536,769	(NA)	(NA)	133.6	35.1

¹Collected quarterly.NA Not available. [†]Revised by 5 percent or more from previously published figures. X Not applicable.

Table 3. Commercial Rye Milling Production, by Month: 1994 and 1993

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Daily (24-hour) capacity ¹ (1,000 cwt. sacks)	Stocks of rye flour ¹ (1,000 cwt. sacks)	Average pounds ground per cwt. sack of flour	
						Rye	Millfeed
1994							
Total	1,650	3,583	'16,492	(X)	(X)	121.6	20.0
December	(D)	(D)	'1,398	'11	(D)	(D)	(D)
November	(D)	(D)	'1,384	(NA)	(NA)	(D)	(D)
October	(D)	(D)	'1,458	(NA)	(NA)	(D)	(D)
September	(D)	(D)	'1,462	'12	(D)	(D)	(D)
August	'132	293	'1,451	(NA)	(NA)	124.3	22.0
July	'127	'271	'1,232	(NA)	(NA)	119.5	19.4
June	'112	'243	'1,016	'12	(D)	121.5	18.1
May	'133	290	'1,306	(NA)	(NA)	122.1	19.6
April	'136	292	'1,127	(NA)	(NA)	120.2	16.6
March	'150	336	'1,717	'12	27	125.4	22.9
February	'141	'313	'1,497	(NA)	(NA)	124.3	21.2
January	'153	327	'1,444	(NA)	(NA)	119.7	18.9
1993							
Total	1,527	3,325	16,543	(X)	(X)	121.9	21.7
December	127	280	1,394	11	20	123.5	22.0
November	140	311	1,549	(NA)	(NA)	124.4	22.1
October	147	328	1,740	(NA)	(NA)	125.0	23.7
September	121	274	1,366	11	23	126.8	22.6
August	126	268	1,323	(NA)	(NA)	119.1	21.0
July	122	261	1,207	(NA)	(NA)	119.8	19.8
June	122	258	1,311	11	22	118.4	21.5
May	125	267	1,115	(NA)	(NA)	119.6	17.8
April	121	259	1,236	(NA)	(NA)	119.9	20.4
March	131	287	1,421	11	20	122.7	21.7
February	122	267	1,458	(NA)	(NA)	122.6	23.9
January	123	265	1,423	(NA)	(NA)	120.7	23.1

¹Collected quarterly.D Data withheld to avoid disclosing figures for individual companies.
published figures. X Not applicable.

NA Not available.

'Revised by 5 percent or more from previously

Table 4. Summary of Commercial Wheat Milling Production, by Geographic Area: 1994 and 1993

Geographic area	1994			1993		
	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 ¹ (cwt. sacks)		Wheat ground for flour (1,000 bushels)	Daily (24-hour) capacity ¹ (cwt. sacks)
United States	392,519	884,707	1,379,776	387,419	871,408	1,369,670
California and Hawaii	28,145	62,509	97,780	26,113	57,833	96,927
Florida	8,273	18,807	27,300	8,281	18,483	27,300
Georgia	(D)	(D)	(D)	(D)	(D)	(D)
Illinois	20,308	46,699	67,218	18,285	42,042	67,138
Indiana	(D)	(D)	(D)	(D)	(D)	(D)
Iowa	(D)	(D)	(D)	6,868	15,287	22,660
Kansas	42,698	93,955	144,160	40,654	91,498	137,600
Michigan	7,831	17,926	31,700	8,249	18,790	31,300
Minnesota	36,693	80,991	130,830	38,722	84,267	130,650
Missouri	27,589	62,732	94,100	26,380	58,726	94,100
New York	31,082	70,706	105,888	34,112	76,596	115,252
North Carolina	11,037	24,400	¹ 36,720	11,057	24,845	35,917
Ohio	23,999	54,144	84,368	24,794	56,162	85,700
Oklahoma	9,589	22,360	30,500	9,375	21,594	30,500
Oregon and Washington	13,712	30,538	50,540	13,514	30,663	50,740
Pennsylvania	¹ 14,371	¹ 33,139	56,112	12,578	29,342	54,962
Tennessee	15,310	35,212	48,073	15,533	35,604	48,078
Texas	14,920	34,130	49,760	15,017	34,156	47,610
All other States	64,460	145,272	249,352	63,118	140,441	244,428

¹Capacity as reported for December of each year.

D Data withheld to avoid disclosing figures for individual companies.

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

Table 5. Quantity of Wheat Flour Produced, by Geographic Area: 1994 and 1993

[1,000 cwt. sacks]

Geographic area	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1994													
United States	392,519	30,886	30,154	35,879	32,295	32,236	31,145	30,516	34,915	34,159	34,963	33,697	31,674
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
1993													
United States	387,419	30,572	31,268	34,099	31,999	30,954	30,286	30,670	33,333	32,873	33,525	34,002	33,838
California and Hawaii ...	26,113	1,959	1,991	2,208	2,131	2,023	2,011	2,068	2,301	2,320	2,412	2,445	2,244
Florida	8,281	623	747	839	677	610	639	665	686	622	630	763	780
Georgia	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois	18,285	1,567	1,722	1,811	1,740	1,588	1,597	1,245	1,010	1,196	1,407	1,698	1,704
Indiana	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Iowa	6,868	544	547	585	547	548	542	553	605	603	591	607	596
Kansas	40,654	3,329	3,176	3,625	3,354	3,260	2,911	3,254	3,556	3,378	3,645	3,585	3,581
Michigan	8,249	596	585	689	681	658	690	690	789	791	737	729	614
Minnesota	38,722	3,096	3,334	3,525	3,276	3,168	2,878	3,007	3,415	3,140	3,294	3,241	3,348
Missouri	26,380	1,956	2,058	2,316	2,086	2,095	2,113	1,920	2,147	2,297	2,491	2,481	2,420
New York	34,112	2,568	2,770	2,963	2,794	2,783	2,821	2,880	2,999	2,945	2,829	2,902	2,858
North Carolina	11,057	854	838	961	904	914	900	904	991	946	951	952	942
Ohio	24,794	1,931	1,889	2,074	2,055	1,850	1,900	1,953	2,301	2,275	2,311	2,158	2,097
Oklahoma	9,375	728	770	815	767	777	723	751	812	799	829	795	809
Oregon and Washington.	13,514	1,079	1,028	1,161	1,113	1,093	1,132	1,112	1,196	1,141	1,140	1,167	1,152
Pennsylvania	12,578	885	1,046	1,053	992	1,001	978	980	1,205	1,117	1,111	1,127	1,083
Tennessee	15,533	1,196	1,150	1,400	1,350	1,241	1,244	1,231	1,394	1,350	1,334	1,332	1,311
Texas	15,017	1,438	1,257	1,344	1,230	1,168	1,104	1,188	1,211	1,265	1,282	1,276	1,254
All other States	63,118	5,105	5,181	5,517	5,138	5,005	4,972	5,107	5,389	5,372	5,216	5,413	5,703

D Data withheld to avoid disclosing figures for individual companies.

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

Note: Detail may not add to total due to independent rounding.

Table 6. Quantity of Wheat Ground for Flour, by Geographic Area: 1994 and 1993

[1,000 cwt. sacks]

Geographic area	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1994													
United States	884,707	70,047	68,327	81,096	73,002	73,035	70,555	68,885	78,653	76,296	77,850	75,860	71,101
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
1993													
United States	871,408	68,066	69,956	76,240	71,964	69,596	67,872	69,217	75,231	74,142	75,790	76,987	76,347
California and Hawaii ...	57,833	4,363	4,378	4,868	4,717	4,484	4,422	4,597	5,152	5,170	5,358	5,387	4,937
Florida	18,483	1,391	1,702	1,859	1,502	1,371	1,431	1,474	1,527	1,335	1,412	1,724	1,755
Georgia	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois	42,042	3,562	3,914	4,150	3,977	3,652	3,682	2,920	2,352	2,755	3,246	3,942	3,890
Indiana	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Iowa	15,287	1,196	1,200	1,294	1,219	1,213	1,204	1,234	1,353	1,335	1,327	1,364	1,348
Kansas	91,498	7,449	7,107	8,089	7,485	7,308	6,570	7,478	8,019	7,715	8,190	8,074	8,014
Michigan	18,790	1,317	1,332	1,615	1,537	1,491	1,520	1,566	1,809	1,816	1,690	1,678	1,419
Minnesota	84,267	6,329	7,136	7,621	7,191	6,960	6,243	6,573	7,446	6,878	7,291	7,166	7,433
Missouri	58,726	4,334	4,540	5,083	4,669	4,681	4,716	4,282	4,734	5,170	5,536	5,594	5,387
New York	76,596	5,701	6,172	6,560	6,314	6,239	6,311	6,365	6,828	6,622	6,391	6,595	6,498
North Carolina	24,845	1,894	1,879	2,145	2,019	2,073	2,023	2,044	2,248	2,138	2,142	2,140	2,100
Ohio	56,162	4,391	4,289	4,696	4,694	4,120	4,337	4,467	5,209	5,129	5,205	4,876	4,749
Oklahoma	21,594	1,671	1,757	1,846	1,751	1,776	1,661	1,742	1,863	1,856	1,935	1,856	1,880
Oregon and Washington ..	30,663	2,477	2,298	2,602	2,547	2,450	2,534	2,591	2,688	2,602	2,617	2,676	2,581
Pennsylvania	29,342	2,059	2,493	2,418	2,292	2,339	2,287	2,293	2,799	2,602	2,603	2,633	2,524
Tennessee	35,604	2,717	2,628	3,198	3,072	2,832	2,861	2,840	3,216	3,095	3,072	3,051	3,022
Texas	34,156	3,136	2,837	3,041	2,787	2,660	2,518	2,723	2,798	2,930	2,942	2,926	2,858
All other States	140,441	11,405	11,466	12,260	11,406	11,130	11,046	11,261	12,013	11,863	11,703	12,118	12,770

D Data withheld to avoid disclosing figures for individual companies.

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

Table 7. **Production and Mill Stocks of Wheat Flour, by Quarter: 1994 and 1993**

[1,000 cwt. sacks]

Quarter	Production	Mill stocks
1994		
First quarter	96,919	5,904
Second quarter	95,676	5,834
Third quarter	99,590	6,020
Fourth quarter	100,334	7,060
1993		
First quarter	95,939	4,863
Second quarter	93,239	6,197
Third quarter	96,876	5,882
Fourth quarter	101,365	5,611

Table 8. **Durum Wheat Products by Month: 1994 and 1993**

Product description	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1994													
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.....	-	-	-	-	-	-	-	-	-	-	-	-	-
1993													
Durum wheat ground.....	70,575	5,771	6,100	6,302	5,612	5,271	5,398	5,141	5,879	5,901	6,477	6,197	6,526
Straight semolina	32,488	2,688	2,866	2,903	2,561	2,466	2,513	2,360	2,693	2,729	2,978	2,777	2,954
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 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 John Miller, 301-457-4626.

1.2 CONFECTIONERY

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 8 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 9 shows the quantity and value of shipments of confectionery and nonconfectionery by the type of product. Table 10 shows the quantity and value of the materials that were consumed in the manufacturing process. Apparent consumption figures are derived in Table 11 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 24.3 million pounds in 1994, compared with 23.6 million pounds in 1993. This represents an increase of 3 percent. The total per capita consumption of these same products amounted to \$46.8 million in 1994, compared with \$46.4 million in 1993, an increase of 0.9 percent. The total per capita consumption of confectionery products, excluding chewing gum, bubble gum, and chewing gum base, amounted to 22.3 million pounds and \$41.5 million in 1994, compared with 21.9 million pounds and \$41.5 million in 1993.

Total quantity of shipments of confectionery products, excluding chewing gum, bubble gum, and chewing gum base, for 1994, amounted to 5,694.8 million pounds, compared with 5,571.7 million pounds in 1993, an increase of 2.2 percent. Total value of shipments for these same products increased 0.8 percent in 1994 to \$10,752.0 million, from \$10,670.2 million in 1993. The quantity of chocolate and chocolate type confectionery products shipped decreased by less than 1 percent, while the quantity of nonchocolate type confectionery products increased by 4.8 percent. The value of chocolate and chocolate type confectionery products shipped decreased by less than 1 percent, while the value of nonchocolate confectionery products increased by 4.2 percent.

The single largest category remained chocolate enrobed or molded with candy, fruit, or nut center with a quantity shipped of 1,304.3 million pounds. The category showing

the largest pound increase was nonchocolate type soft candy, which increased 11.9 percent to 749.5 million pounds in 1994, from 669.8 million pounds in 1993.

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 which 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 pop-corn 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 product 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: 1983 to 1994

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

Year	Total				Excluding chewing gum			
	Pounds	Value	Per capita consumption ¹ (pounds)	Per capita consumption ¹ (dollars)	Pounds	Value	Per capita consumption ¹ (pounds)	Per capita consumption ¹ (dollars)
1994.....	6,198	12,123	24.3	46.8	5,695	10,752	22.3	41.5
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
1983.....	(NA)	(NA)	(NA)	(NA)	4,064	5,983	17.9	26.7

¹Production plus imports minus exports divided by population, including armed forces abroad, as of July 1, 1994.

NA Not available.

Source of population data: U.S. Bureau of the Census, U.S. Population Estimates, Series PPL-21 (July 1, 1994, population was 260,651,000).

Table 10. Quantity and Value of Shipments of Confectionery and Nonconfectionery, by Type of Product: 1994 and 1993

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

Product description	1994		1993	
	Quantity	Value	Quantity	Value
Confectionery				
Shipments	6,197,998	12,123,008	5,988,435	11,894,090
Chocolate and chocolate-type confectionery	2,859,805	6,796,740	2,862,472	6,861,817
Solid	392,486	859,189	367,313	845,266
Solid with inclusions	244,722	656,777	267,193	725,980
Enrobed or molded:				
With candy, fruit, nut, or granola center	1,304,311	3,064,136	1,334,456	3,123,045
With bakery product center	183,233	429,006	185,455	420,224
Panned	515,747	1,073,838	502,770	1,080,795
Assortments and other	219,306	713,794	205,285	666,507
Chocolate type, n.s.k.	-	-	-	-
Nonchocolate-type confectionery	2,635,965	3,587,327	2,514,540	3,443,247
Hard candy	701,464	1,124,253	712,429	1,116,994
Chewy candy, including granola bars	482,975	867,409	494,511	857,225
Soft candy	749,543	705,286	669,812	644,652
Iced/coated	10,270	23,220	11,377	22,872
Panned	450,555	587,105	424,864	563,617
Licorice and licorice-type	241,158	280,054	201,547	237,887
Nonchocolate type, n.s.k.	-	-	-	-
Chewing gum, bubble gum, and chewing gum base	(S)	1,371,018	(S)	1,223,902
Confectionery, n.s.k. ¹	198,986	367,923	194,686	365,124
Nonconfectionery				
Shipments	1,455,227	1,425,235	1,416,427	1,355,293
Chocolate products other than confectionery:				
Baking chocolate (bars or blocks)	13,603	22,963	12,564	21,456
Chocolate coatings (blocks, wafers, and liquid)	333,639	351,655	314,429	318,960
Chocolate liquor	46,090	50,052	46,087	44,595
Cocoa butter	22,988	34,432	28,309	34,099
Compound coatings (blocks, wafers, and liquid)	204,106	148,046	193,579	138,108
Chocolate chips and baking pieces	405,751	492,272	386,676	488,440
Cocoa powder, syrup/toppings, and other	429,050	325,815	434,783	309,635
Nonconfectionery chocolate, n.s.k.	-	-	-	-

¹Represents estimated data for small companies, typically those with fewer than five employees, that were not included on the mailing panel.- Represents zero. n.s.k. Not specified by kind. ^fRevised by 5 percent or more from previously published figures. S Suppressed. Due to high estimation, data did not meet publication standards of the Bureau of the Census.

Table 11. Consumption of Selected Ingredients, by the U.S. Confectionery Industry: 1994 and 1993

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

Materials	1994		1993	
	Quantity	Value	Quantity	Value
Materials consumed	(X)	3,443,324	(X)	3,275,986
Sugar (cane-beet)	2,698,406	687,285	2,736,601	705,704
Cocoa beans	536,396	344,839	497,508	302,891
Corn syrup, including HFCS and dextrose	1,595,663	196,911	1,666,415	186,677
Chocolate liquor, imported	67,776	58,285	66,382	50,150
Chocolate liquor, domestic	28,816	28,005	42,918	30,771
Cocoa powder composition coatings	33,140	16,768	33,811	17,154
Cocoa cake or powder	130,665	61,600	137,053	60,258
Cocoa butter	349,908	317,767	352,650	290,684
Chocolate coatings, milk	226,322	233,725	203,357	217,305
Chocolate coatings, other than milk	109,618	91,854	111,159	88,767
Fats and oils	236,042	101,186	233,523	101,585
Gum base	(D)	(D)	(D)	(D)
Milk and milk products	543,081	399,269	520,497	391,276
Peanuts, shelled basis	368,291	239,907	359,909	238,778
Almond kernels	51,427	119,528	62,602	115,316
Other nuts and nut meats (kernels)	23,147	52,191	20,879	60,119
Coconuts meat	22,330	15,787	23,526	17,095
Other edible materials ¹	693,119	435,014	574,447	367,868
Materials, n.s.k.	(X)	(D)	(X)	(D)

¹Includes corn starch, essential oils, eggs and egg products, fruits, jams, and other materials on which specific data were not collected.D Data withheld to avoid disclosing figures for individual companies. n.s.k. Not specified by kind. ^fRevised by 5 percent or more from previously published figures. X Not applicable.

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: 1994 and 1993

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

Product code ¹	Product description	Manufacturers' shipments		Exports of domestic merchandise ²		Percent exports to manufacturers' shipments		Imports for consumption ³		Apparent consumption ⁵		Percent imports to apparent consumption		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ⁴	Quantity	Value	Quantity	Value	
Confectionery:														
20642, 20662	Chocolate-type confectionery	1994	1,297,208	6,796,740	85,281	276,878	6.6	4.1	68,635	207,786	1,280,562	6,727,648	5.4	3.1
		1993	1,298,417	6,861,817	96,567	275,934	7.4	4.0	71,127	215,591	1,272,977	6,801,474	5.6	3.2
20643	Nonchocolate-type confectionery	1994	1,195,674	3,587,327	64,821	161,647	5.4	4.5	136,073	294,897	1,266,926	3,720,577	10.7	7.9
		1993	1,140,595	3,443,247	64,898	161,010	5.7	4.7	126,383	279,561	1,202,080	3,561,798	10.5	7.8
20648	Chewing gum, sugar, and nonsugar	1994	(S)	1,371,018	22,173	65,519	(S)	4.8	30,532	64,367	(S)	1,369,866	(S)	4.7
		1993	(S)	1,223,902	13,745	50,168	(S)	4.1	29,567	68,235	(S)	1,241,969	(S)	5.5
Nonconfectionery:														
20669 81	Cocoa butter	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
		1993	12,841	34,099	4,340	16,298	33.8	47.8	83,399	207,779	91,900	225,580	90.7	92.1
20661 11, 21	Chocolate coatings, blocks, wafers, or liquid confectionery	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
		1993	230,432	457,068	1,336	2,087	0.6	0.5	5,634	8,099	234,730	463,080	2.4	1.7
20661 14, 20669 12-13, 61	Other chocolate and cocoa products	1994	405,742	891,102	46,630	96,326	11.5	10.8	212,372	288,172	571,484	1,082,948	37.2	26.6
		1993	399,218	864,126	45,326	103,955	11.4	12.0	217,951	278,917	571,843	1,039,088	38.1	26.8

¹For 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.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM146, *U.S. Imports for Consumption*.

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

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

¹Revised by 5 percent or more from previously published figures. S Suppressed. Due to high estimation, data did not meet publication standards of the Bureau of the Census.

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.

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 John Miller, 301-457-4626.

1.3 FATS AND OILSEED CRUSHINGS, PRODUCTION, CONSUMPTION, AND STOCKS

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 1994 calendar year, soybean crushings were 39,334.5 thousand short tons. This showed an increase of 3 percent, from the 1993 figure of 38,256.8 thousand short tons. The production of crude soybean oil was 14,336.2 million pounds, and the production of refined soybean oil was 12,392.6 million pounds. This showed an increase of 4.0 percent from the 1993 figure of 13,788.8 million pounds for crude oil, and a 0.6 percent increase from the 1993 figure of 12,316.7 million pounds for refined soybean oil. The consumption of soybean oil in end products was 12,474.1 million pounds, a slight decrease from the 1993 figure of 12,495.6 million pounds.

At the same time, cottonseed crushings were 3,573.0 thousand short tons. This represented a slight decrease from the 1993 figure of 3,584.4 thousand pounds. The production of crude cottonseed oil was 1,143.6 million pounds, and the production of refined cottonseed oil was 1,018.9 million pounds in 1994. This represented a slight increase from the 1993 figure of 1,142.9 million pounds for crude cottonseed oil, and an increase of 5.5 percent from the 1993 figure of 966.0 million pounds for refined cottonseed oil.

The production of crude corn oil was 1,951.3 million pounds and the production of refined corn oil was 1,070.8 million pounds in 1994. This represented a 3.6-percent

increase from the 1993 figure of 1,882.9 million pounds for crude corn oil and a decrease of 3.2 percent from the 1993 figure of 1,106.4 million pounds for refined oil.

Also, for the calendar year 1994, the production of refined peanut oil and refined coconut oil decreased 8.0 percent and 23.8 percent, respectively, while the production of refined rapeseed oil increased 32.1 percent. At the same time, the consumption in end products of peanut oil decreased 8.6 percent, while the consumption in end products of coconut oil increased 3.5 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, plastic, 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: 1994

[Thousands of short tons]

Product description	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
Soybeans:													
Receipts at mills	38,961.0	3,380.1	3,979.2	5,599.4	3,142.1	2,562.4	2,232.2	2,683.0	3,063.6	2,534.9	3,435.1	2,871.4	3,477.6
Crushed or used	39,334.5	3,854.6	3,674.5	3,579.1	3,177.8	3,028.6	3,028.7	2,916.0	3,089.3	3,166.7	3,399.2	3,098.3	3,321.7
Stocks ¹	3,253.1	3,253.1	3,727.6	3,422.9	1,402.6	1,438.3	1,904.5	2,701.0	2,934.0	2,959.7	3,591.5	3,555.6	3,782.5
Cottonseed:													
Receipts at mills	3,971.2	556.6	1,430.5	1,371.1	357.4	130.9	13.5	- 30.9	- 23.0	5.4	28.9	35.7	95.1
Crushed or used	3,573.0	397.5	386.2	343.9	195.5	192.1	210.2	239.4	257.7	265.7	358.6	335.2	391.0
Stocks ¹	2,763.4	2,763.4	2,604.3	1,560.0	532.8	370.9	432.1	628.8	899.1	1,179.8	1,440.1	1,769.8	2,069.3
Peanuts:													
Receipts at mills	290.4	29.1	21.6	18.9	17.9	16.8	26.2	24.2	32.9	24.5	23.3	29.2	25.8
Crushed or used	294.1	29.3	23.1	15.9	22.4	20.9	27.7	19.8	36.9	24.3	26.9	22.9	24.0
Stocks ¹	8.6	8.6	8.8	10.3	7.3	11.8	15.9	17.4	13.0	17.0	16.8	20.4	14.1
Linseed:													
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 ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sunflower:													
Receipts at mills	(D)	(D)	(D)	(D)	(D)	(D)	(D)	27.1	41.3	31.0	73.4	66.6	74.5
Crushed or used	(D)	(D)	(D)	(D)	(D)	(D)	(D)	26.4	37.4	59.6	61.9	75.6	68.6
Stocks ¹	(D)	(D)	(D)	(D)	27.7	11.4	(D)	41.6	40.9	37.0	65.6	54.1	63.1
Safflower:													
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 ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Rapeseed:													
Receipts at mills	(D)	(D)	(D)	(D)	(D)	(D)	(D)	24.2	27.4	36.3	54.9	45.9	(D)
Crushed or used	(D)	(D)	(D)	(D)	(D)	(D)	(D)	47.1	54.7	44.1	51.8	37.3	(D)
Stocks ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	39.2	62.1	89.4	97.2	94.1	85.5
Other:													
Receipts at mills	-	-	-	-	-	-	-	-	-	-	-	-	-
Crushed or used	-	-	-	-	-	-	-	-	-	-	-	-	-
Stocks ¹	-	-	-	-	-	-	-	-	-	-	-	-	-

¹Calculated at end of the period.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 14. Production, Consumption, Shipments and Transfers, and Stocks of Major Crude and Refined Animal and Vegetable Fats and Oils: 1994

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
SOYBEAN OIL														
Production:														
Crude oil	Mil. of lb	14,336.2	1,403.0	1,341.5	1,327.6	1,168.0	1,103.7	1,098.9	1,070.1	1,122.7	1,155.3	1,231.3	1,121.8	1,192.3
Refined oil	do.	12,392.6	1,060.6	1,079.2	1,123.0	1,044.6	1,107.2	968.0	1,017.3	1,012.0	1,018.5	1,056.6	945.5	960.1
Cake and meal	Mil. of s. tons	29,073.3	2,822.9	2,702.3	2,622.7	2,346.4	2,244.7	2,241.7	2,177.7	2,285.4	2,347.5	2,522.7	2,303.8	2,455.5
Lecithin	do.	82.9	7.0	7.4	8.4	6.7	7.0	6.4	7.9	6.8	6.5	7.1	5.7	6.0
Millfeed	do.	2,066.0	204.9	201.2	189.8	170.7	161.9	156.3	153.0	161.0	162.5	173.6	154.3	176.8
Shipments and transfers:														
Cake and meal	do.	29,132.1	2,811.7	2,710.2	2,531.3	2,350.7	2,367.0	2,231.5	2,244.9	2,296.8	2,289.8	2,534.4	2,246.5	2,517.3
Millfeed	do.	2,056.2	206.6	202.6	189.9	161.7	162.2	153.3	156.8	157.3	164.5	167.7	158.5	175.1
Consumption:														
Crude in refining ¹	Mil. of lb	12,773.0	1,094.00	1,111.20	1,160.90	1,087.00	1,144.10	998.00	1,045.50	1,042.70	1,050.40	1,090.60	974.50	974.00
In end product ²	do.	12,474.1	1,063.80	1,103.40	1,123.30	1,075.40	1,119.20	974.90	1,023.80	1,001.40	1,040.60	1,084.70	939.10	924.50
In edible products	do.	12,157.7	1,042.80	1,080.50	1,099.70	1,050.40	1,089.20	947.20	996.80	971.80	1,009.00	1,056.90	915.90	897.50
Baking and frying fats	do.	4,928.8	395.5	443.1	441.8	425.0	458.9	377.7	399.6	389.8	412.4	431.9	373.9	379.2
Salad and cooking oil	do.	5,218.7	467.0	448.2	485.9	459.9	462.3	420.8	433.7	436.9	443.2	441.3	377.4	342.1
Margarine	do.	1,793.2	161.0	170.7	152.8	145.3	148.5	130.7	145.8	126.3	136.2	165.3	151.2	159.4
Other	do.	217.0	19.3	18.5	19.2	20.2	19.5	18	17.7	18.8	17.2	18.4	13.4	16.8
In inedible products	do.	316.3	20.9	22.9	23.7	25.0	30.0	27.6	27.0	29.6	31.5	27.8	23.2	27.1
Paint and varnish	do.	47.6	3.0	3.1	4.0	4.0	4.5	4.2	4.1	4.8	4.3	4.1	3.9	3.6
Resins and plastics	do.	119.6	7.5	9.6	9.7	10.6	11.6	12.2	10.4	12.2	9.8	10.8	7.3	7.9
Stocks:														
Crude oil	Mil. of lb	826.6	826.6	811.4	850.8	904.7	1,124.0	1,352.6	1,330.0	1,346.2	1,329.8	1,192.3	1,184.0	1,184.2
Refined oil	do.	231.7	231.7	215.5	204.7	198.4	215.4	223.8	223.8	220.6	223.5	209.8	216.9	230.4
Cake and meal	Mil. of s. tons	192.4	192.4	181.2	189.1	97.7	102.0	224.3	214.1	281.3	292.7	235.0	246.7	189.4
Millfeed	do.	48.7	48.7	50.4	51.8	51.9	42.9	43.2	40.2	44.0	40.3	42.3	36.4	40.6
COTTONSEED OIL														
Production:														
Crude oil	Mil. of lb	1,143.6	125.6	122.6	109.8	61.0	61.7	69.8	78.4	85.2	85.3	119.6	99.9	124.7
Refined oil	do.	1,018.9	106.2	94.4	80.0	62.9	86.3	72.2	70.0	71.6	66.9	107.8	93.4	107.2
Cake and meal	Mil. of s. tons	1,596.2	176.9	171.5	154.2	89.4	90.6	93.4	106.9	116.1	119.6	164.0	151.8	161.8
Hulls	do.	948.3	109.0	103.4	89.5	49.3	48.5	56.6	64.4	69.8	65.9	97.0	88.5	106.4
Linters:¹														
First cut	Mil. of lb	118.9	13.2	13.2	(D)	(D)	6.5	(D)	(D)	(D)	(D)	10.6	9.5	11.3
First cut	Thous. of bales	189.9	21.1	21.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	17.0	15.3	18.0
Second cut	Mil. of lb	422.3	47.5	45.6	42.8	23.6	24.3	24.8	30.3	31.9	31.2	42.3	36.8	41.2
Second cut	Thous. of bales	667.0	75.0	72.0	67.5	37.2	38.4	39.1	47.8	50.3	49.3	67.3	58.1	65.0
Mill run	Mil. of lb	66.6	9.3	10.1	(D)	(D)	0.1	(D)	(D)	(D)	(D)	6.5	5.2	6.0
Mill run	Thous. of bales	106.9	14.9	16.2	(D)	(D)	0.2	(D)	(D)	(D)	(D)	10.5	8.3	9.7
Shipments and transfers:														
Cake and meal	Mil. of s. tons	1,532.9	162.0	158.3	140.6	112.8	117.7	85.2	106.7	87.2	105.3	153.1	153.1	150.9
Hulls	do.	923.4	98.1	91.4	84.5	54.2	57.2	53.8	64.5	68.9	73.9	93.1	87.3	96.5
Linters:¹														
First cut	Mil. of lb	128.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	11.6	9.2	10.7
First cut	Thous. of bales	205.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	18.5	14.9	17.0
Second cut	Mil. of lb	437.4	43.2	45.1	41.1	24.2	23.5	31.1	36.5	33.8	28.0	50.3	40.1	40.5
Second cut	Thous. of bales	690.8	68.1	71.2	64.9	38.1	37.1	49.2	57.5	53.2	44.3	80.0	63.3	63.9
Mill run	Mil. of lb	67.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	6.2	4.7	6.8
Mill run	Thous. of bales	107.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	9.9	7.6	10.9
Consumption:														
Crude in refining	Mil. of lb	1,052.7	109.8	97.2	81.9	64.2	88.4	74.6	73.2	74.8	69.6	111.5	96.7	110.8
In end product ²	do.	563.6	44.9	47.6	46.5	45.1	(D)	(D)	(D)	(D)	51.9	43.3	(D)	(D)
In edible products	do.	554.1	43.9	46.7	45.8	44.7	59.1	46.3	49.0	50.1	51.2	42.4	36.9	38.0
Baking and frying fats	do.	216.2	16.0	21.0	19.3	16.9	23.7	16.9	18.8	16.8	17.0	19.1	13.9	16.8
Salad and cooking oil	do.	285.0	23.1	20.9	22.4	22.7	30.0	26.0	26.2	29.0	30.8	17.8	18.6	17.5
In inedible products	do.	9.5	1.0	0.9	0.7	0.4	(D)	(D)	(D)	(D)	0.7	0.9	(D)	(D)
Stocks:														
Crude oil	do.	33.7	33.7	43.3	34.9	31.4	29.6	46.9	53.5	52.8	38.1	38.2	35.6	36.1
Refined oil	do.	81.0	81.0	73.7	68.6	74.2	82.8	96.9	91.3	106.4	118.9	128.9	117.0	112.3
Cake and meal	Mil. of s. tons	94.9	94.9	80.0	66.8	53.2	76.6	103.0	95.5	95.3	66.4	52.1	41.2	42.5
Hulls	do.	40.6	40.6	29.7	17.7	12.7	17.6	26.3	23.5	23.6	22.7	30.7	26.8	25.6
Linters:¹														
First cut	Mil. of lb	10.9	10.9	9.4	(D)	(D)	(D)	(D)	6.0	(D)	18.4	20.5	21.5	21.2
First cut	Thous. of bales	17.5	17.5	15.0	(D)	(D)	(D)	(D)	9.6	(D)	29.4	32.8	34.3	33.9
Second cut	Mil. of lb	16.2	16.2	11.9	11.4	9.7	10.3	9.5	15.8	22.0	23.9	20.7	28.7	32.0
Second cut	Thous. of bales	25.6	25.6	18.7	17.9	15.3	16.2	14.9	25.0	34.7	37.6	32.6	45.3	50.5
Hulls	Mil. of lb	4.0	4.0	2.8	(D)	(D)	(D)	(D)	3.0	(D)	4.1	4.4	4.1	3.6
Hulls	Thous. of bales	6.4	6.4	4.5	(D)	(D)	(D)	(D)	4.8	(D)	6.6	7.1	6.5	5.8

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: 1994—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
CORN OIL														
Production:														
Crude oil	Mil. of lb	1,951.3	180.9	165.3	175.5	165.1	162.3	164.8	171.8	164.2	155.3	166.9	138.6	140.6
Refined oil	do.	1,070.8	110.7	101.7	96.7	101.8	99.6	85.4	85.0	86.0	75.2	87.9	72.4	68.4
Consumption:														
Crude in refining	do.	1,137.2	116.9	107.2	103.5	109.1	106.4	90.6	91.7	91.5	79.4	92.6	76.5	71.8
In end product ²	do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	60.6	(D)	(D)	61.1	54.9	(D)
In edible products	do.	679.0	70.8	65.0	55.6	63.0	55.3	44.3	60.5	54.6	49.2	61.1	54.9	44.6
Baking and frying fats	do.	125.5	10.0	8.7	11.1	9.5	11.8	11.7	11.4	11.3	10.7	12.1	9.2	7.9
Salad and cooking oil	do.	423.2	48.5	43.9	38.2	38.8	34.0	24.0	34.5	32.6	29.6	40.5	32.6	26.0
Stocks:														
Crude oil	do.	58.7	58.7	72.8	90.6	93.5	83.4	81.2	62.6	58.8	52.2	39.5	46.4	48.0
Refined oil	do.	31.5	31.5	24.1	43.1	24.8	39.3	26.2	33.7	29.6	44.2	25.9	32.6	31.5
PEANUT OIL														
Production:														
Crude oil	Mil. of lb	228.2	24.2	18.4	11.9	17.2	16.8	21.7	15.4	25.6	18.7	21.2	18.3	18.8
Refined oil	do.	149.0	8.4	8.9	11.1	14.2	14.5	12.6	14.3	13.5	16.0	13.6	12.5	9.4
Cake and meal	Mil. of s. tons	164.4	16.1	12.8	8.5	12.2	11.4	15.2	11.0	22.9	13.4	15.1	12.4	13.4
Shipments and transfers:														
Cake and meal	do.	156.5	13.1	6.3	8.5	12.2	11.4	20.0	10.7	22.9	13.3	14.2	12.2	11.7
Consumption:														
Crude in refining	Mil. of lb	158.0	8.8	9.4	12.0	15.0	15.6	13.3	14.9	14.1	17.0	14.4	13.6	9.9
In end product ²	do.	151.7	(D)	9.3	(D)	14.7	(D)	13.8	(D)	(D)	(D)	15.5	(D)	(D)
In edible products	do.	150.6	8.4	9.2	12.5	14.7	14.9	13.7	13.4	13.3	13.0	15.4	10.8	11.3
In inedible products	do.	1.1	(D)	0.1	(D)	(Z)	(D)	0.1	(D)	(D)	(D)	0.1	(D)	(D)
Stocks:³														
Crude oil	do.	5.0	5.0	7.2	15.1	23.4	27.4	20.7	19.9	32.1	29.4	23.3	24.4	20.2
Refined oil	do.	2.8	2.8	1.6	2.8	3.4	3.8	4.3	5.6	4.3	5.1	2.8	3.9	3.4
Cake and meal	Mil. of s. tons	9.5	9.5	6.5	(D)	(D)	(D)	(D)	4.8	4.5	4.5	4.4	3.5	3.3
LINSEED OIL														
Production:														
Crude oil	Mil. of 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. of 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. of lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In end product ²	do.	124.3	10.0	9.0	12.2	12.3	10.8	10.7	11.7	11.5	8.5	9.9	7.5	10.2
In inedible products	do.	124.3	10.0	9.0	12.2	12.3	10.8	10.7	11.7	11.5	8.5	9.9	7.5	10.2
Paint and varnish	do.	33.0	3.3	2.2	2.9	2.7	2.7	2.9	3.8	3.6	2.3	1.7	1.5	3.4
Resins and plastics	do.	50.9	3.1	2.7	4.1	4.4	5.7	4.6	5.3	5.1	4.3	4.9	3.1	3.6
Other inedible products	do.	40.4	3.6	4.1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.2
Stocks:³														
Crude oil	do.	22.6	22.6	22.2	27.6	40.3	27.0	33.7	36.3	36.1	32.0	28.0	28.0	23.0
Refined oil	do.	16.0	16.0	17.1	20.5	20.3	22.4	22.8	24.0	26.5	20.0	21.4	14.0	15.0
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
SUNFLOWER OIL														
Production:														
Crude oil	Mil. of lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	20.6	29.5	47.7	50.0	60.0	55.5
Refined oil	do.	33.1	3.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.9	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	13.7	18.0	28.3	30.8	37.1	34.4
Shipments and transfers:														
Cake and meal	do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	30.5	39.4	37.0
Consumption:														
Crude in refining ¹	Mil. of lb	34.2	3.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.0	(D)	(D)
In end product ²	do.	110.9	21.1	11.9	13.6	9.2	11.3	5.3	4.9	6.7	(D)	(D)	(D)	5.3
In edible products	do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.8	7.7	7.5	(D)
In inedible products	do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:³														
Crude oil	do.	184.0	184.0	150.8	54.6	61.1	111.7	107.3	162.5	142.7	133.6	132.8	107.7	134.1
Refined oil	do.	4.3	4.3	3.9	3.7	3.5	3.6	5.0	5.4	6.7	7.0	9.3	7.5	9.2
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.9	4.6	6.9

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: 1994—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
SAFFLOWER OIL														
Production:														
Crude oil	Mil. of lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Refined oil	do.	22.3	2.5	1.6	0.7	1.1	1.2	1.2	2.7	1.6	1.9	2.1	2.2	3.5
Cake and meal	Mil. of 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 ¹	Mil. of lb	22.5	2.5	1.7	0.7	1.1	1.2	1.2	2.7	1.6	1.9	2.1	2.3	3.5
In end product ²	do.	33.6	5.0	3.2	1.7	2.0	2.1	2.1	2.8	2.5	2.4	3.5	3.2	3.2
In edible products	do.	32.6	4.9	3.1	1.7	2.0	2.0	2.0	2.7	2.4	2.2	3.4	(D)	(D)
In inedible products	do.	1.0	0.1	(Z)	(Z)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	(D)	(D)
Stocks:³														
Crude oil	do.	35.4	35.4	35.1	30.9	29.4	35.1	32.8	32.9	43.6	37.0	28.2	33.6	22.6
Refined oil	do.	1.5	1.5	1.0	0.6	1.1	1.2	1.5	1.7	1.5	1.7	1.9	2.5	2.2
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
RAPESEED OIL														
Production:														
Crude oil	Mil. of lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	38.4	44.3	34.2	42.0	29.6	(D)
Refined oil	do.	316.1	14.1	26.1	22.8	27.3	38.0	34.3	31.8	29.5	23.6	22.4	25.3	20.9
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	27.7	31.8	25.9	29.9	21.7	(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 ¹	Mil. of lb	329.8	14.6	27.3	24.1	28.3	39.4	35.5	34.0	31.2	24.2	23.1	26.5	21.6
In end product ²	do.	(D)	32.4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	31.4	(D)
In edible products	do.	446.3	27.8	37.8	35.6	39.1	57.3	40.6	38.7	42.0	35.1	32.5	30.4	29.3
Salad and cooking oils	do.	316.5	20.9	28.5	25.9	24.5	42.8	28.7	25.5	30.0	22.4	22.6	22.4	22.3
In inedible products	do.	(D)	4.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.9	(D)
Stocks:³														
Crude oil	do.	65.0	65.0	86.3	83.0	115.1	111.3	86.8	67.9	70.8	72.3	55.6	45.7	33.0
Refined oil	do.	13.2	13.2	15.9	16.9	21.5	25.0	28.3	29.0	25.0	36.7	26.0	24.1	20.7
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
LARD														
Production	Mil. of lb	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Consumption:														
In end products ¹	do.	451.9	41.7	44.7	43.8	43.4	37.5	32.4	34.4	35.9	34.6	36.2	33.9	33.5
In edible products	do.	324.7	29.8	32.7	33.3	31.9	28.1	23.0	24.4	24.2	23.4	26.0	24.8	23.2
Baking and frying fats	do.	286.7	26.6	29.2	30.0	28.3	24.6	19.9	22.4	20.9	20.8	22.6	21.4	20.1
In inedible products	do.	127.2	11.9	12.0	10.5	11.5	9.4	9.4	10.0	11.7	11.2	10.2	9.1	10.3
Lubricants	do.	8.9	0.7	0.9	1.1	1.3	0.9	0.5	0.9	0.7	0.3	0.6	0.5	0.5
Other inedible products	do.	118.3	11.2	11.1	9.4	10.2	8.5	8.9	9.1	11.0	10.9	9.6	8.6	9.8
Stocks	do.	41.9	41.9	35.8	34.0	34.4	29.7	25.5	27.0	27.4	25.1	28.8	31.8	38.0
EDIBLE TALLOW														
Production	Mil. of lb	1,557.2	124.2	129.3	138.1	138.9	134.4	119.8	140.7	140.3	121.8	127.6	120.5	121.6
Consumption:														
In end products ²	do.	643.1	48.8	58.4	59.3	64.3	68.9	50.1	52.9	(D)	(D)	(D)	(D)	37.9
In edible products	do.	411.4	31.0	34.6	35.1	36.4	41.2	32.5	35.3	33.4	33.9	38.2	31.9	(D)
Baking and frying fats	do.	404.6	29.9	33.5	34.8	36.1	40.3	31.9	34.9	32.7	33.5	37.6	31.6	27.8
In inedible products	do.	231.7	17.8	23.8	24.2	27.9	27.7	17.6	17.6	(D)	(D)	(D)	(D)	(D)
Stocks	do.	36.3	36.3	38.9	42.1	36.3	44.5	43.8	41.1	41.5	37.0	41.1	40.0	39.9
COCONUT OIL														
Production:														
Refined oil ¹	Mil. of lb	518.1	51.9	46.2	39.4	28.4	50.3	41.1	44.5	46.2	41.0	42.4	43.9	42.8
Consumption:														
Crude in refining	do.	539.8	54.2	48.3	41.1	29.8	52.5	42.7	47.1	48.2	42.8	44.4	45.2	43.5
In end products ²	do.	969.3	95.0	85.1	74.6	65.1	88.4	76.0	88.8	86.6	80.4	77.5	77.4	74.4
In edible products	do.	227.1	19.0	18.1	17.8	18.1	23.7	17.7	20.3	19.4	21.0	19.9	15.3	16.8
Baking and frying fats	do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In inedible products	do.	742.2	76.0	67.0	56.8	47.0	64.7	58.3	68.5	67.2	59.4	57.6	62.1	57.6
Soap	do.	146.2	15.3	11.1	12.8	12.8	9.4	10.6	12.4	12.4	16.7	9.4	10.7	12.6
Resins and plastics	do.	2.3	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.1	0.2	0.1	0.1	0.3
Stocks:														
Crude oil	do.	86.6	86.6	98.6	101.6	89.9	103.3	121.1	106.7	135.7	167.5	190.2	229.8	252.3
Refined oil ²	do.	69.0	69.0	54.3	64.6	74.2	52.7	42.6	44.7	64.2	70.1	61.3	54.7	64.2

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: 1994—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
VEGETABLE OIL FOOTS														
Production	Mil. of lb	329.6	26.1	25.7	31.6	30.4	31.6	27.2	28.1	25.1	29.7	26.5	21.7	25.9
Consumption:														
In end products ² . . . . .	. . . . .do.	112.1	8.5	8.4	12.7	11.1	12.7	7.9	8.4	7.8	7.6	9.4	7.9	9.7
In inedible products . . . . .	. . . . .do.	112.1	8.5	8.4	12.7	11.1	12.7	7.9	8.4	7.8	7.6	9.4	7.9	9.7
Feed . . . . .	. . . . .do.	87.0	7.0	7.5	8.9	7.5	7.9	6.9	6.9	6.9	6.1	7.7	5.9	7.8
Other inedible products . . . . .	. . . . .do.	25.1	1.5	0.9	3.8	3.6	4.8	1.0	1.5	0.9	1.5	1.7	2.0	1.9
Stocks . . . . .	. . . . .do.	14.6	14.6	14.0	15.0	15.4	13.7	12.2	14.7	13.6	13.0	18.1	18.8	23.9
CASTOR OIL														
Production	Mil. of lb	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Consumption:														
In end products ² . . . . .	. . . . .do.	61.9	6.5	4.2	5.1	4.5	4.9	4.5	5.2	6.3	4.5	5.8	4.9	5.5
In inedible products . . . . .	. . . . .do.	61.9	6.5	4.2	5.1	4.5	4.9	4.5	5.2	6.3	4.5	5.8	4.9	5.5
Resins and plastics . . . . .	. . . . .do.	1.9	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.2
Lubricants . . . . .	. . . . .do.	2.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Stocks . . . . .	. . . . .do.	39.9	39.9	44.2	23.5	21.1	21.0	27.9	21.8	22.6	25.2	18.4	22.4	29.9
TALL OIL														
Production:														
Crude oil	Mil. of lb	1,427.3	115.1	114.5	111.1	117.4	110.8	108.7	109.1	119.1	131.0	148.1	115.4	127.0
Refined oil ³ . . . . .	. . . . .do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Consumption:														
Crude in refining . . . . .	. . . . .do.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In end products ² . . . . .	. . . . .do.	1,362.5	113.0	101.9	113.7	119.8	114.9	106.8	118.8	115.0	118.4	124.0	98.8	117.4
In inedible products . . . . .	. . . . .do.	1,362.5	113.0	101.9	113.7	119.8	114.9	106.8	118.8	115.0	118.4	124.0	98.8	117.4
Resins and plastics . . . . .	. . . . .do.	48.5	1.3	2.9	2.9	3.2	3.7	6.6	6.3	5.3	5.0	4.5	2.9	3.9
Lubricants . . . . .	. . . . .do.	6.1	0.4	0.7	0.7	0.5	0.6	0.4	0.6	0.4	0.4	0.5	0.4	0.5
Fatty acids . . . . .	. . . . .do.	1,025.0	91.0	75.6	86.2	96.0	90.0	78.5	86.1	78.3	82.9	94.8	71.9	93.6
Stocks: ³														
Crude oil . . . . .	. . . . .do.	104.1	104.1	94.1	82.7	86.3	97.5	101.1	105.3	112.6	124.4	118.2	109.7	109.5
Refined oil . . . . .	. . . . .do.	15.9	15.9	16.3	14.4	12.0	10.9	11.6	9.8	10.2	12.0	13.5	13.5	13.7
INEDIBLE TALLOW AND GREASE														
Production	Mil. of lb	6,711.9	594.6	582.1	581.5	582.3	584.6	518.1	567.0	561.8	531.7	584.2	506.2	517.9
Inedible tallow . . . . .	. . . . .do.	3,711.3	337.9	325.9	329.2	322.7	320.6	279.0	308.6	305.4	288.0	321.1	275.8	297.1
Grease . . . . .	. . . . .do.	2,959.0	253.1	253.2	249.1	256.2	261.1	237.3	255.6	252.0	238.8	258.6	226.1	217.8
Inedible tallow and grease, n.s.k. . . . .	. . . . .do.	41.6	3.6	3.0	3.1	3.4	2.9	1.8	2.8	4.4	4.9	4.5	4.3	2.9
Consumption:														
In end products ² . . . . .	. . . . .do.	3,189.9	282.6	278.9	271.0	273.8	266.1	246.1	277.9	278.5	276.0	257.6	246.9	234.4
In inedible products . . . . .	. . . . .do.	3,189.9	282.6	278.9	271.0	273.8	266.1	246.1	277.9	278.5	276.0	257.6	246.9	234.4
Soap . . . . .	. . . . .do.	300.8	31.5	26.7	29.1	27.6	17.4	24.1	24.8	27.7	24.4	19.9	24.2	23.4
Feed . . . . .	. . . . .do.	2,101.9	176.2	176.7	170.8	178.7	183.3	163.1	185.9	183.2	183.3	177.1	163.4	160.3
Lubricants . . . . .	. . . . .do.	81.8	7.3	6.5	6.5	8.1	8.3	6.3	6.5	6.4	7.2	6.3	6.2	6.2
Fatty acids . . . . .	. . . . .do.	634.0	62.1	63.2	60.0	52.5	51.9	48.0	54.2	54.6	53.2	48.5	47.2	38.6
Other inedible products . . . . .	. . . . .do.	71.4	5.5	5.8	4.6	6.9	5.2	4.6	6.6	6.6	8.0	5.8	6.0	6.0
Stocks:														
Inedible tallow . . . . .	. . . . .do.	232.4	232.4	281.9	263.4	260.0	233.0	204.7	206.5	213.6	223.6	261.1	234.2	231.7
Grease . . . . .	. . . . .do.	107.1	107.1	131.4	124.6	110.0	119.7	97.6	81.5	88.6	92.2	101.7	86.1	82.7
Inedible tallow and grease, n.s.k. . . . .	. . . . .do.	8.8	8.8	9.5	8.8	12.0	8.3	7.3	6.7	7.7	7.2	8.0	6.6	7.5

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: 1994—Con.

Product description	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
PALM OIL														
Production:														
Refined oil ¹	Mil. of lb	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Consumption:														
Crude refining	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
In end products ²	.....do.....	205.6	14.3	17.7	18.5	17.1	18.2	14.6	18.5	16.8	16.6	19.9	15.9	17.5
In edible products	.....do.....	87.8	5.3	8.2	7.7	6.8	7.2	5.7	7.1	7.9	7.1	9.3	6.7	8.8
In inedible products	.....do.....	117.8	9.0	9.5	10.8	10.3	11.0	8.9	11.4	8.9	9.5	10.6	9.2	8.7
Stocks:														
Crude oil	.....do.....	12.3	12.3	10.6	9.9	10.7	14.7	16.7	22.2	18.3	17.0	13.7	11.0	11.6
Refined oil	.....do.....	22.6	22.6	16.9	28.0	25.5	23.4	23.4	21.1	20.6	24.4	24.5	14.6	21.2
PALM KERNEL OIL														
Production:														
Refined oil ¹	Mil. of lb	157.6	14.4	(D)	14.3	(D)	15.4	12.4	18.6	16.9	10.4	10.8	9.9	12.3
Consumption:														
Crude refining	.....do.....	139.7	14.6	(D)	14.9	(D)	16.1	12.9	19.4	17.4	10.7	11.1	10.2	12.4
In end products ²	.....do.....	280.0	17.5	17.5	21.4	21.7	23.2	20.1	25.7	27.7	25.3	25.5	27.5	26.9
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.....	60.7	60.7	57.1	50.0	72.3	54.4	58.6	81.8	97.3	94.5	112.7	90.0	109.4
TUNG OIL														
Consumption:														
In end products ²	Mil. of lb	9.3	0.3	0.5	0.5	0.5	0.9	0.8	0.8	1.6	1.5	0.7	0.6	0.6
In inedible products	.....do.....	9.3	0.3	0.5	0.5	0.5	0.9	0.8	0.8	1.6	1.5	0.7	0.6	0.6
Paint and varnish	.....do.....	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Resins and plastics	.....do.....	6.6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.4	0.4	0.4
Other inedible products	.....do.....	1.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.2	0.1	0.1
Stocks	.....do.....	1.8	1.8	1.9	1.7	2.5	0.8	1.6	2.1	2.6	2.1	2.0	1.5	2.1
FISH OIL														
Consumption:														
In end products ²	Mil. of lb	9.5	0.2	0.8	0.5	0.7	0.4	0.4	1.2	1.1	1.0	1.3	0.8	1.1
In inedible products	.....do.....	9.5	0.2	0.8	0.5	0.7	0.4	0.4	1.2	1.1	1.0	1.3	0.8	1.1
Lubricants	.....do.....	3.7	(Z)	0.1	0.1	0.1	0.2	0.1	0.3	0.6	0.6	0.7	0.4	0.5
OTHER OILS														
Consumption:														
In end products ²	Mil. of lb	(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.....	47.3	2.9	4.4	4.4	3.4	3.8	4.5	2.6	4.9	4.4	4.3	3.2	4.5
Stocks	.....do.....	4.6	4.6	2.8	3.4	4.6	5.3	5.1	5.9	5.3	4.6	3.4	3.4	19.9

¹Production of refined oils covers only once-refined oils. Degummed soybean oil is reported as crude oil.

²Includes hydrogenated fats (vegetable and animal) and other fats and oils in process (for example, refined cottonseed including stocks of stearin).

³The production of refined tall oil and distilled tall oil containing less than 90-percent free fatty acids, not including resin acids.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.s.k. Not specified by kind.

Note: Detail may not add to total due to independent rounding.

Table 15. Net Receipts, Crushings, and Stocks of Cottonseed and Soybeans at Oil Mills, By Selected States: 1994

[Thousands of short tons]

State	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
Cottonseed													
Receipts at mills	3,971.2	556.6	1,430.5	1,371.1	357.4	130.9	13.5	(30.9)	(23.0)	5.4	28.9	35.7	95.1
Crushed or used	3,573.0	397.5	386.2	343.9	195.5	192.1	210.2	239.4	257.7	265.7	358.6	335.2	391.0
Stocks ¹	2,763.4	2,763.4	2,604.3	1,560.0	532.8	370.9	432.1	628.8	899.1	1,179.8	1,440.1	1,769.8	2,069.3
Arkansas:													
Crushed or used	450.0	57.1	56.1	57.7	(D)	(D)	(D)	(D)	32.4	38.0	48.7	38.0	49.4
Stocks ¹	357.4	357.4	375.6	249.1	34.5	(D)	(D)	43.6	84.6	126.4	157.2	187.0	217.1
Pacific and mountain States:													
Crushed or used	440.9	55.3	51.4	(D)	(D)	(D)	(D)	19.9	42.5	36.1	47.9	49.7	70.6
Stocks ¹	333.4	333.4	279.0	128.3	10.9	26.0	59.0	81.3	111.4	162.4	207.0	265.9	298.4
Mississippi:													
Crushed or used	432.0	44.8	45.6	49.3	23.3	(D)	32.0	(D)	(D)	31.8	43.9	38.1	47.2
Stocks ¹	356.7	356.7	376.1	253.9	80.7	(D)	(D)	47.0	87.3	119.3	147.3	186.0	217.0
Texas:													
Crushed or used	1,494.7	154.3	142.9	134.6	115.1	114.4	92.7	104.7	111.8	117.9	137.4	130.0	138.9
Stocks ¹	1,083.9	1,083.9	954.6	572.2	352.4	332.4	291.3	361.1	478.1	585.5	707.7	850.6	984.3
Soybean													
Receipts at mills	38,961.0	3,380.1	3,979.2	5,599.4	3,142.1	2,562.4	2,232.2	2,683.0	3,063.6	2,534.9	3,435.1	2,871.4	3,477.6
Crushed or used	39,334.5	3,854.6	3,674.5	3,579.1	3,177.8	3,028.6	3,028.7	2,916.0	3,089.3	3,166.7	3,399.2	3,098.3	3,321.7
Stocks ¹	3,253.1	3,253.1	3,727.6	3,422.9	1,402.6	1,438.3	1,904.5	2,701.0	2,934.0	2,959.7	3,591.5	3,555.6	3,782.5
Arkansas:													
Receipts at mills	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Crushed or used	1,231.2	135.6	127.0	131.0	126.6	111.6	37.7	(D)	(D)	93.6	120.7	106.5	121.8
Stocks ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Georgia:													
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 ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois:													
Receipts at mills	6,979.5	573.3	602.6	1,137.2	725.2	339.3	200.0	487.9	611.5	421.8	558.5	557.3	764.9
Crushed or used	7,045.2	719.7	678.8	704.5	681.7	467.6	198.8	597.9	553.4	595.6	641.4	581.5	624.3
Stocks ¹	549.2	549.2	695.6	771.8	339.1	295.6	423.9	422.7	532.7	474.6	648.4	731.3	755.5
Indiana:													
Receipts at mills	2,473.3	(D)	(D)	(D)	(D)	108.1	49.9	180.5	201.8	165.1	246.0	532.0	199.3
Crushed or used	2,526.9	236.7	218.5	224.7	191.6	187.7	72.1	216.8	242.8	232.1	238.5	227.4	238.0
Stocks ¹	(D)	(D)	(D)	(D)	(D)	66.0	145.6	167.8	204.1	245.1	312.1	304.6	(D)
Iowa:													
Receipts at mills	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	385.9	615.3	545.8	466.0
Crushed or used	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	510.0	516.5	543.2	517.6	562.5
Stocks ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	305.8	436.4	364.3	336.1
Kansas:													
Receipts at mills	1,612.5	231.4	117.4	(D)	(D)	(1.2)	52.1	112.5	149.2	113.5	196.0	149.5	145.3
Crushed or used	1,551.2	165.6	162.9	(D)	(D)	55.6	54.6	134.6	157.5	143.0	157.3	136.1	146.0
Stocks ¹	188.6	188.6	122.8	168.3	76.7	59.5	116.3	118.8	140.9	149.2	178.7	140.0	126.6
Minnesota:													
Receipts at mills	2,464.3	367.1	242.3	189.7	195.6	100.7	139.4	203.6	301.3	144.1	208.5	187.3	184.7
Crushed or used	2,403.9	254.1	242.3	228.3	210.5	213.7	71.0	200.8	206.0	194.7	201.7	181.0	199.8
Stocks ¹	113.0	113.0	(D)	(D)	38.6	53.5	166.5	98.1	95.3	(D)	125.4	118.6	112.3
Missouri:													
Receipts at mills	2,361.2	178.0	246.1	339.1	210.8	166.5	37.7	180.4	194.4	167.9	242.5	141.7	256.1
Crushed or used	2,312.0	234.8	227.3	232.0	221.8	212.0	51.0	181.4	179.4	185.8	201.3	184.3	200.9
Stocks ¹	(D)	(D)	(D)	161.9	54.8	65.8	111.3	124.6	125.6	110.6	128.5	87.3	129.9
Ohio:													
Receipts at mills	2,831.8	256.2	225.0	467.7	258.5	134.8	104.5	188.0	251.5	178.5	292.1	221.5	253.5
Crushed or used	2,842.4	281.6	273.4	266.2	256.7	263.2	94.0	189.5	252.4	246.9	254.3	223.7	240.5
Stocks ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina:													
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 ¹	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹Calculated at the end of the period.

D Data withheld to avoid disclosing figures for individual companies.

Table 16. Production and Stocks of Cottonseed and Soybeans, by Selected States: 1994

State	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
Cottonseed														
Production:														
Crude oil	Mil. of lb.	1,143.6	125.6	122.6	109.8	61.0	61.7	69.8	78.4	85.2	85.3	119.6	99.9	124.7
Cake and meal	Mil. of s. tons	1,596.2	176.9	171.5	154.2	89.4	90.6	93.4	106.9	116.1	119.6	164.0	151.8	161.8
Hulls	do	948.3	109.0	103.4	89.5	49.3	48.5	56.6	64.4	69.8	65.9	97.0	88.5	106.4
Linters ¹	Thous. of bales	963.8	111.0	109.2	100.4	53.1	48.9	52.8	70.2	79.3	69.7	94.8	81.7	92.7
Stocks:														
Crude oil	Mil. of lb.	20.5	20.5	28.2	21.9	17.8	12.2	16.0	19.1	19.2	15.7	19.1	20.6	23.0
Cake and meal	Mil. of s. tons	94.9	94.9	80.0	66.8	53.2	76.6	103.7	95.5	95.3	66.4	52.1	41.2	42.5
Hulls	do	40.6	40.6	29.7	17.7	12.7	17.6	26.3	23.5	23.6	22.7	30.7	26.8	25.6
Linters ¹	Thous. of bales	49.5	49.5	38.2	31.9	23.8	27.0	25.7	39.4	55.7	73.6	72.5	86.1	90.2
Arkansas:														
Production:														
Crude oil	Mil. of lb.	137.2	16.1	15.9	18.0	(D)	(D)	(D)	(D)	10.0	12.0	15.2	11.6	15.2
Cake and meal	Mil. of s. tons	197.5	23.7	23.9	25.4	(D)	(D)	(D)	(D)	13.7	16.9	21.3	17.3	21.8
Hulls	do	117.3	14.9	14.7	14.0	(D)	(D)	(D)	(D)	8.4	9.5	12.2	11.2	13.3
Linters ¹	Thous. of bales	160.2	17.9	16.9	18.0	(D)	(D)	(D)	(D)	26.3	11.1	14.4	10.3	14.5
Stocks:														
Crude oil	Mil. of lb.	3.8	3.8	5.5	4.1	3.4	(D)	1.6	4.9	3.7	2.0	3.8	3.4	4.4
Cake and meal	Mil. of s. tons	5.0	5.0	5.1	7.2	1.5	(D)	4.0	6.0	7.2	7.1	3.7	2.2	3.8
Hulls	do	(D)	(D)	(D)	(D)	(D)	(D)	5.3	(D)	4.0	4.9	5.1	3.2	2.6
Linters ¹	Thous. of bales	(D)	(D)	(D)	(D)	(D)	(D)	3.0	5.3	6.3	9.0	9.3	8.5	9.3
California:														
Production:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of 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 ¹	Thous. of bales	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of 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 ¹	Thous. of bales	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Mississippi:														
Production:														
Crude oil	Mil. of lb.	127.8	12.4	13.6	14.7	6.9	(D)	9.6	(D)	(D)	9.6	13.1	11.4	14.3
Cake and meal	Mil. of s. tons	182.7	17.8	18.7	20.6	9.9	(D)	13.6	(D)	(D)	13.8	19.1	16.7	20.8
Hulls	do	128.1	14.3	13.2	13.5	6.1	(D)	10.2	(D)	(D)	10.2	12.6	11.2	13.9
Linters ¹	Thous. of bales	136.7	13.8	17.4	16.7	8.4	(D)	9.4	(D)	(D)	9.8	13.6	11.8	13.7
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.4	(D)	(D)	1.5
Cake and meal	Mil. of s. tons	(D)	(D)	4.6	3.9	2.9	2.3	(D)	(D)	(D)	(D)	1.8	2.4	2.0
Hulls	do	2.9	2.9	3.2	1.3	0.7	(D)	4.7	(D)	(D)	(D)	1.4	2.2	1.4
Linters ¹	Thous. of bales	2.0	2.0	1.8	2.4	1.9	(D)	2.5	(D)	(D)	(D)	2.7	4.8	4.0
Texas:														
Production:														
Crude oil	Mil. of lb.	499.6	50.7	46.8	44.1	39.0	38.6	32.5	36.1	38.5	40.4	46.7	38.1	48.1
Cake and meal	Mil. of s. tons	662.6	69.6	63.2	61.3	52.5	51.2	40.4	46.5	48.4	52.5	60.7	62.3	54.0
Hulls	do	396.0	39.4	37.8	35.2	29.1	29.0	23.7	27.0	31.1	30.3	36.0	36.5	40.9
Linters ¹	Thous. of bales	370.8	40.7	36.7	35.7	30.0	27.6	20.5	25.5	25.7	30.5	34.1	31.1	32.7
Stocks:														
Crude oil	Mil. of lb.	6.9	6.9	9.8	9.0	8.4	7.3	6.7	6.5	5.3	(D)	5.8	6.9	6.5
Cake and meal	Mil. of s. tons	52.7	52.7	44.7	41.4	38.3	46.4	47.7	42.4	33.1	18.4	11.5	11.0	9.2
Hulls	do	10.0	10.0	8.6	6.7	6.1	7.8	6.2	2.6	2.1	3.7	5.6	7.6	6.5
Linters ¹	Thous. of bales	17.3	17.3	11.7	11.2	6.4	8.4	9.0	13.6	22.1	33.4	35.0	47.9	49.2
Soybean														
Production:														
Crude oil	Mil. of lb.	14,336.2	1,403.0	1,341.5	1,327.6	1,168.0	1,103.7	1,098.9	1,070.1	1,122.7	1,155.3	1,231.3	1,121.8	1,192.3
Cake and meal	Mil. of s. tons	31,222.2	3,034.8	2,910.9	2,820.9	2,523.8	2,413.6	2,404.4	2,338.6	2,453.2	2,516.5	2,703.4	2,463.8	2,638.3
Stocks:														
Crude oil	Mil. of lb.	486.2	486.2	494.0	480.0	509.7	647.4	754.4	685.7	720.1	724.1	663.9	717.6	701.7
Cake and meal	Mil. of s. tons	241.1	241.1	231.6	240.9	149.6	144.9	267.5	254.3	325.3	333.0	277.3	283.1	230.0

See footnotes at end of table.

Table 16. Production and Stocks of Cottonseed and Soybeans, by Selected States: 1994—Con.

State	Unit of measure	Total	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	April	March	Feb.	Jan.
Soybean—Con.														
Arkansas:														
Production:														
Crude oil	Mil. of lb.	471.3	49.1	46.6	48.1	46.1	40.5	37.7	(D)	(D)	33.5	43.8	38.1	43.6
Cake and meal	Mil. of s. tons	1,090.9	107.6	101.6	103.7	101.9	88.4	82.9	(D)	(D)	74.2	95.9	84.3	95.2
Stocks:														
Crude oil	Mil. of lb.	23.0	23.0	17.1	23.6	24.6	29.7	26.3	19.2	26.7	23.5	30.1	30.4	27.5
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	11.9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	14.7	14.0
Georgia:														
Production:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Illinois:														
Production:														
Crude oil	Mil. of lb.	2,729.4	266.3	253.6	268.1	256.8	172.1	198.8	220.4	203.2	217.4	233.2	211.9	227.6
Cake and meal	Mil. of s. tons	5,919.7	566.9	535.7	553.3	536.6	369.1	423.9	566.9	438.4	470.9	505.2	459.1	493.7
Stocks:														
Crude oil	Mil. of lb.	98.7	98.7	89.9	109.8	127.1	135.1	177.7	174.4	188.7	218.3	209.6	223.1	215.5
Cake and meal	Mil. of s. tons	76.9	76.9	76.0	68.2	43.5	34.8	54.5	78.9	132.6	104.0	98.7	97.5	57.8
Indiana:														
Production:														
Crude oil	Mil. of lb.	957.4	83.6	77.9	81.2	70.2	68.5	71.9	79.0	88.7	84.0	86.1	82.1	84.2
Cake and meal	Mil. of s. tons	2,105.8	185.4	172.5	176.6	151.5	148.2	155.5	185.4	191.3	183.3	188.5	179.2	188.4
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	55.4	63.6	70.8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	35.6	(D)	(D)	(D)	(D)	(D)	(D)
Iowa:														
Production:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	179.5	181.0	190.4	180.6	196.6
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	404.3	411.8	431.8	416.8	448.0
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	55.0	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	25.9	33.4	14.3	(D)	30.8
Kansas:														
Production:														
Crude oil	Mil. of lb.	612.1	61.7	61.6	(D)	(D)	20.6	54.6	50.2	58.4	53.1	57.9	50.2	53.9
Cake and meal	Mil. of s. tons	1,331.9	131.8	128.2	(D)	(D)	44.8	116.3	131.8	124.0	112.7	128.2	108.8	116.1
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	31.0	(D)	28.3	42.7	36.1	31.5	30.5	21.9	22.7	(D)
Cake and meal	Mil. of s. tons	9.4	9.4	9.1	(D)	6.7	(D)	16.0	9.4	10.6	7.4	11.4	10.2	8.3
Minnesota:														
Production:														
Crude oil	Mil. of lb.	898.8	92.5	86.4	82.9	74.6	75.9	71.0	71.4	72.5	69.4	68.3	64.7	69.2
Cake and meal	Mil. of s. tons	2,090.2	201.7	193.9	182.4	170.2	173.0	166.5	201.7	166.1	158.7	165.2	147.8	163.0
Stocks:														
Crude oil	Mil. of lb.	52.9	52.9	39.6	34.5	28.4	28.6	(D)	(D)	(D)	29.5	31.3	43.0	42.1
Cake and meal	Mil. of s. tons	10.6	10.6	13.9	11.8	(D)	6.5	11.6	(D)	9.8	9.0	2.6	12.3	13.2
Missouri:														
Production:														
Crude oil	Mil. of lb.	913.3	88.4	86.5	88.3	83.3	78.8	51.0	68.4	65.5	75.7	80.9	73.1	73.4
Cake and meal	Mil. of s. tons	1,932.1	181.1	175.8	181.0	175.4	169.2	111.3	181.1	142.9	147.6	159.5	147.5	159.7
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	89.4	(D)	(D)	(D)	(D)	(D)	(D)	49.0	54.8	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	6.7	6.6	3.0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	3.8
Ohio:														
Production:														
Crude oil	Mil. of lb.	1,085.9	96.4	94.2	92.8	94.1	97.9	94.0	70.3	92.7	90.5	94.3	81.3	87.4
Cake and meal	Mil. of s. tons	2,466.4	225.4	218.8	212.1	206.0	210.0	203.4	225.4	200.1	195.2	202.0	177.5	190.5
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Carolina:														
Production:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Stocks:														
Crude oil	Mil. of lb.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Cake and meal	Mil. of s. tons	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

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
D Data withheld to avoid disclosing figures for individual companies.

Table 17. Production and Stocks of Fat and Oil Products: 1994

[Millions of pounds]

Product description	Total	Dec.	Nov.	Oct.	Sep.	Aug.	July	June	May	April	March	Feb.	Jan.
Baking and frying fats:													
Vegetable oil:													
Production	5,657.7	448.5	508.3	503.5	487.3	536.0	437.4	467.6	450.7	473.9	495.1	423.1	426.2
Stocks ¹	83.4	83.4	86.4	83.7	82.3	106.5	83.4	79.6	84.7	86.8	92.3	90.1	89.1
Animal fats or blends:													
Production	676.1	54.2	60.5	63.0	64.0	63.0	48.0	54.4	51.8	52.9	59.3	52.5	52.4
Stocks ¹	6.8	6.8	7.7	8.3	8.0	7.9	7.5	9.2	7.0	8.1	7.9	9.1	11.3
Soybean salad and cooking oils:													
Production	5,167.8	465.0	446.1	481.5	452.8	457.3	414.3	428.0	429.6	438.1	438.3	376.2	340.6
Stocks ¹	67.0	67.0	52.7	55.1	54.9	54.8	71.2	49.8	61.6	68.2	66.4	68.0	64.5
Other salad and cooking oils:													
Production	1,378.9	130.5	121.5	117.9	117.5	142.2	109.1	114.4	124.3	109.3	110.6	95.1	86.5
Stocks ¹	30.9	30.9	27.7	26.8	32.9	59.4	53.4	57.1	53.3	57.3	43.1	37.3	38.4
Margarine:													
Production	2,622.7	242.4	252.8	218.1	218.1	216.3	188.6	212.7	183.3	188.8	243.5	229.9	228.2
Stocks ¹	62.0	62.0	83.5	83.3	71.2	64.3	69.4	64.5	70.5	79.8	78.1	77.5	67.0
Glycerine crude:													
Production	333.1	26.9	31.1	28.5	26.9	30.5	27.7	28.1	27.2	26.1	27.8	24.4	27.9
Used in refining	352.9	30.3	34.0	31.0	30.8	28.3	25.3	34.7	27.3	28.3	30.1	24.5	28.3
Stocks ¹	25.2	25.2	24.6	24.7	28.3	30.5	30.0	27.2	29.3	33.2	30.8	30.4	34.8
Glycerine refined:													
Production	349.7	30.0	33.8	30.7	30.6	28.1	25.2	34.5	26.8	27.9	30.0	24.4	27.7
Stocks ¹	8.8	8.8	11.0	10.9	12.7	10.9	15.0	11.8	10.0	13.9	14.4	12.4	15.2
Fatty acids:													
Production	1,965.1	167.0	173.3	167.8	165.9	161.0	150.3	160.1	168.2	171.3	174.1	165.2	140.7
Stocks ¹	105.3	105.3	96.0	102.3	104.2	97.6	91.5	91.8	93.7	97.2	110.4	97.3	112.8
Meat meal and tannage:													
Production	5,954.9	532.0	505.7	520.1	514.8	542.4	451.5	505.6	497.5	465.5	507.8	455.0	457.0
Meat and bone meal ..	4,598.4	418.2	390.9	402.9	395.8	423.8	353.9	394.9	380.7	356.8	390.2	344.6	345.6
Dry rendered tannage ..	1,324.0	110.1	111.0	113.6	115.5	116.2	95.3	108.3	114.1	106.9	114.8	107.3	111.0
Meat and bone meal, n.s.k.	32.5	3.7	3.8	3.5	3.5	2.4	2.3	2.4	2.8	1.8	2.7	3.1	0.5
Stocks:													
Meat and bone meal ..	44.7	44.7	51.1	48.1	40.8	51.0	50.3	44.0	43.7	47.5	40.8	41.3	37.3
Dry rendered tannage ..	8.9	8.9	10.4	11.3	8.4	9.4	11.0	10.6	10.4	9.3	9.1	8.2	9.2
All other products:													
Production	2,485.8	210.9	210.9	201.9	201.5	216.9	194.8	216.7	213.6	201.1	229.3	185.9	202.4
Stocks ¹	19.0	19.0	17.2	17.7	19.2	19.6	19.3	19.0	22.9	23.4	22.1	15.9	16.0

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

n.s.k. Not specified by kind.

Note: Detailed figures may not add to total due to independent rounding.

Table 18A. Selected Fats and Oils Consumed in End Products: 1994

[Millions of pounds]

Product description	Total all fats and oils	Cotton-seed	Soybean	Corn	Peanut	Safflower seed	Coconut	Linseed	Sunflower	Tall	
Total	22,058.7	563.6	12,474.1	(D)	151.7	33.6	969.2	124.3	110.9	1,362.5	
Consumption in edible products	15,373.8	554.1	12,157.8	679.0	150.6	32.6	227.1	-	(D)	-	
Baking and frying fats	6,364.9	216.2	4,928.9	125.5	-	-	(D)	-	(D)	-	
Salad or cooking oil	6,580.4	285.0	5,218.7	423.2	(D)	(D)	-	-	(D)	-	
Margarine	2,002.8	(D)	1,793.2	(D)	-	-	-	-	-	-	
Other edible products	425.7	(D)	217.0	(D)	(D)	(D)	(D)	-	-	-	
Consumption in inedible products	6,586.0	9.5	316.3	(D)	1.1	1.0	742.1	124.3	(D)	1,362.5	
Soap	770.0	(D)	(D)	-	-	-	146.1	-	-	(D)	
Paint and varnish	115.1	-	47.6	-	-	(D)	(D)	33.0	(D)	(D)	
Feed	2,272.5	-	-	-	-	-	-	-	-	-	
Resins and plastics	240.7	(D)	119.6	-	-	(D)	2.3	50.9	(D)	48.4	
Lubricants	120.4	(D)	-	-	-	-	(D)	-	-	6.1	
Fatty acids	2,306.2	-	(D)	-	-	-	(D)	-	(D)	1,025.0	
Other inedible products	761.1	(D)	91.9	(D)	1.1	(D)	(D)	40.4	(D)	(D)	
	Castor	Tung	Palm	Palm kernel	Fish	Lard ¹	Edible tallow ¹	Inedible tallow	Veg-etable oil foots	Rape-seed	Other fats and oils
Total	61.9	9.3	205.6	280.0	9.5	451.9	643.1	3,288.8	112.1	(D)	(D)
Consumption in edible products	-	-	87.8	(D)	-	324.7	411.4	-	-	446.3	(D)
Baking and frying fats	-	-	(D)	(D)	-	286.7	404.6	-	-	(D)	-
Salad or cooking oil	-	-	-	(D)	-	-	-	-	-	316.5	(D)
Margarine	-	-	-	-	-	(D)	(D)	-	-	(D)	-
Other edible products	-	-	(D)	(D)	-	(D)	(D)	-	-	-	(D)
Consumption in inedible products	61.9	9.3	117.8	(D)	9.5	127.2	231.7	3,189.9	112.1	(D)	47.3
Soap	(D)	-	(D)	(D)	-	-	(D)	300.8	-	-	-
Paint and varnish	(D)	1.2	-	-	(D)	-	-	-	-	-	(D)
Feed	-	-	(D)	-	-	-	(D)	2,101.9	87.0	-	20.5
Resins and plastics	1.9	6.6	-	-	0.5	-	(D)	-	-	-	2.4
Lubricants	2.4	-	(D)	-	3.7	8.9	(D)	81.8	-	(D)	7.4
Fatty acids	-	-	37.8	(D)	-	-	(D)	634.0	-	(D)	(D)
Other inedible products	41.0	1.5	5.4	-	(D)	118.3	(D)	71.4	25.1	(D)	(D)

¹Includes 41.7 million pounds of lard and edible tallow consumed in margarine for 1994.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 18B. Total Consumption in Edible and Inedible Products: 1994

[Millions of pounds]

Product description	Total	Dec.	Nov.	Oct.	Sep.	Aug.	July	June	May	April	March	Feb.	Jan.
Consumption in edible products ¹	15,373.8	1,318.9	1,362.5	1,375.7	1,334.2	1,408.2	1,192.0	1,270.2	1,241.2	1,265.4	1,327.3	1,154.4	1,123.8
Baking or frying fats	6,364.9	504.7	570.0	569.8	553.3	600.4	486.8	523.1	507.0	530.0	557.5	479.4	482.9
Salad or cooking oil	6,580.4	596.6	569.3	603.2	574.6	601.7	525.1	546.0	554.6	552.0	552.6	475.1	429.6
Margarine	2,002.8	180.4	191.1	165.3	167.7	165.7	145.2	165.5	144.0	149.8	181.1	171.2	175.8
Other edible products ²	425.7	37.2	32.1	37.4	38.6	40.4	34.9	35.6	35.6	33.6	36.1	28.7	35.5
Consumption in inedible products ¹	6,586.0	573.4	554.7	554.2	555.1	564.1	513.2	574.2	574.5	555.3	547.1	506.1	514.1
Soap	770.0	70.4	62.9	68.1	65.9	54.8	60.1	62.5	68.3	71.6	60.3	66.3	58.8
Paint and varnish	115.1	10.3	7.3	10.8	11.0	12.1	9.0	10.4	11.7	8.1	7.8	6.9	9.7
Feed	2,272.5	190.2	191.8	186.5	191.9	197.8	176.5	199.3	196.8	197.4	191.5	176.2	176.7
Resins and plastics	240.7	14.0	17.5	18.9	20.5	23.8	24.5	23.0	24.8	20.9	21.6	14.8	16.6
Lubricants	120.4	9.4	10.1	10.5	11.5	10.9	8.6	10.1	10.0	9.9	10.1	9.4	9.8
Fatty acids	2,306.2	204.0	197.1	198.3	199.8	196.1	177.2	200.8	192.3	188.6	201.6	168.8	181.6
Other inedible products	761.1	75.2	67.9	61.1	54.5	68.6	57.4	68.1	70.6	58.9	54.3	63.7	60.9

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

Note: Detailed figures may not add to total due to independent rounding.

Table 19. Shipments, Exports, Imports, and Apparent Consumption of Animal and Vegetable Fats and Oils: 1994

[Quantity in millions of kilograms]

Product description	Manufacturers' production	Exports of domestic merchandise ¹	Percent exports to manufacturers' production	Imports for consumption ²	Apparent consumption ³
Cottonseed:					
Crude	518.7	9.4	-	-	509.3
Refined	462.2	93.5	0.2	11.9	380.6
Soybean:					
Crude	6,502.9	623.1	0.1	24.7	5,904.5
Refined	5,621.3	32.3	-	-	5,589.0
Corn oil (crude and refined)	1,370.8	176.2	0.1	3.1	1,197.7
Peanut:					
Crude	103.5	21.5	0.2	5.0	87.0
Refined	67.6	-	-	-	67.6
Edible tallow	807.0	133.7	0.2	7.3	680.6
Inedible tallow	1,683.4	982.7	0.6	15.9	716.6

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²Source: Bureau of the Census report IM146, *U.S. Imports for Consumption*.³"Apparent consumption" represents new domestic supply and is derived by subtracting exports from the sum of manufacturers' shipments plus imports.

- Represents zero.

Note: 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.

Table 20A. **Supply and Distribution of Total Cottonseed Oil, Soybean Oil, Corn Oil, and Palm Oil: 1994**

[Millions of pounds]

Supply and distribution	Cottonseed oil	Soybean oil	Corn oil	Palm oil
Beginning stocks	123.3	1,406.8	65.0	31.5
Production (crude)	1,143.6	14,336.2	1,951.3	(X)
Imports	11.9	24.7	3.1	160.1
A. Total supply (+)	1,278.8	15,767.7	2,019.4	191.6
Ending stocks	114.7	1,058.3	90.2	34.9
Production of foots ¹	33.8	380.4	66.4	(D)
Exports ²	102.9	655.4	176.2	2.9
Domestic consumption ³	563.6	12,474.1	(D)	205.6
B. Total distribution (-)	815.0	14,568.2	(D)	(D)
Statistical discrepancy (A-B) ⁴	463.8	1,199.5	(D)	(D)
Discrepancy as a percent of total supply	36.3	7.6	(D)	(D)

¹Represents difference between crude oil consumed in refining and refined oil production.²Represents crude and once-refined oil only; excludes exports of fully refined oil.³Consumption of once-refined oils plus direct consumption of crude in end products.⁴Represents difference between the several elements of supply and distribution due to timing of production and stock reported, goods in transit, etc.

D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

Table 20B. **Supply and Distribution of Selected Fats and Oils: 1994**

[Millions of pounds]

Supply and distribution	Cottonseed		Soybean		Inedible tallow and grease
	Crude	Once-refined ¹	Crude	Once-refined ¹	
Beginning stocks	32.8	90.5	1,189.3	217.5	320.4
Production	1,143.6	1,018.9	14,336.2	12,392.6	6,711.9
Imports	-	11.9	24.7	-	15.9
A. Total supply (+)	1,176.4	1,121.3	15,550.2	12,610.1	7,048.2
Ending stocks	33.7	81.0	826.6	231.7	348.3
Exports	9.4	93.5	623.1	32.3	982.7
Reported domestic consumption	1,052.7	563.6	12,773.0	12,474.1	3,288.8
B. Total distribution (-)	1,095.8	738.1	14,222.7	12,738.1	4,619.8
Statistical discrepancy (A-B) ²	80.6	383.2	1,327.5	- 128.0	2,428.4
Discrepancy as a percent of total supply	6.9	34.2	8.5	- 1.0	34.5

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

- Represents zero.

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 John Miller 301-457-4626 or Steve Pope 301-457-1165.

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 fabric 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 fabric is chiefly cotton, wool, or manmade fiber. For example, a fabric which is 55 percent cotton and 45 percent rayon is classified in the cotton section; a fabric 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 fabric) or 5.9 ounces per square yard (chiefly cotton fabric), 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 Boy's:

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 fabric. 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 fabric designed for hard wear,

and work pants with closed-seam construction and a waistband in the same fabric as the shell. Also includes waistband overalls.

Work Shirts. Includes open front or pullover shirts in a sturdy fabric, 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 fabric, 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 Junior's:

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, plastic 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 fabric.

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 Fabric. Fabric 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 fabric) 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 fabric) or 5.9 ounces per square yard (chiefly cotton fabric), napped, or not. They are woven as a plain weave fabric except that two or more warp ends are woven as one (taped warp). Oxford cloth is not to be classified as a plain weave fabric.

Plain Weave Fabrics. A fabric 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 fabric) or 5.9 ounces per square yard (chiefly cotton fabric) 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 fabric) or 5.9

ounces per square yard (chiefly cotton fabric), 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 fabric) or 5.9 ounces per square yard (chiefly cotton fabric), 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 fabric) or 5.9 ounces per square yard (chiefly cotton fabric), 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 fabric) or 5.9 ounces per square yard (chiefly cotton fabric) 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 fabric.

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 Fabric Production; M22P, Consumption on the Cotton System and Stocks; and MQ22T, Broadwoven Fabrics, Gray, surveys.

Table A. Textile Machinery in Place: End of Year 1994

Product description	Machines in place
Total looms	83,724
Shuttle type looms	17,853
Single shuttle cam looms	11,612
Single shuttle dobby looms	3,239
Multiple shuttle box or head motion looms	2,119
Double shuttle pile and plush, and jacquard looms	883
Shuttleless looms and weaving machines	65,871
Single filling insertion capability	38,714
Air jet looms	16,272
Water jet looms	5,835
Projectile looms	12,710
Rapier looms	3,897
Multiple filling insertion capability	26,277
Air jet looms	(D)
Water jet looms	(D)
Projectile looms	8,481
Rapier looms	12,925
Pile and plush looms	880
Cotton system spindles in place	7,266
Active, spinning 100 percent cotton fibers	2,918
Ring spindles	2,352
Open end position (rotors)	566
Active, spinning 100 percent manmade fibers	1,169
Ring spindles	1,137
Open end position (rotors)	32
Active, spinning cotton/manmade blends	2,737
Ring spindles	2,347
Open end position (rotors)	390
Knitting machines	21,466
Warp knitting machines (over 12 inches in length)	5,144
Pile fabrics	1,730
Elastic fabrics	854
All other warp knit fabrics	2,560
Warp knitting machines (12 inches or less in length)	722
Elastic fabrics	(D)
All other warp knit fabrics	(D)
Weft knitting machines (over 12 inches in length)	16,322
Pile fabrics	688
Elastic fabrics	207
Single circular knit	10,456
Double knit and interlock	2,663
Rib, other than double knit and interlock	2,308
Weft knitting machines (12 inches or less in length)	412
Elastic fabrics	(D)
All other weft knit fabrics	(D)
Knitting garment lengths, trimmings, and collars	4,263
Knit garment lengths, made on sweater-strip, V-bed strip, and full-fashioned machines	2,932
Knit trimmings and collars	1,331

D Data withheld to avoid disclosing figures for individual companies.

Table B. Textile Machines in Place and Hours Operated, by Quarter: 1994

[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	603,988	86,668	155,288	85,513	153,611	84,398	146,121	83,724	148,968
Shuttle type looms	121,146	20,879	33,098	19,784	31,179	18,909	28,868	17,853	28,001
Single shuttle cam looms	80,548	13,394	22,076	12,233	20,667	11,824	18,606	11,612	19,199
Single shuttle dobby looms	22,505	4,193	6,258	4,296	5,808	3,914	5,836	3,239	4,603
Multiple shuttle box or head motion looms	13,164	2,307	3,368	2,270	3,297	2,273	3,288	2,119	3,211
Double shuttle pile and plush, and jacquard looms	4,929	985	1,396	985	1,407	898	1,138	883	988
Shuttleless looms and weaving machines	482,842	65,789	122,190	65,729	122,432	65,489	117,253	65,871	120,967
Single filling insertion capability	296,552	39,271	75,790	39,032	75,674	38,419	71,038	38,714	74,050
Air jet looms	129,358	16,442	33,167	16,382	33,084	16,075	30,591	16,272	32,516
Water jet looms	41,061	6,167	10,939	6,090	10,348	5,916	9,862	5,835	9,912
Projectile looms	97,266	12,616	24,265	12,567	24,790	12,589	23,795	12,710	24,416
Rapier looms	28,867	4,046	7,419	3,993	7,452	3,839	6,790	3,897	7,206
Multiple filling insertion capability	181,741	25,677	45,185	25,850	45,546	26,200	45,130	26,277	45,880
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	64,265	9,317	16,963	8,939	16,342	8,612	15,529	8,481	15,431
Rapier looms	83,039	12,572	20,818	12,646	21,010	12,743	20,290	12,925	20,921
Pile and plush looms	4,549	841	1,215	847	1,212	870	1,085	880	1,037
Cotton system spindles in place	49,886	23,822	13,002	23,049	12,989	22,721	12,286	22,010	11,609
Active, spinning 100 percent cotton fibers	21,470	9,604	5,571	9,233	5,628	9,008	5,291	8,751	4,980
Ring spindles	16,938	7,990	4,483	7,584	4,466	7,333	4,132	7,071	3,857
Open end position (rotors)	4,532	1,614	1,088	1,649	1,162	1,675	1,159	1,680	1,123
Active, spinning 100 percent manmade fibers	8,538	3,843	2,275	3,708	2,185	3,683	2,128	3,532	1,950
Ring spindles	8,233	3,737	2,210	3,600	2,119	3,581	2,066	3,434	1,838
Open end position (rotors)	305	106	65	108	66	102	62	98	112
Active, spinning cotton/manmade blends	19,878	8,836	5,156	8,738	5,176	8,730	4,867	8,429	4,679
Ring spindles	16,593	7,724	4,416	7,559	4,378	7,530	3,993	7,246	3,806
Open end position (rotors)	3,285	1,112	740	1,179	798	1,200	874	1,183	873

D Data withheld to avoid disclosing figures for individual companies.

*Revised by 5 percent or more from previously published figures.

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.

2.1 CONSUMPTION ON THE COTTON SYSTEM

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 around 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: 1994**

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

Month	Daily average consumption						Stocks		Daily average spindle hours operated ¹
	Cotton			Manmade fibers			Cotton ²	Manmade fiber staple	
	Total	Upland	Long staple ¹	Total	Cellulosic	Non-cellulosic			
NOT SEASONALLY ADJUSTED									
December	35,874	35,602	272	5,248	779	4,469	12,498	96,554	156
November	41,907	41,582	325	6,298	979	5,319	11,649	85,976	188
October	43,650	43,318	332	6,449	957	5,492	7,069	81,211	196
September	42,797	42,491	306	6,258	893	5,365	2,598	75,913	194
August	43,511	43,195	316	6,452	910	5,542	2,379	70,728	197
July	37,193	36,937	256	5,621	703	4,918	3,134	68,178	175
June	41,278	40,983	295	6,351	823	5,528	4,277	60,663	197
May	41,476	41,122	354	6,561	889	5,672	5,874	59,741	203
April	40,289	39,958	331	6,411	919	5,492	7,321	56,572	201
March	39,968	39,654	314	6,269	890	5,379	8,719	53,064	201
February	39,273	38,955	318	6,152	919	5,233	10,111	58,721	204
January	37,167	36,899	268	5,847	920	4,927	11,488	65,189	195
SEASONALLY ADJUSTED									
December	41,985	41,713	272	6,316	905	5,411	7,727	96,554	188
November	42,123	41,798	325	6,371	944	5,427	8,140	85,976	189
October	41,436	41,104	332	6,169	906	5,263	7,187	81,211	184
September	41,697	41,391	306	6,136	880	5,256	6,504	75,913	192
August	41,329	41,013	316	6,088	847	5,241	6,542	70,728	189
July	40,528	40,272	256	6,144	816	5,328	6,535	68,178	197
June	40,689	40,394	295	6,217	818	5,399	6,878	60,663	195
May	39,859	39,505	354	6,254	832	5,422	7,207	59,741	192
April	39,666	39,335	331	6,163	869	5,294	7,498	56,572	194
March	39,265	38,951	314	6,144	896	5,248	7,575	53,064	196
February	38,179	37,861	318	5,994	929	5,065	7,492	58,721	196
January	37,198	36,930	268	5,934	942	4,992	7,787	65,189	196

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

²Cotton in 1,000 running bales.

Table 2. Supply and Distribution of Cotton 1993/1994 Crop Year

Supply and distribution	Cotton
SUPPLY	
Stocks, July 31, 1993	4,481,637
In consuming establishments	694,176
In public storage and at compresses	3,587,461
Elsewhere	200,000
Net imports	5,352
Total imports for consumption	5,352
Less: Re-exports	-
Ginnings, crop year of 1993 during crop year 1993 to 1994	15,676,520
Total ginnings, crop year of 1993	15,685,970
Less: Ginnings prior to August 1, 1993	9,450
Ginnings, prior to August 1, 1994, crop year of 1993	112,900
Aggregate supply	20,276,409
DISTRIBUTION	
Total exports	6,638,100
Consumption, August 1, 1993, to July 30, 1994	10,018,526
Cotton lost or destroyed	25,000
Stocks, July 30, 1994 ¹	3,508,562
In consuming establishments	650,615
In public storage	2,482,947
Elsewhere (partially estimated) ²	375,000
Aggregate distribution	20,190,188
Excess of reported supply over distribution	86,221

¹The cotton "carry-over" in the United States as of August 1, 1994, is 3,508,562 bales. Linters are not included in this "carry-over." In addition to stocks of cotton in warehouses and in consuming establishments, this figure includes a partially estimated count of cotton held elsewhere.

²Includes 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.

- Represents zero.

Table 3. Consumption of Domestic and Foreign Cotton, by Staple Length, by Month: 1994

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								
Total, year ending December 31, 1994	10,487,247	10,407,605	196,617	2,098,582	7,703,803	408,603	-	79,642
December	896,844	890,055	17,019	181,956	657,934	33,146	-	6,789
November	838,151	831,646	15,034	167,840	616,323	32,449	-	6,505
October	873,014	866,374	17,396	173,032	642,603	33,343	-	6,640
September	1,069,943	1,062,284	18,002	225,413	780,821	38,048	-	7,659
August	870,234	863,909	15,597	174,689	640,412	33,211	-	6,325
July	743,855	738,742	12,486	148,487	548,123	29,646	-	5,113
June	1,031,932	1,024,568	17,169	213,439	753,831	40,129	-	7,364
May	829,508	822,438	13,752	169,087	606,673	32,926	-	7,070
April	805,775	799,157	17,865	157,818	592,895	30,579	-	6,618
March	999,194	991,349	21,472	193,748	736,565	39,564	-	7,845
February	785,461	779,097	15,757	149,006	582,476	31,858	-	6,364
January	743,336	737,986	15,068	144,067	545,147	33,704	-	5,350
Thousand pounds								
Total, year ending December 31, 1994	5,230,600	5,190,557	98,341	1,045,640	3,842,566	204,010	-	40,043
December	445,529	442,115	8,526	90,229	326,850	16,510	-	3,414
November	417,099	413,821	7,544	83,487	306,597	16,193	-	3,278
October	435,022	431,682	8,766	86,138	320,150	16,628	-	3,340
September	534,510	530,663	9,058	112,317	390,287	19,001	-	3,847
August	434,948	431,767	7,842	87,132	320,240	16,553	-	3,181
July	371,535	368,963	6,250	74,089	273,805	14,819	-	2,572
June	515,425	511,709	8,600	106,551	376,507	20,051	-	3,716
May	413,969	410,409	6,862	84,366	302,731	16,450	-	3,560
April	402,288	398,963	8,875	78,717	296,084	15,287	-	3,325
March	498,117	494,166	10,711	96,563	367,142	19,750	-	3,951
February	391,469	388,300	7,802	74,241	290,343	15,914	-	3,169
January	370,689	367,999	7,505	71,810	271,830	16,854	-	2,690

- Represents zero.

Note: Data for August to December 1994 include information for establishments not included in prior months; therefore, the data are not directly comparable to previous months. These establishments represent approximately 1.75 percent of total cotton consumption.

Table 4. Consumption of Domestic and Foreign Cotton, by State: 1994

[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											
Total, year ending December 31, 1994.	10,487,247	10,462,995	1,478,491	1,798,394	4,570,367	1,964,121	103,301	145,958	189,100	213,263	24,252
December	896,844	894,503	122,359	157,497	395,056	166,129	10,023	11,007	15,211	17,221	2,341
November	838,151	837,556	112,747	143,485	371,669	158,255	8,342	11,108	14,937	17,013	595
October	873,014	871,348	121,786	149,071	381,697	162,054	8,931	14,646	15,438	17,725	1,666
September	1,069,943	1,068,741	151,853	190,090	464,302	194,416	11,131	15,004	19,494	22,451	1,202
August	870,234	869,003	122,516	152,379	377,488	162,105	7,477	12,426	16,752	17,860	1,231
July	743,855	742,236	100,594	127,144	323,603	142,352	8,214	9,999	15,514	14,816	1,619
June	1,031,932	1,031,048	144,810	180,694	446,730	193,324	9,572	15,166	18,857	21,895	884
May	829,508	828,367	115,788	139,132	361,729	159,830	7,549	12,066	14,390	17,883	1,141
April	805,775	800,605	115,591	135,838	351,891	146,946	7,277	11,774	14,302	16,986	5,170
March	999,194	994,468	149,626	166,029	435,053	186,233	10,306	11,403	16,200	19,618	4,726
February	785,461	783,230	116,493	130,642	336,481	151,395	7,744	11,241	13,601	15,633	2,231
January	743,336	741,890	104,328	126,393	324,668	141,082	6,735	10,118	14,404	14,162	1,446
Thousand pounds											
Total, year ending December 31, 1994.	5,230,600	5,218,473	735,567	897,325	2,281,406	979,341	51,672	72,555	94,411	106,196	12,127
December	445,529	444,357	60,692	78,282	196,192	82,627	5,002	5,457	7,563	8,542	1,172
November	417,099	416,800	55,860	71,428	185,298	78,683	4,167	5,501	7,445	8,418	299
October	435,022	434,188	60,342	74,601	190,392	80,660	4,451	7,247	7,708	8,787	834
September	534,510	533,908	75,771	94,756	232,425	96,991	5,559	7,452	9,739	11,215	602
August	434,948	434,333	61,152	76,124	188,934	80,935	3,726	6,155	8,375	8,932	615
July	371,535	370,727	50,179	63,563	161,811	70,961	4,097	4,960	7,759	7,397	808
June	515,425	514,984	72,159	90,252	223,351	96,518	4,778	7,559	9,429	10,938	441
May	413,969	413,400	57,617	69,494	180,710	79,662	3,777	6,019	7,197	8,924	569
April	402,288	399,703	57,458	67,832	175,525	73,761	3,640	5,871	7,150	8,466	2,585
March	498,117	495,755	74,440	82,807	216,972	92,782	5,224	5,690	8,087	9,753	2,362
February	391,469	390,353	57,991	65,083	167,839	75,422	3,877	5,602	6,786	7,753	1,116
January	370,689	369,965	51,906	63,103	161,957	70,339	3,374	5,042	7,173	7,071	724

Table 5. Stocks of Cotton Held in Consuming Establishments and in Public Warehouses: 1994

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

Month	Total ¹	In consuming establishments			In warehouses and compresses		
		Total	American upland	Other cotton ²	Total	American upland	Other cotton ²
December	12,497,572	651,916	646,654	5,262	11,845,656	11,543,821	301,835
November	11,649,260	585,231	580,714	4,517	11,064,029	10,789,729	274,300
October	7,069,175	577,503	572,116	5,387	6,491,672	6,282,134	209,538
September	2,597,999	587,196	580,777	6,419	2,010,803	1,834,306	176,497
August	2,379,247	641,228	634,880	6,348	1,738,019	1,558,798	179,221
July	3,133,562	650,615	645,239	5,376	2,482,947	2,279,944	203,003
June	4,277,388	653,177	647,449	5,728	3,624,211	3,409,616	214,595
May	5,874,489	663,074	657,134	5,940	5,211,415	4,972,359	239,056
April	7,320,946	682,361	676,650	5,711	6,638,585	6,376,732	261,853
March	8,718,815	683,053	677,177	5,876	8,035,762	7,755,549	280,213
February	10,111,056	661,206	655,083	6,123	9,449,850	9,147,066	302,784
January	11,488,398	652,636	644,427	8,209	10,835,762	10,515,238	320,524

¹Excludes 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.

²Includes foreign cotton, American-Pima, Sea Island, and other domestic cotton.

Table 6. Stocks of Cotton Held by Consuming Establishments, by State: 1994

[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	651,916	651,690	153,505	84,697	240,379	117,969	8,036	(D)	(D)	8,268	226
November	585,231	584,326	147,770	83,216	208,160	108,435	6,013	(D)	(D)	8,783	905
October	577,503	576,856	124,290	86,598	218,270	110,623	5,340	(D)	(D)	9,562	647
September	587,196	586,730	120,848	94,019	210,293	119,014	7,626	(D)	(D)	10,893	466
August	641,228	640,695	131,506	99,913	230,086	133,179	9,305	(D)	(D)	12,691	533
July	650,615	650,125	136,475	91,971	232,910	145,224	11,423	(D)	(D)	13,747	490
June	653,177	652,614	128,453	90,494	238,937	147,573	10,759	(D)	(D)	11,990	563
May	663,074	662,558	143,478	92,128	230,273	153,699	9,872	(D)	(D)	11,339	516
April	682,361	681,904	145,155	96,641	234,505	161,184	10,348	(D)	(D)	8,415	457
March	683,053	682,307	151,912	90,221	245,366	148,786	7,911	(D)	(D)	10,501	746
February	661,206	660,547	149,040	83,278	245,246	140,224	6,825	(D)	(D)	7,074	659
January	652,636	652,153	158,379	89,051	231,071	130,105	6,936	(D)	(D)	7,526	483
Thousand pounds											
December	323,883	323,770	75,855	42,202	119,831	58,543	4,006	(D)	(D)	4,109	113
November	290,741	290,288	72,970	41,357	103,878	53,835	2,993	(D)	(D)	4,367	453
October	287,584	287,261	61,831	43,108	108,896	54,985	2,656	(D)	(D)	4,769	323
September	292,884	292,651	60,090	47,101	105,109	59,168	3,786	(D)	(D)	5,439	233
August	319,160	318,893	65,309	49,881	114,636	66,229	4,602	(D)	(D)	6,354	267
July	324,690	324,445	68,166	45,905	116,404	72,235	5,655	(D)	(D)	6,887	245
June	326,336	326,055	64,414	45,139	119,510	73,445	5,319	(D)	(D)	6,004	281
May	329,733	329,475	71,563	46,013	114,004	76,418	4,872	(D)	(D)	5,683	258
April	340,192	339,963	72,332	48,300	117,151	80,046	5,114	(D)	(D)	4,202	229
March	340,767	340,394	75,730	45,081	122,676	73,999	3,911	(D)	(D)	5,242	373
February	329,720	329,391	74,397	41,582	122,461	69,704	3,387	(D)	(D)	3,527	329
January	325,527	325,285	78,905	44,450	115,461	64,803	3,439	(D)	(D)	3,740	242

D Data withheld to avoid disclosing figures for individual companies.

Table 7. Stocks of Cotton Held in Public Storage and at Compresses, by State: 1994

States	December	November	October	Sep- tember	August	July	June	May	April	March	February	January
Total	11,845,656	11,064,029	6,491,672	2,010,803	1,738,019	2,482,947	3,624,211	5,211,415	6,638,585	8,035,762	9,449,850	10,835,762
Alabama	581,779	497,439	258,841	45,987	41,512	72,439	107,453	157,060	212,637	257,452	314,630	364,524
Arizona and New Mexico	674,445	655,989	427,827	180,082	188,868	227,553	285,371	357,097	448,007	549,624	657,267	754,299
Arkansas	1,072,435	1,081,366	685,261	142,389	52,775	131,019	222,059	321,093	394,024	469,223	533,024	613,680
California	1,608,444	1,318,158	703,591	124,155	210,604	379,533	628,730	1,061,531	1,499,740	1,908,798	2,118,239	2,313,754
Florida and Georgia	781,770	546,698	244,935	52,169	60,507	102,763	146,612	205,831	263,096	295,357	362,948	423,449
Louisiana	1,203,135	1,383,931	902,899	304,519	64,748	169,517	291,395	406,487	527,560	640,261	768,289	869,494
Mississippi	1,502,838	1,595,492	1,009,944	249,701	66,101	182,149	307,782	467,936	598,820	740,475	905,835	1,039,511
Missouri	202,599	235,447	181,539	39,329	7,833	20,423	35,961	66,878	93,444	119,521	150,884	168,563
North Carolina	457,441	379,262	180,639	66,032	85,211	113,800	137,050	175,785	210,328	229,577	241,658	254,411
Oklahoma and Texas	2,757,283	2,398,558	1,341,193	641,900	749,323	714,114	994,206	1,410,737	1,723,592	2,094,918	2,651,579	3,288,941
South Carolina	149,266	117,344	79,122	46,313	55,227	67,947	73,340	88,712	110,769	120,125	137,788	133,353
Tennessee	854,221	854,345	475,881	118,227	155,310	301,690	394,252	492,268	556,568	610,431	607,709	611,783
Other States	-	-	-	-	-	-	-	-	-	-	-	-

- Represents zero.

Table 8. Consumption of Manmade Fiber Staple: 1994

[Thousands of pounds]

Month	Total	Rayon and/or acetate	Total noncellulosic	Nylon	Acrylic and modacrylic	Polyester	Other manmade fiber staple
Total, year ending December 31, 1994 ..	1,598,873	228,498	1,370,375	48,737	107,262	1,208,101	6,275
December	131,190	19,464	111,726	3,737	8,679	98,914	396
November	125,943	19,571	106,372	3,736	8,013	94,087	536
October	128,978	19,143	109,835	3,320	8,062	97,671	782
September	156,442	22,319	134,123	4,349	10,234	118,940	600
August	129,048	18,206	110,842	4,047	8,426	97,832	537
July	112,408	14,055	98,353	3,689	7,485	86,741	438
June	158,765	20,576	138,189	5,324	11,303	120,953	609
May	131,218	17,779	113,439	3,832	9,211	99,964	432
April	128,208	18,370	109,838	3,953	9,247	96,168	470
March	156,709	22,238	134,471	5,246	11,302	117,360	563
February	123,037	18,386	104,651	3,990	8,043	92,056	562
January	116,927	18,391	98,536	3,514	7,257	87,415	350

Table 9. Stocks of Manmade Fiber Staple: 1994

[Thousands of pounds]

Month	Total ¹	Rayon and/or acetate	Total noncellulosic	Nylon	Acrylic and modacrylic	Polyester	Other manmade fiber staple
December	96,554	15,658	80,896	693	6,685	73,305	213
November	85,976	14,407	71,569	914	6,803	63,632	220
October	81,211	13,487	67,724	785	5,637	60,941	361
September	75,913	14,571	61,342	1,011	5,136	54,941	254
August	70,728	15,914	54,814	547	4,207	49,800	260
July	68,178	15,443	52,735	1,000	4,866	46,490	379
June	60,663	14,975	45,688	990	4,452	39,936	310
May	59,741	14,391	45,350	883	4,872	39,123	472
April	56,572	13,900	42,672	1,789	4,925	35,577	381
March	53,064	13,639	39,425	1,072	4,407	33,538	408
February	58,721	14,548	44,173	1,060	4,144	38,560	409
January	65,189	14,771	50,418	1,401	4,565	43,983	469

¹Stocks are only for mills with cotton system spindles.

Table 10. Cotton System Spindles in Place and Active, by Type of Fiber Spun: 1994

[In thousands]

State and type	December	November	October	September	August	July	June	May	April	March	February	January
Spindles in place:												
United States	7,266	7,346	7,398	7,481	7,565	7,675	7,690	7,721	7,838	7,921	7,924	7,977
By State:												
Alabama	698	700	699	699	701	700	695	700	764	773	771	779
Georgia	649	662	661	678	690	746	744	744	746	741	745	751
North Carolina	2,829	2,849	2,826	2,837	2,859	2,852	2,857	2,865	2,892	2,921	2,914	2,937
South Carolina	2,589	2,631	2,706	2,751	2,784	2,838	2,842	2,849	2,872	2,923	2,931	2,948
Tennessee.....	254	257	258	258	258	260	259	258	257	257	258	257
Texas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia.....	146	146	147	158	172	183	189	202	201	202	201	201
Other States	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles	6,261	6,342	6,403	6,490	6,546	6,663	6,689	6,725	6,858	6,952	6,964	7,009
Open-end position (i.e., rotors).....	1,005	1,004	995	991	1,019	1,012	1,001	996	980	969	960	968
Active, 100 percent cotton:												
United States	2,918	2,914	2,919	2,965	3,018	3,025	3,071	3,082	3,080	3,176	3,214	3,214
By State:												
Alabama	408	409	389	386	386	394	387	376	378	377	396	398
Georgia	275	273	275	284	289	307	305	303	306	298	299	307
North Carolina	1,190	1,192	1,200	1,191	1,242	1,234	1,251	1,267	1,259	1,375	1,387	1,373
South Carolina	765	764	788	831	826	815	854	860	856	844	849	855
Tennessee.....	162	155	157	152	150	149	151	146	140	149	148	141
Texas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia.....	53	54	54	57	61	62	61	64	71	67	64	71
Other States	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles	2,352	2,350	2,369	2,419	2,454	2,460	2,513	2,533	2,538	2,640	2,674	2,676
Open-end position (i.e., rotors).....	566	564	550	546	564	565	558	549	542	536	540	538
Active, 100 percent manmade fibers:												
United States	1,169	1,182	1,181	1,231	1,223	1,229	1,242	1,214	1,252	1,279	1,267	1,297
By State:												
Alabama	24	24	24	26	26	26	26	27	27	27	27	27
Georgia	72	72	74	74	74	74	74	74	74	78	77	76
North Carolina	737	746	744	756	727	716	706	691	717	719	710	720
South Carolina	315	317	312	345	365	383	406	392	404	424	422	443
Tennessee.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Texas	(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)
By type:												
Ring spindles	1,137	1,148	1,149	1,198	1,188	1,195	1,207	1,177	1,216	1,243	1,232	1,262
Open-end position (i.e., rotors).....	32	34	32	33	35	34	35	37	36	36	35	35
Active, other fibers and blends:												
United States	2,737	2,831	2,861	2,873	2,930	2,927	2,893	2,929	2,916	2,916	2,948	2,972
By State:												
Alabama	244	251	268	262	272	266	265	272	277	341	326	327
Georgia	242	272	268	275	274	258	258	260	255	255	260	263
North Carolina	797	808	793	786	796	790	801	794	785	722	719	739
South Carolina	1,318	1,360	1,382	1,398	1,423	1,443	1,389	1,411	1,409	1,417	1,463	1,467
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	2,347	2,436	2,463	2,477	2,527	2,526	2,495	2,530	2,534	2,533	2,580	2,611
Open-end position (i.e., rotors).....	390	395	398	396	403	401	398	399	382	383	368	361

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 11. Cotton System Spindle Hours, by Type of Fiber Spun: 1994

[In thousands]

State and type	December	November	October	September	August	July	June	May	April	March	February	January
Spindle hours:												
United States	3,918	3,765	3,926	4,841	3,949	3,496	4,922	4,053	4,014	5,020	4,076	3,906
By State:												
Alabama	384	360	379	478	386	333	461	379	388	485	425	412
Georgia	329	329	319	433	348	304	400	342	338	409	346	330
North Carolina	1,604	1,560	1,638	2,007	1,592	1,380	1,992	1,625	1,640	2,017	1,563	1,536
South Carolina	1,353	1,285	1,337	1,600	1,339	1,205	1,692	1,405	1,336	1,737	1,438	1,363
Tennessee	144	142	147	197	171	167	228	179	181	218	182	177
Texas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia	51	43	55	59	59	67	88	70	73	85	70	37
Other States	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles	3,212	3,100	3,189	4,001	3,259	2,931	4,131	3,427	3,405	4,268	3,492	3,349
Open-end position (i.e., rotors)	706	665	737	840	690	565	791	626	609	752	584	557
100 percent cotton:												
United States	1,718	1,600	1,662	2,030	1,729	1,532	2,115	1,764	1,749	2,141	1,772	1,658
By State:												
Alabama	212	203	212	245	217	186	260	210	223	245	226	206
Georgia	148	147	137	205	167	150	192	170	170	181	166	164
North Carolina	723	692	727	846	753	669	923	776	755	964	761	722
South Carolina	480	424	452	554	448	402	555	464	453	568	468	434
Tennessee	91	83	72	102	78	69	106	80	77	103	82	71
Texas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Virginia	26	21	31	32	28	27	36	29	31	33	30	22
Other States	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By type:												
Ring spindles	1,340	1,231	1,286	1,570	1,352	1,210	1,657	1,408	1,401	1,715	1,433	1,335
Open-end position (i.e., rotors)	378	369	376	460	377	322	458	356	348	426	339	323
100 percent manmade fibers:												
United States	625	611	714	882	669	577	831	666	688	861	692	722
By State:												
Alabama	9	9	9	11	9	7	10	8	7	10	7	7
Georgia	45	41	42	52	40	35	47	39	40	52	44	45
North Carolina	389	378	402	552	378	329	478	378	403	491	384	400
South Carolina	168	167	227	219	191	153	229	188	180	240	196	203
Tennessee	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Texas	(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)
By type:												
Ring spindles	601	592	645	859	649	558	806	645	668	835	672	703
Open-end position (i.e., rotors)	24	19	69	23	20	19	25	21	20	26	20	19
Other fibers and blends:												
United States	1,575	1,554	1,550	1,929	1,551	1,387	1,976	1,623	1,577	2,018	1,612	1,526
By State:												
Alabama	163	148	158	222	160	140	191	161	158	230	192	199
Georgia	136	141	140	176	141	119	161	133	128	176	136	121
North Carolina	492	490	509	609	461	382	591	471	482	562	418	414
South Carolina	705	694	658	827	700	650	908	753	703	929	774	726
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	1,271	1,277	1,258	1,572	1,258	1,163	1,668	1,374	1,336	1,718	1,387	1,311
Open-end position (i.e., rotors)	304	277	292	357	293	224	308	249	241	300	225	215

- Represents zero.

D Data withheld to avoid disclosing figures for individual companies.

Table 12. Consumption, Stocks, and Spindle Activity on the Cotton System, by Industry Groups: 1994

Product description	Unit of measure	Total	December	November	October	September	August	July	June	May	April	March	February	January
All industries total:														
Domestic and foreign cotton:														
Consumption	Bales	10,487,247	896,844	838,151	873,014	1,069,943	870,234	743,855	1,031,932	829,508	805,775	999,194	785,461	743,336
Stocks	do	(NA)	651,916	585,231	577,503	587,196	641,228	650,615	653,177	663,074	682,361	683,053	661,206	652,636
Manmade fiber staple:														
Consumption	M lb	1,598,873	131,190	125,943	128,978	156,442	129,048	112,408	158,765	131,218	128,208	156,709	123,037	116,927
Stocks	do	(NA)	96,554	85,976	81,211	75,913	70,728	68,178	60,663	59,741	56,572	53,064	58,721	65,189
Cellulosic:														
Consumption	do	228,498	19,464	19,571	19,143	22,319	18,206	14,055	20,576	17,779	18,370	22,238	18,386	18,391
Stocks	do	(NA)	15,658	14,407	13,487	14,571	15,914	15,443	14,975	14,391	13,900	13,639	14,548	14,771
Noncellulosic:														
Consumption	do	1,370,375	111,726	106,372	109,835	134,123	110,842	98,353	138,189	113,439	109,838	134,471	104,651	98,536
Stocks	do	(NA)	80,896	71,569	67,724	61,342	54,814	52,735	45,688	45,350	42,672	39,425	44,173	50,418
Spindle activity:														
Spindles in place	Thous.	(NA)	7,266	7,346	7,398	7,481	7,565	7,675	7,690	7,721	7,838	7,921	7,924	7,977
Active spindles	do	(NA)	6,824	6,927	6,961	7,069	7,171	7,181	7,206	7,225	7,248	7,371	7,429	7,483
Hours operated	Millions	49,886	3,918	3,765	3,926	4,841	3,949	3,496	4,922	4,053	4,014	5,020	4,076	3,906
Weaving mills (SIC 221, 222, 223, and 224):														
Domestic and foreign cotton:														
Consumption	Bales	6,059,028	522,229	476,816	497,072	615,463	498,020	426,819	602,540	482,530	467,267	578,597	454,051	437,624
Stocks	do	(NA)	410,882	371,037	369,158	377,946	415,960	411,344	412,859	420,474	425,648	419,212	402,192	403,143
Manmade fiber staple:														
Consumption	M lb	936,659	80,785	74,663	75,224	91,024	75,738	63,531	91,659	76,285	73,653	90,628	73,534	69,935
Stocks	do	(NA)	50,937	42,353	40,323	38,169	36,817	36,259	33,182	32,127	31,203	29,493	32,777	37,457
Cellulosic:														
Consumption	do	149,353	13,785	12,936	12,465	14,708	11,995	9,260	13,108	11,452	11,269	14,253	11,886	12,236
Stocks	do	(NA)	8,942	7,657	7,632	7,959	8,578	8,712	8,614	7,840	7,727	7,291	7,699	8,129
Noncellulosic:														
Consumption	do	787,306	67,000	61,727	62,759	76,316	63,743	54,271	78,551	64,833	62,384	76,375	61,648	57,699
Stocks	do	(NA)	41,995	34,696	32,691	30,210	28,239	27,547	24,568	24,287	23,476	22,202	25,078	29,328
Spindle activity:														
Spindles in place	Thous.	(NA)	4,496	4,548	4,596	4,666	4,735	4,866	4,887	4,915	4,948	5,002	5,018	5,055
Active spindles	do	(NA)	4,194	4,249	4,276	4,386	4,466	4,512	4,533	4,543	4,584	4,576	4,645	4,688
Hours operated	Millions	30,068	2,381	2,265	2,345	2,856	2,339	2,129	2,986	2,469	2,460	3,015	2,464	2,359
Yarn and thread mills (SIC 228):														
Domestic and foreign cotton:														
Consumption	Bales	4,066,148	347,566	333,343	344,506	417,044	340,642	290,219	395,714	319,010	309,648	385,378	303,318	279,760
Stocks	do	(NA)	223,431	198,653	192,060	188,634	202,713	212,904	213,383	211,634	207,131	215,924	214,708	210,692
Manmade fiber staple:														
Consumption	M lb	507,521	38,069	38,774	40,773	51,050	41,275	37,425	51,851	41,977	42,903	50,641	37,380	35,403
Stocks	do	(NA)	37,799	35,218	32,690	29,990	26,920	24,218	20,192	20,791	18,104	16,924	18,999	20,888
Cellulosic:														
Consumption	do	61,874	4,445	5,114	5,183	6,215	4,940	3,759	5,807	4,858	5,935	5,976	4,876	4,766
Stocks	do	(NA)	6,426	6,484	5,647	6,144	6,695	6,053	5,525	5,845	5,305	5,407	5,896	5,984
Noncellulosic:														
Consumption	do	445,647	33,624	33,660	35,590	44,835	36,335	33,666	46,044	37,119	36,968	44,665	32,504	30,637
Stocks	do	(NA)	31,373	28,734	27,043	23,846	20,225	18,165	14,667	14,946	12,799	11,517	13,103	14,904
Spindle activity:														
Spindles in place	Thous.	(NA)	2,428	2,457	2,461	2,463	2,477	2,468	2,461	2,464	2,548	2,560	2,549	2,566
Active spindles	do	(NA)	2,342	2,385	2,389	2,392	2,388	2,377	2,368	2,377	2,358	2,469	2,461	2,479
Hours operated	Millions	17,723	1,391	1,353	1,419	1,814	1,446	1,233	1,737	1,410	1,389	1,779	1,419	1,333
All other industry groups:														
Domestic and foreign cotton:														
Consumption	Bales	362,071	27,049	27,992	31,436	37,436	31,572	26,817	33,678	27,968	28,860	35,219	28,092	25,952
Stocks	do	(NA)	17,603	15,541	16,285	20,616	22,555	26,367	26,935	30,966	49,582	47,917	44,306	38,801
Manmade fiber staple:														
Consumption	M lb	154,693	12,336	12,506	12,981	14,368	12,035	11,452	15,255	12,956	11,652	15,440	12,123	11,589
Stocks	do	(NA)	7,818	8,405	8,198	7,754	6,991	7,701	7,289	6,823	7,265	6,647	6,945	6,844
Cellulosic:														
Consumption	do	17,271	1,234	1,521	1,495	1,396	1,271	1,036	1,661	1,469	1,166	2,009	1,624	1,389
Stocks	do	(NA)	290	266	208	468	641	678	836	706	868	941	953	658
Noncellulosic:														
Consumption	do	137,422	11,102	10,985	11,486	12,972	10,764	10,416	13,594	11,487	10,486	13,431	10,499	10,200
Stocks	do	(NA)	7,528	8,139	7,990	7,286	6,350	7,023	6,453	6,117	6,397	5,706	5,992	6,186
Spindle activity:														
Spindles in place	Thous.	(NA)	342	341	341	352	353	341	342	342	342	359	357	356
Active spindles	do	(NA)	288	293	296	291	317	292	305	305	306	326	323	316
Hours operated	Millions	2,095	146	147	162	171	164	134	199	174	165	226	193	214

NA Not available.

Table 13. Consumption of Linters, by Type of Consumer: 1994

[Number of running bales]

Month	Total	Bleachers	Other consumers		
			Total	Pacific and Mountain States	All other States
Total, year ending December 31, 1994	761,474	706,090	55,384	17,369	38,015
December	71,628	68,087	3,541	1,502	2,039
November	55,216	51,290	3,926	1,380	2,546
October	53,577	49,225	4,352	1,479	2,873
September	65,610	60,379	5,231	1,662	3,569
August	61,754	56,744	5,010	1,530	3,480
July	55,617	51,016	4,601	1,471	3,130
June	74,697	69,887	4,810	1,574	3,236
May	64,486	59,658	4,828	1,479	3,349
April	66,752	61,935	4,817	1,297	3,520
March	72,278	67,442	4,836	1,434	3,402
February	61,215	55,640	5,575	1,415	4,160
January	58,644	54,787	3,857	1,146	2,711

Table 14. Stocks of Linters, by Type of Establishment: 1994

[Number of running bales]

Month	All establishments	Bleachers	Other consumers			Public storage and compresses	Oil mills ¹
			Total	Pacific and Mountain States	All other States		
December	212,270	152,853	(D)	(D)	(D)	(D)	49,469
November	195,615	148,486	(D)	(D)	(D)	(D)	38,216
October	190,040	148,924	(D)	(D)	(D)	(D)	31,923
September	180,633	151,946	(D)	(D)	(D)	(D)	23,836
August	222,322	190,052	(D)	(D)	(D)	(D)	26,938
July	252,753	220,143	(D)	(D)	(D)	(D)	25,680
June	276,683	228,409	(D)	(D)	(D)	(D)	39,325
May	318,553	252,128	(D)	(D)	(D)	(D)	55,670
April	352,109	268,155	(D)	(D)	(D)	(D)	73,631
March	358,526	277,285	(D)	(D)	(D)	(D)	72,436
February	381,901	280,763	(D)	(D)	(D)	(D)	86,136
January	393,264	290,067	(D)	(D)	(D)	(D)	90,204

¹Oil mill stocks in estimated running bales based on information reported in pounds.

D Data withheld to avoid disclosing figures for individual companies.

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 Kristin Williams, 301-457-4698.

2.2 CONSUMPTION ON THE WOOLEN SYSTEM AND WORSTED COMBING

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. They are generally used to produce fabric 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: 1990 to 1994

[Thousands of pounds]

Product description	1994	1993	1992	1991	1990
All fibers ¹	1,035,750	1,008,135	926,035	836,695	811,512
Raw wool ^{2 3}	153,302	156,811	150,838	151,539	132,746
Apparel class	138,563	141,380	136,143	137,187	120,622
Woolen system	61,998	67,519	59,478	58,560	51,114
Worsted combing	76,565	73,861	76,665	78,627	69,508
Carpet class	18,641	15,431	14,695	14,352	12,124
Noils, reprocessed and reused wool, and other animal fibers ⁴	18,641	22,728	20,745	21,002	20,231
Other fibers ^{1 5}	863,807	828,596	754,452	664,154	658,535

¹Includes manmade fiber top converted from tow without combing.

²Data are shown on a scoured basis for greasy wool.

³Shorn and pulled wool of the sheep does not include raw wool consumed in cotton system spinning. These data were withheld to avoid disclosing figures for individual companies.

⁴Includes 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.

⁵Includes 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: 1994 and 1993

[Thousands of pounds]

Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
1994					
All fibers ¹	1,035,750	268,162	269,562	253,460	244,566
Raw wool ^{2 3}	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 ⁴	14,739	4,450	3,484	3,640	3,165
Noils, reprocessed and reused wool, and other animal fibers ⁵	18,641	5,568	5,261	4,151	3,661
Other fibers ¹	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 ⁶	27,132	7,553	6,490	6,349	6,740
1993					
All fibers ¹	1,008,135	247,551	252,418	260,664	247,502
Raw wool ^{2 3}	156,811	40,062	40,253	38,152	38,344
Apparel class	141,380	35,549	35,910	35,502	34,419
Woolen system	67,519	17,400	16,971	16,486	16,662
Worsted combing	73,861	18,149	18,939	19,016	17,757
Carpet class ⁴	15,431	4,513	4,343	2,650	3,925
Noils, reprocessed and reused wool, and other animal fibers ⁵	22,728	6,356	5,942	5,365	5,065
Other fibers ¹	828,596	201,133	206,223	217,147	204,093
Nylon	490,018	119,293	122,228	129,111	119,386
Polyester	144,114	32,235	35,795	38,752	37,332
Acrylic and modacrylic	167,421	42,791	41,456	42,748	40,426
Other fibers ⁶	27,043	6,814	6,744	6,536	6,949

¹Includes top converted from manmade fiber tow without combing.²Data are shown on a scoured basis for greasy wool.³Shorn and pulled wool of the sheep does not include raw wool consumed in cotton system spinning.⁴Data 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 figures for individual companies. These data represent less than one-half of 1 percent of the "Total carpet class raw wool."⁵Includes 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 1994 amounted to 3,556 thousand pounds and in 1993 amounted to 2,787 thousand pounds.⁶Includes 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: 1994 and 1993

[Thousands of pounds]

Product code	Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
1994						
	Fibers consumed in woolen spinning ¹	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 (foreign, duty-free) AND					
02299 36	Tops, noils, mohair, reused and reprocessed wool, and other wool (except shorn or pulled)	14,739	4,450	3,484	3,640	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)
1993						
	Fibers consumed in woolen spinning ¹	878,537	215,041	219,430	227,527	216,539
	For yarns (except carpet and rug)	317,588	81,054	80,029	78,953	77,552
	Shorn and pulled wool of the sheep (domestic and foreign duty-paid)	67,519	17,400	16,971	16,486	16,662
00214 61	60S and finer	40,895	9,862	10,214	10,107	10,712
00214 62	Coarser than 60S	26,624	7,538	6,757	6,379	5,950
	Other wool	15,242	4,147	4,052	3,585	3,458
02299 38	Sheep (tops, noils, etc.)	13,919	3,799	3,611	3,316	3,193
00214 71	Other (mohair, alpaca, vicuna, etc.)	1,323	348	441	269	265
02294 07	Reprocessed wool and reused wool	4,866	1,458	1,206	1,155	1,047
	Other fibers	229,961	58,049	57,800	57,727	56,385
02824 14	Nylon	32,077	8,332	8,289	7,672	7,784
02824 29	Polyester	47,455	11,750	12,159	11,810	11,736
02824 25	Acrylic and modacrylic	124,226	31,426	30,867	31,837	30,096
00100 17	All other fibers, including rayon and acetate	26,203	6,541	6,485	6,408	6,769
	For carpet and rug yarns	560,949	133,987	139,401	148,574	138,987
00214 51	Shorn and pulled wool of the sheep (foreign, duty-free) AND					
02299 36	Tops, noils, mohair, reused and reprocessed wool, and other wool (except shorn or pulled)	15,431	4,513	4,343	2,650	3,925
	Other fibers	545,518	129,474	135,058	145,924	135,062
02824 13	Nylon	457,941	110,961	113,939	121,439	111,602
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)

¹Data are shown on a scoured basis for greasy wools.

D Data withheld to avoid disclosing figures for individual companies.

Table 18. **Production of Tops and Noils Combed and Manmade Tow Converted to Top Without Combing, by Quarter: 1994 and 1993**

[Thousands of pounds]

Product code	Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
1994						
	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)
1993						
	Tops and noils combed	76,481	18,900	19,623	19,641	18,317
	Top production	69,792	17,327	17,982	17,793	16,690
	Wool of the sheep (domestic and foreign duty-paid)	(D)	(D)	(D)	(D)	(D)
22993 21	60S and finer	53,701	14,524	13,953	12,049	13,175
22993 24	Coarser than 60S	(D)	(D)	(D)	(D)	(D)
22993 31	All other fibers, including mohair	(D)	(D)	(D)	(D)	(D)
	Noil production	6,689	1,573	1,641	1,848	1,627
	Wool of the sheep (domestic and foreign duty-paid)	(D)	(D)	(D)	(D)	(D)
22993 51	60S and finer	5,133	1,348	1,303	1,230	1,252
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 ..	53,117	13,610	13,365	13,496	12,646
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 Data withheld to avoid disclosing figures 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.

2.3 YARN PRODUCTION (TEXTURED AND SPUN)

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 fabric, 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: 1982 to 1994**

[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
1994.....	8,130.3	2,824.7	5,305.6	3,939.4	2,280.4	1,659.0
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
1982.....	5,284.3	1,681.6	3,602.6	2,137.1	1,584.1	553.0

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

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.

Table 20. Summary of Spun Yarn Production, by Fiber and End Use of Distribution: 1994 and 1993

[Thousands of pounds]

Principal fiber	1994			1993		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
Spun yarn	8,130,277	2,824,698	5,305,579	7,566,589	2,510,596	5,055,993
Cotton	4,385,228	1,819,974	2,565,254	3,905,909	1,509,593	2,396,316
Carded	3,915,008	1,549,356	2,365,652	3,525,618	1,288,273	2,237,345
85 percent or more cotton	3,503,250	1,311,985	2,191,265	3,127,024	1,071,686	2,055,338
Other chiefly cotton blends	411,758	237,371	174,387	'398,594	216,587	'182,007
Combed	470,220	270,618	199,602	380,291	221,320	158,971
85 percent or more cotton	363,326	217,375	145,951	313,634	(D)	(D)
Other chiefly cotton blends	106,894	53,243	53,651	'66,657	(D)	(D)
Wool and chiefly wool blends	138,328	29,473	108,855	128,279	'29,704	98,575
Woolen	82,113	19,961	62,152	72,009	21,089	50,920
Worsted	56,215	9,512	46,703	'56,270	'8,615	47,655
Cellulosic (rayon and/or acetate)	224,738	83,870	140,868	242,119	'83,169	158,950
85 percent or more rayon and/or acetate	171,845	66,390	105,455	188,245	'62,972	125,273
Other chiefly rayon and/or acetate blends	52,893	17,480	35,413	53,874	20,197	33,677
Noncellulosic	3,381,983	891,381	2,490,602	3,290,282	888,130	2,402,152
85 percent or more acrylic	240,514	174,092	66,422	'242,856	173,505	'69,351
Other chiefly acrylic blends:						
Mixed with cotton	6,296	(D)	(D)	4,661	(D)	(D)
Mixed with wool	2,692	478	2,214	'1,394	'1,187	207
Mixed with other fibers	4,462	(D)	(D)	3,103	(D)	(D)
85 percent or more nylon	850,527	149,151	701,376	844,004	200,634	643,370
Other chiefly nylon blends	15,418	(D)	(D)	22,400	(D)	(D)
85 percent or more polyester	594,571	291,468	303,103	483,586	226,236	257,350
Other chiefly polyester blends:						
Mixed with cotton	1,467,727	175,933	1,291,794	1,457,352	'157,618	1,299,734
Mixed with wool	21,426	4,668	16,758	17,826	'1,880	15,946
Mixed with other fibers	67,627	20,483	47,144	108,620	'50,132	58,488
All other manmade fibers ¹	110,723	58,258	52,465	'104,480	56,246	'48,234

¹Data for "Silk and other natural fibers" are combined with "All other manmade fibers" to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. 'Revised by 5 percent or more from previously published figures.

Table 21. Production of Spun Yarn, by Fiber and End Use of Distribution: 1994 and 1993

[Thousands of pounds]

Principal fiber	1994			1993		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
Weaving yarn (except carpet)	3,867,002	468,331	3,398,671	3,683,936	'455,143	3,228,793
Cotton	2,218,682	220,524	1,998,158	2,036,103	'219,710	1,816,393
Carded	2,059,541	208,526	1,851,015	1,925,148	'208,575	1,716,573
85 percent or more cotton	1,935,134	202,903	1,732,231	1,810,204	'166,933	1,643,271
Other chiefly cotton blends	124,407	5,623	118,784	114,944	41,642	73,302
Combed	159,141	11,998	147,143	110,955	11,135	99,820
85 percent or more cotton	104,817	(D)	(D)	'81,418	11,103	'70,315
Other chiefly cotton blends	54,324	(D)	(D)	'29,537	32	'29,505
Wool and chiefly wool blends	110,706	18,370	92,336	100,659	17,856	82,803
Woolen	63,257	(D)	(D)	52,517	(D)	(D)
Worsted	47,449	(D)	(D)	48,142	(D)	(D)
Cellulosic (rayon and/or acetate)	206,755	69,079	137,676	228,771	74,793	153,978
85 percent or more rayon and/or acetate	157,168	54,675	102,493	178,379	55,731	122,648
Other chiefly rayon and/or acetate blends	49,587	14,404	35,183	50,392	19,062	31,330
Noncellulosic	1,330,859	160,358	1,170,501	1,318,403	'142,784	1,175,619
85 percent or more acrylic	48,151	19,117	29,034	41,232	'13,239	'27,993
Other chiefly acrylic blends:						
Mixed with cotton	2,733	(D)	(D)	2,681	(D)	(D)
Mixed with wool	2,310	(D)	(D)	192	(D)	(D)
Mixed with other fibers	4,090	(D)	(D)	2,838	(D)	(D)
85 percent or more nylon	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly nylon blends	2,785	(D)	(D)	5,307	(D)	(D)
85 percent or more polyester	178,260	99,291	78,969	151,100	73,464	77,636
Other chiefly polyester blends:						
Mixed with cotton	949,288	14,416	934,872	966,351	'20,667	945,684
Mixed with wool	(D)	(D)	(D)	(D)	(D)	(D)
Mixed with other fibers	52,138	6,089	46,049	60,171	10,722	49,449
All other manmade fibers ¹	50,298	6,949	43,349	'47,305	'9,301	'38,004
Machine knitting yarn (except carpet)	2,946,073	1,984,971	961,102	2,609,054	1,635,668	973,386
Cotton	2,100,960	1,538,264	562,696	1,812,148	1,236,188	575,960
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)	(D)
Wool and chiefly wool blends	9,344	7,169	2,175	'8,315	'6,045	2,270
Woolen	4,090	(D)	(D)	3,848	(D)	(D)
Worsted	5,254	(D)	(D)	'4,467	(D)	(D)
Cellulosic (rayon and/or acetate)	10,452	8,208	2,244	'7,614	'3,037	4,577
85 percent or more rayon and/or acetate	10,083	(D)	(D)	'5,035	(D)	(D)
Other chiefly rayon and/or acetate blends	369	(D)	(D)	2,579	(D)	(D)
Noncellulosic	825,317	431,330	393,987	780,977	390,398	390,579
85 percent or more acrylic	158,551	(D)	(D)	151,995	'133,931	18,064
Other chiefly acrylic blends:						
Mixed with cotton	(D)	(D)	(D)	(D)	(D)	(D)
Mixed with wool	(D)	(D)	(D)	(D)	(D)	(D)
Mixed with other fibers	(D)	(D)	-	(D)	(D)	-
85 percent or more nylon	7,400	(D)	(D)	10,266	(D)	(D)
Other chiefly nylon blends	-	-	-	-	-	-
85 percent or more polyester	152,670	124,641	28,029	'112,435	'88,988	23,447
Other chiefly polyester blends:						
Mixed with cotton	488,954	142,436	346,518	463,531	120,217	343,314
Mixed with wool	(D)	(D)	(D)	(D)	(D)	(D)
Mixed with other fibers	(D)	(D)	(D)	(D)	(D)	(D)
All other manmade fibers ¹	(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: 1994 and 1993—Con.

[Thousands of pounds]

Principal fiber	1994			1993		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
Carpet and rug yarns	1,171,093	247,455	923,638	1,113,306	284,430	828,876
Cotton	(D)	(D)	(D)	(D)	(D)	-
Carded	(D)	(D)	(D)	(D)	(D)	-
85 percent or more cotton	(D)	(D)	(D)	(D)	(D)	-
Other chiefly cotton blends	-	-	-	(D)	(D)	-
Combed	-	-	-	-	-	-
85 percent or more cotton	-	-	-	-	-	-
Other chiefly cotton blends	-	-	-	-	-	-
Wool and chiefly wool blends	16,840	(D)	(D)	17,443	(D)	(D)
Woolen	14,132	(D)	(D)	14,591	(D)	(D)
Worsted	2,708	(D)	(D)	2,852	(D)	(D)
Cellulosic (rayon and/or acetate)	(D)	(D)	(D)	(D)	(D)	(D)
85 percent or more rayon and/or acetate	-	-	-	-	-	-
Other chiefly rayon and/or acetate blends	(D)	(D)	(D)	(D)	(D)	(D)
Noncellulosic	1,115,569	205,760	909,809	1,064,950	248,587	816,363
85 percent or more acrylic	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly acrylic blends:						
Mixed with cotton	-	-	-	-	-	-
Mixed with wool	-	-	-	-	-	-
Mixed with other fibers	-	-	-	-	-	-
85 percent or more nylon	820,391	131,579	688,812	808,285	180,252	628,033
Other chiefly nylon blends	(D)	(D)	(D)	(D)	(D)	(D)
85 percent or more polyester	247,615	(D)	(D)	197,686	(D)	(D)
Other chiefly polyester blends:						
Mixed with cotton	234	(D)	(D)	253	(D)	(D)
Mixed with wool	-	-	-	-	-	-
Mixed with other fibers	5,598	(D)	(D)	11,358	(D)	(D)
All other manmade fibers ¹	9,710	(D)	(D)	¹ 11,204	(D)	(D)
Hand knitting yarns	18,600	16,588	2,012	¹ 40,243	¹ 35,168	5,075
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	-	-	-	-	-	-
Other chiefly cotton blends	(D)	(D)	-	(D)	(D)	-
Wool and chiefly wool blends	821	821	-	¹ 929	(D)	(D)
Woolen	(D)	(D)	-	(D)	(D)	(D)
Worsted	(D)	(D)	-	(D)	(D)	(D)
Cellulosic (rayon and/or acetate)	(D)	(D)	(D)	(D)	(D)	(D)
85 percent or more rayon and/or acetate	-	-	-	-	-	-
Other chiefly rayon and/or acetate blends	(D)	(D)	(D)	(D)	(D)	(D)
Noncellulosic	15,065	(D)	(D)	¹ 31,925	(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	(D)	(D)	-	(D)	(D)	-
Mixed with other fibers	-	-	-	(D)	(D)	-
85 percent or more nylon	-	-	-	(D)	(D)	-
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 ¹	(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: 1994 and 1993—Con.**

[Thousands of pounds]

Principal fiber	1994			1993		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
All other spun yarns	127,509	107,353	20,156	120,050	100,187	19,863
Cotton	24,480	(D)	(D)	19,592	15,629	3,963
Carded	18,219	(D)	(D)	13,483	(D)	(D)
85 percent or more cotton	16,938	(D)	(D)	11,571	(D)	(D)
Other chiefly cotton blends	1,281	(D)	(D)	1,912	(D)	(D)
Combed	6,261	(D)	(D)	6,109	(D)	(D)
85 percent or more cotton	(D)	(D)	(D)	(D)	(D)	(D)
Other chiefly cotton blends	(D)	(D)	-	(D)	(D)	-
Wool and chiefly wool blends	617	(D)	(D)	933	(D)	(D)
Woolen	(D)	(D)	(D)	(D)	(D)	(D)
Worsted	(D)	(D)	(D)	(D)	(D)	-
Cellulosic (rayon and/or acetate)	7,239	(D)	(D)	5,498	(D)	(D)
85 percent or more rayon and/or acetate	4,594	(D)	(D)	4,831	(D)	(D)
Other chiefly rayon and/or acetate blends	2,645	(D)	(D)	667	(D)	(D)
Noncellulosic	95,173	(D)	(D)	94,027	(D)	(D)
85 percent or more acrylic	296	(D)	(D)	393	(D)	(D)
Other chiefly acrylic blends:						
Mixed with cotton	(D)	(D)	-	-	-	-
Mixed with wool	-	-	-	(D)	(D)	(D)
Mixed with other fibers	(D)	(D)	-	-	-	-
85 percent or more nylon	(D)	(D)	-	(D)	(D)	-
Other chiefly nylon blends	(D)	(D)	-	(D)	(D)	-
85 percent or more polyester	16,026	(D)	(D)	22,365	(D)	(D)
Other chiefly polyester blends:						
Mixed with cotton	29,251	(D)	(D)	27,217	(D)	(D)
Mixed with wool	-	-	-	-	-	-
Mixed with other fibers	(D)	(D)	(D)	(D)	(D)	(D)
All other manmade fibers ¹	46,831	46,831	-	43,035	43,035	-

¹Data for "Silk and other natural fibers" are combined with "All other manmade fibers" to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

Table 22. Production of Spun Yarn, by State: 1994 and 1993

[Thousands of pounds]

State	1994	1993
United States	8,130,277	7,566,589
Alabama	818,803	758,833
Georgia	1,858,583	1,661,350
Kentucky	(D)	(D)
Maine	46,565	47,907
Massachusetts	12,195	9,764
Mississippi	(D)	(D)
North Carolina	3,016,398	2,821,237
Pennsylvania	45,321	41,412
South Carolina	1,627,804	1,519,607
Tennessee	207,721	198,857
Texas	77,791	86,407
Virginia	164,736	164,707
All other States	87,701	87,973

D Data withheld to avoid disclosing figures for individual companies.

Table 23. Production of Spun Yarn, by Spinning System and End Use: 1994 and 1993

[Thousands of pounds]

System of spinning	1994			1993		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
Production, all systems	8,130,277	2,824,698	5,305,579	7,566,589	2,510,596	5,055,993
Cotton system	6,664,024	2,416,316	4,247,708	6,163,064	2,067,513	4,095,551
Weaving (except carpet)	3,609,048	395,381	3,213,667	3,439,600	387,101	3,052,499
Machine knitting (except carpet)	2,817,969	1,860,056	957,913	2,491,773	1,521,342	970,431
Carpet and rug	160,105	(D)	(D)	147,575	95,522	52,053
Hand knitting	(D)	(D)	-	11,504	(D)	(D)
All other uses	(D)	(D)	(D)	72,612	(D)	(D)
Woolen system	195,417	30,286	165,131	194,658	31,301	163,357
Weaving (except carpet)	82,073	(D)	(D)	88,407	(D)	(D)
Machine knitting (except carpet)	5,451	(D)	(D)	4,846	2,933	1,913
Carpet and rug	102,290	7,749	94,541	98,427	10,650	87,777
Hand knitting	962	(D)	(D)	920	(D)	(D)
All other uses	4,641	(D)	(D)	2,058	(D)	(D)
Worsted system	1,074,453	273,474	800,979	1,020,063	316,145	703,918
Weaving (except carpet)	120,171	31,418	88,753	100,634	28,317	72,317
Machine knitting (except carpet)	96,863	(D)	(D)	89,142	(D)	(D)
Carpet and rug	839,647	132,365	707,282	799,809	171,890	627,919
Hand knitting	15,107	(D)	(D)	(D)	(D)	(D)
All other uses	2,665	(D)	(D)	(D)	(D)	(D)
Other systems	196,383	104,622	91,761	188,804	95,637	93,167
Weaving (except carpet)	55,710	(D)	(D)	55,295	(D)	(D)
Machine knitting (except carpet)	25,790	25,790	-	23,293	23,293	-
Carpet and rug	69,051	(D)	(D)	67,495	(D)	(D)
Hand knitting	(D)	(D)	-	(D)	(D)	-
All other uses	(D)	(D)	-	(D)	(D)	-

- Represents zero.

D Data withheld to avoid disclosing figures for individual companies.

†Revised by 5 percent or more from previously published figures.

Table 24. Production of Textured, Crimped, or Bulked Filament Yarns by Fiber and End Use: 1994 and 1993

Product description	1994			1993		
	Total	For sale	For own use or commission	Total	For sale	For own use or commission
All yarn	3,939,350	2,280,368	1,658,982	3,564,673	2,149,127	1,415,546
Nylon	2,413,995	1,474,565	939,430	2,254,772	1,445,106	809,666
Polyester	973,821	661,376	312,445	807,980	518,454	289,526
Rayon and acetate	1,856	(D)	(D)	1,058	(D)	(D)
Other yarns	549,678	(D)	(D)	500,863	(D)	(D)
Weaving yarn (except carpet)	528,858	267,658	261,200	557,412	320,931	236,481
Nylon	94,637	(D)	(D)	(D)	(D)	(D)
Polyester	372,883	(D)	(D)	426,421	(D)	(D)
Rayon and acetate	1,261	(D)	(D)	(D)	(D)	(D)
Other yarns	60,077	26,874	33,203	50,591	22,572	28,019
Knitting yarn (except carpet)	811,964	684,403	127,561	582,727	501,741	80,986
Nylon	230,238	224,586	5,652	242,721	237,467	5,254
Polyester	551,354	(D)	(D)	312,723	263,588	49,135
Rayon and acetate	(D)	(D)	(D)	(D)	(D)	(D)
Other yarns	(D)	(D)	(D)	(D)	(D)	(D)
Carpet and rug yarn	2,441,451	1,186,965	1,254,486	2,248,468	1,208,272	1,040,196
Nylon	1,980,417	1,070,154	910,263	1,824,798	1,046,116	778,682
Polyester	(D)	(D)	(D)	(D)	(D)	(D)
Rayon and acetate	-	-	-	-	-	-
Other yarns	(D)	(D)	(D)	(D)	(D)	(D)
All other uses	157,077	141,342	15,735	176,066	118,183	57,883
Nylon	108,703	(D)	(D)	(D)	(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 Data withheld to avoid disclosing figures for individual companies. 1 Revised by 5 percent or more from previously published figures.

Table 25. Domestic Production, Imports, and Exports of Yarn: 1994 and 1993

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

Product description and year	Total production (quantity)	Exports of domestic merchandise ¹		Percent exports to domestic production		Imports for consumption ²		Apparent consumption ⁴		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value	Quantity	Value ³	Quantity	Value	Quantity	Value
1994											
Spun yarn	3,687,894	52,797	212,804	1.4	(NA)	92,932	477,584	3,728,029	(NA)	2.5	(NA)
Cotton	1,989,139	26,940	92,609	1.4	(NA)	45,654	209,041	2,007,853	(NA)	2.3	(NA)
85 percent or more cotton	1,753,879	25,534	84,014	1.5	(NA)	36,659	173,039	1,765,004	(NA)	2.1	(NA)
Carded	1,589,074	16,846	51,605	1.1	(NA)	26,893	115,151	1,599,121	(NA)	1.7	(NA)
Combed	164,805	8,688	32,409	5.3	(NA)	9,766	57,888	165,883	(NA)	5.9	(NA)
Other chiefly cotton blends	235,261	1,406	8,595	0.6	(NA)	8,995	36,002	242,850	(NA)	3.7	(NA)
Carded	186,773	927	6,215	0.5	(NA)	1,275	6,155	187,121	(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	62,746	633	7,418	1.0	(NA)	4,375	48,905	66,488	(NA)	6.6	(NA)
Woolen	37,246	9	145	-	(NA)	1,691	12,601	38,928	(NA)	4.3	(NA)
Worsted	25,499	624	7,273	2.4	(NA)	2,684	36,304	27,559	(NA)	9.7	(NA)
Manmade spun yarn	1,636,009	25,224	112,777	1.5	(NA)	42,903	219,638	1,653,688	(NA)	2.6	(NA)
Cellulosic	101,941	4,874	29,290	4.8	(NA)	13,009	54,559	110,076	(NA)	11.8	(NA)
Noncellulosic	1,534,067	20,350	83,487	1.3	(NA)	29,894	165,079	1,543,611	(NA)	1.9	(NA)
Polyester	975,853	7,189	26,314	0.7	(NA)	9,427	42,279	978,091	(NA)	1.0	(NA)
85 percent or more polyester	269,697	2,540	9,795	0.9	(NA)	5,846	27,240	273,003	(NA)	2.1	(NA)
Other chiefly polyester blends	706,155	4,649	16,519	0.7	(NA)	3,581	15,039	705,087	(NA)	0.5	(NA)
Acrylic	115,198	2,890	10,858	2.5	(NA)	10,094	84,271	122,402	(NA)	8.2	(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	6,101	253	1,479	4.1	(NA)	882	36,410	6,730	(NA)	13.1	(NA)
Nylon	392,793	4,381	23,384	1.1	(NA)	307	4,467	388,719	(NA)	0.1	(NA)
All other, including silk and other natural fibers	50,224	5,890	22,931	11.7	(NA)	10,066	34,062	54,400	(NA)	18.5	(NA)
Manmade textured, bulked, or crimped filament yarn	1,786,889	84,849	255,299	4.7	(NA)	45,726	171,440	1,497,974	(NA)	3.1	(NA)
Polyester	441,725	52,477	120,654	11.9	(NA)	9,932	30,131	399,180	(NA)	2.5	(NA)
Nylon	1,094,988	27,746	117,380	2.5	(NA)	31,552	124,909	1,098,794	(NA)	2.9	(NA)
Other	250,176	4,626	17,265	1.8	(NA)	4,242	16,400	249,792	(NA)	1.7	(NA)

See footnotes at end of table.

Table 25. Domestic Production, Imports, and Exports of Yarn: 1994 and 1993—Con.

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

Product description and year	Total production (quantity)	Exports of domestic merchandise ¹		Percent exports to domestic production		Imports for consumption ²		Apparent consumption ⁴		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value	Quantity	Value ³	Quantity	Value	Quantity	Value
1993											
Spun yarn	3,432,205	31,547	135,586	0.9	(NA)	87,735	375,005	3,488,393	(NA)	2.5	(NA)
Cotton	1,771,720	15,606	60,745	0.9	(NA)	47,281	192,958	1,803,395	(NA)	2.6	(NA)
85 percent or more cotton	1,560,682	14,771	56,412	0.9	(NA)	39,568	166,663	1,585,479	(NA)	2.5	(NA)
Carded	1,418,418	9,420	33,826	0.7	(NA)	33,247	131,171	1,442,245	(NA)	2.3	(NA)
Combed	142,264	5,351	22,586	3.8	(NA)	6,321	35,492	143,234	(NA)	4.4	(NA)
Other chiefly cotton blends	211,038	835	4,333	0.4	(NA)	7,713	26,295	217,916	(NA)	3.5	(NA)
Carded	180,802	480	2,313	0.3	(NA)	697	3,024	181,019	(NA)	0.4	(NA)
Combed	30,236	355	2,020	1.2	(NA)	7,016	23,271	36,897	(NA)	19.0	(NA)
Wool spun yarn	58,187	442	4,805	0.8	(NA)	3,917	40,102	61,662	(NA)	6.4	(NA)
Woolen	32,663	5	47	-	(NA)	1,623	10,488	34,281	(NA)	4.7	(NA)
Worsted	25,524	437	4,758	-	(NA)	2,294	29,614	27,381	(NA)	8.4	(NA)
Manmade spun yarn	1,602,297	15,499	70,036	1.0	(NA)	36,537	141,945	1,623,335	(NA)	2.3	(NA)
Cellulosic	109,825	(NA)	(NA)	-	(NA)	10,075	40,433	119,900	(NA)	8.4	(NA)
Noncellulosic	1,492,472	15,499	70,036	1.0	(NA)	26,462	101,512	1,503,435	(NA)	1.8	(NA)
Polyester	937,765	5,116	22,176	0.5	(NA)	7,289	31,766	939,938	(NA)	0.8	(NA)
85 percent or more polyester	219,355	2,050	7,599	0.9	(NA)	5,178	23,509	222,483	(NA)	2.3	(NA)
Other chiefly polyester blends	718,411	3,066	14,577	0.4	(NA)	2,111	8,257	717,456	(NA)	0.3	(NA)
Acrylic	114,314	1,308	7,007	1.1	(NA)	8,573	39,586	121,579	(NA)	7.1	(NA)
85 percent or more acrylic	110,159	994	5,161	0.9	(NA)	8,269	37,866	117,434	(NA)	7.0	(NA)
Other chiefly acrylic blends	4,154	314	1,846	7.6	(NA)	304	1,720	4,144	(NA)	7.3	(NA)
Nylon	393,001	3,092	16,812	0.8	(NA)	278	3,695	390,187	(NA)	0.1	(NA)
All other, including silk and other natural fibers	47,392	5,983	24,041	12.6	(NA)	10,322	26,465	51,731	(NA)	20.0	(NA)
Manmade textured, bulked, or crimped filament yarn	1,616,936	60,204	231,360	3.7	(NA)	40,294	147,956	1,368,982	(NA)	2.9	(NA)
Polyester	366,500	27,359	87,179	7.5	(NA)	6,663	20,138	345,804	(NA)	1.9	(NA)
Nylon	1,022,765	28,163	126,748	2.8	(NA)	28,577	113,171	1,023,179	(NA)	2.8	(NA)
Other	227,671	4,682	17,433	2.1	(NA)	5,054	14,647	228,043	(NA)	0.3	(NA)

¹Source: Bureau of Census report EM545, *U.S. Exports*.

²Source: Bureau of Census report IM145, *U.S. Imports for Consumption*.

³The 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.

⁴Apparent consumption is equal to domestic production plus imports minus exports.

- Represents zero. NA Not available.

Note: Detail may not add to total due to 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 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.

FABRIC PRODUCTION

GENERAL

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

Quantity of Knit and Broadwoven Fabrics Produced: 1990 to 1994

[Thousands of pounds]

Year	Woven fabric produced	Knit fabric produced
1994.....	4,926	2,230
1993.....	4,829	2,188
1992.....	4,826	2,179
1991.....	4,563	1,963
1990.....	4,585	1,901

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

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

Knitting is a method of constructing fabric 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 fabric are only for broadwoven fabrics. Broadwoven fabrics are at least 12 inches wide. Although this is the majority of the fabric 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.

2.4 BROADWOVEN FABRICS

INTRODUCTION

The data shown in the following tables were collected in the MQ22T, Broadwoven Fabric, 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 Fabric: 1990 to 1994

[Fabric 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 fabric	Tire cord and tire cord fabrics
1994				
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
1993				
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
1992				
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
1991				
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
1990				
Fourth quarter.....	1,048.0	2,700.2	31.4	177.8
Third quarter.....	1,087.3	2,585.9	32.6	172.5
Second quarter.....	1,126.6	2,664.2	38.7	183.3
First quarter.....	1,201.5	2,712.2	38.0	184.7

Table 27. Summary of Production and Loom Assignments of Broadwoven Gray Fabrics: 1994

[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
	Cotton and chiefly cotton fabrics mixed mainly or solely with manmade fibers	24,030	4,472,560	23,704	1,073,316	24,322	1,125,386	24,500	1,130,740	24,030	1,143,118
2211B 00	Plain weaves	9,913	1,964,303	9,840	498,995	10,156	490,636	10,067	486,267	9,913	488,405
2211C 00	Twill weaves	7,481	1,567,066	7,188	350,043	7,467	399,525	7,653	408,909	7,481	408,589
2211D 00	All other weaves (except pile) . .	2,710	408,681	2,457	92,919	2,510	99,436	2,727	104,798	2,710	111,528
2211E 00	Pile fabrics	3,926	532,510	4,219	131,359	4,189	135,789	4,053	130,766	3,926	134,596
	Chiefly cotton fabrics mixed mainly or solely with other than manmade fibers	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Manmade fiber and silk gray broadwoven fabrics	50,962	11,919,853	53,791	2,960,725	52,034	2,955,755	51,625	2,897,729	50,962	3,105,644
2221B 00	85 percent or more filament rayon and/or acetate fabrics . .	4,453	644,665	5,203	167,329	5,052	166,130	5,104	157,224	4,453	153,982
2221C 00	85 percent or more filament fabrics (except rayon and/or acetate)	14,327	5,394,949	14,502	1,316,620	14,173	1,314,041	14,294	1,300,574	14,327	1,463,714
	85 percent or more spun yarn fabrics (except wool blends) . .	23,485	4,071,587	25,439	1,041,378	24,067	1,026,311	23,598	989,745	23,485	1,014,153
2221D 00	Plain weave (except pile)	17,466	3,221,077	18,655	819,293	17,930	808,328	17,598	786,541	17,466	806,915
2221E 00	Twill weave (except pile)	2,711	493,542	3,354	131,852	2,913	125,207	2,592	115,450	2,711	121,033
2221F 00	All other weaves (except pile)	3,308	356,968	3,430	90,233	3,224	92,776	3,408	87,754	3,308	86,205
2221G 00	Spun/filament yarn combinations	7,508	1,676,147	7,443	403,845	7,519	416,479	7,294	414,454	7,508	441,369
2221H 10	Pile fabrics	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 2X	All other chiefly manmade fiber fabrics, including chiefly manmade fiber blends with wool	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 01	Silk fabrics	43	582	56	167	46	145	47	133	43	137
	Woolen and worsted fabrics	1,925	178,591	2,025	49,128	2,059	51,058	1,848	39,436	1,925	38,969

D Data withheld to avoid disclosing figures for individual companies.

Table 28. Summary of Production of Broadwoven Fabric by Textile Category: 1994

[Thousands of square yards]

Product description	Production				
	Total	First quarter	Second quarter	Third quarter	Fourth quarter
Blue denim	830,831	186,128	212,878	214,227	217,598
All other yarn dyed fabric	557,837	131,313	147,635	141,650	137,239
Plain weave	99,716	24,007	23,987	25,084	26,638
Twill weave	213,677	49,621	60,436	54,522	49,098
All other weave	244,444	57,685	63,212	62,044	61,503
Cheesecloth and batistes	957,942	244,496	235,163	235,569	242,714
Duck	78,311	26,059	19,066	18,312	14,874
Oxfords	83,394	20,547	21,517	20,590	20,740
Pile fabrics	583,811	143,487	147,921	144,212	148,191
Special weave fabric	366,773	87,845	92,142	92,395	94,391
Other fabrics, chiefly cotton fiber:					
Print cloth	301,312	74,160	78,420	75,227	73,505
Poplin and broadcloth	42,423	10,834	11,740	9,393	10,456
Sheeting	715,556	181,919	182,245	176,320	175,072
Twills	534,973	118,062	128,149	143,161	145,601
Sateens	45,588	10,963	9,084	10,981	14,560
Other fabrics, chiefly manmade fiber:					
Manmade/wool blends	(D)	(D)	(D)	(D)	(D)
85 percent or more filament yarn fabrics:					
Typewriter fabric	87,689	22,325	22,750	21,376	21,238
Other nylon	441,488	116,165	112,041	103,050	110,232
Rayon and acetate	644,665	167,329	166,130	157,224	153,982
Polyester	778,803	185,777	196,612	199,068	197,346
Glass fiber	415,642	107,709	101,585	102,838	103,510
All other	3,695,578	890,254	886,120	881,686	1,037,518
85 percent or more spun yarn fabrics:					
Print cloth	640,064	157,451	160,874	161,568	160,171
Poplin and broadcloth	548,262	152,841	129,474	127,747	138,200
Sheeting	1,820,727	451,679	462,158	448,058	458,832
Twills and sateens	508,585	134,537	129,720	119,476	124,852
Spun/filament combinations (except blue denim):					
Print cloth	559,962	140,901	141,371	135,754	141,936
Poplin and broadcloth	445,211	105,829	100,723	111,670	126,989
Sheeting	108,450	25,117	28,690	29,530	25,113
Twills and sateens	119,921	25,989	27,636	32,057	34,239
Other	433,555	104,345	115,868	103,004	110,338
Wool fabrics	178,591	49,128	51,058	39,436	38,969
Silk fabrics	582	167	145	133	137

D Data withheld to avoid disclosing figures for individual companies.

† Revised by 5 percent or more from previously published figures.

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: 1994

[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	2,147	1,012,863	2,234	255,851	2,214	247,427	2,215	250,825	2,147	258,760
2221D 03	More than 50 percent cotton	1,814	819,218	1,778	204,707	1,826	198,884	1,891	205,299	1,814	210,328
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)
2211B 05	All other fabrics, 85 percent or more spun yarn	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 04	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	8,785	1,501,354	9,650	372,519	9,125	380,668	9,138	372,551	8,785	375,616
2221D 13	More than 50 percent cotton	3,168	301,328	3,395	74,167	3,377	78,423	3,283	75,229	3,168	73,509
2221D 15	Chiefly spun polyester mixed with cotton	3,307	559,124	3,402	135,276	3,151	142,747	3,250	141,009	3,307	140,092
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)
2211B 14	All other fabrics, 85 percent or more spun yarn	362	49,016	567	13,829	454	10,222	496	12,257	362	12,708
2221G 07	Spun/filament combinations	1,772	559,962	1,977	140,901	1,881	141,371	1,857	135,754	1,772	141,936
2221G 07	Chiefly cotton	-	-	-	-	-	-	-	-	-	-
2221G 07	Chiefly manmade	1,772	559,962	1,977	140,901	1,881	141,371	1,857	135,754	1,772	141,936
2211B 21	Poplin and broadcloth	6,014	1,096,417	6,449	285,374	6,023	256,561	5,796	263,059	6,014	291,423
2211B 25	More than 50 percent cotton	274	53,177	263	13,140	271	12,772	244	13,331	274	13,934
2211B 30	Weighing 5.9 ounces or less per square yard	249	40,771	241	11,066	228	11,116	205	8,836	249	9,753
2211B 25	Carded	100	23,125	149	7,248	106	7,320	105	4,419	100	4,138
2211B 30	Combed	149	17,646	92	3,818	122	3,796	100	4,417	149	5,615
2221D 23	Weighing more than 5.9 ounces per square yard	25	12,406	22	2,074	43	1,656	39	4,495	25	4,181
2221D 25	Chiefly spun polyester mixed with cotton	3,056	479,913	3,256	127,442	3,030	113,142	3,124	113,638	3,056	125,691
2221D 27	Weighing 5.0 ounces or less per square yard	2,928	449,380	3,146	119,276	2,894	106,096	2,979	106,762	2,928	117,246
2221D 31	Carded	2,357	314,985	2,512	81,100	2,370	74,371	2,435	77,001	2,357	82,513
2221D 33	Combed	571	134,395	634	38,176	524	31,725	544	29,761	571	34,733
2221D 34	Weighing more than 5.0 ounces per square yard	128	30,533	110	8,166	136	7,046	145	6,876	128	8,445
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	223	14,177	218	4,573	136	2,784	190	2,883	223	3,937
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	1,916	445,211	1,596	105,829	1,527	100,723	1,644	111,670	1,916	126,989

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: 1994—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 . . .	122	11,189	125	3,812	134	3,067	116	2,016	122	2,294
	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)
2221D 44	Chiefly spun rayon and/or acetate	-	(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	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 28	Chiefly manmade	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211B 71	Duck, including taped warp duck	513	88,008	506	28,544	581	21,780	587	20,277	513	17,407
	More than 50 percent cotton	174	51,038	190	19,967	253	12,423	237	10,378	174	8,270
2221D 89	Chiefly spun polyester mixed with cotton	114	9,361	151	2,801	124	2,711	116	1,804	114	2,045
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)
2211B 45	Bedsheeting	10,399	1,957,229	10,421	493,422	10,414	494,879	10,366	486,304	10,399	482,624
	More than 50 percent cotton	2,625	416,486	2,592	108,555	2,530	106,308	2,554	101,461	2,625	100,162
	Chiefly spun polyester mixed with cotton	7,106	1,388,748	7,116	348,243	7,208	348,123	7,173	345,356	7,106	347,026
2221D 43	Carded	2,193	527,181	2,011	125,822	2,173	129,411	2,190	135,554	2,193	136,394
2221D 45	Combed	4,913	861,567	5,105	222,421	5,035	218,712	4,983	209,802	4,913	210,632
2221D 46	Chiefly spun rayon and/or acetate	-	(D)	(D)	(D)	-	-	-	-	-	-
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)
2211B 61	All other sheeting, including osnaburgs	3,790	726,650	3,452	173,390	3,832	187,574	3,812	178,437	3,790	187,249
	More than 50 percent cotton	1,467	259,671	'1,255	'62,824	'1,598	'65,467	'1,572	'65,511	1,467	65,869
	Weighing 5.9 ounces or less per square yard	1,051	177,461	864	43,617	1,201	44,449	1,165	44,483	1,051	44,912
	Weighing more than 5.9 ounces per square yard	416	82,210	'391	'19,207	'397	'21,018	'407	'21,028	416	20,957
2211B 63	Blanketing	253	52,173	'272	'12,958	'257	'13,419	'233	'12,492	253	13,304
2211B 65	All other fabric	163	30,037	119	6,249	140	7,599	174	8,536	163	7,653

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: 1994—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.....	181	28,187	163	7,378	159	7,039	194	6,909	181	6,861
2221D 63	Blanketing.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 65	All other fabric.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Chiefly spun polyester mixed with cotton.....	1,233	285,274	1,288	67,748	1,290	76,462	1,193	66,684	1,233	74,380
2221D 73	Weighing 5.0 ounces or less per square yard ...	1,099	263,896	1,152	61,518	1,167	71,614	1,066	61,365	1,099	69,399
2221D 75	Weighing more than 5.0 ounces per square yard.	134	21,378	136	6,230	123	4,848	127	5,319	134	4,981
2221D 81	Chiefly spun acrylic.....	210	41,824	207	10,136	227	11,548	231	11,816	210	8,324
2221D 83	Blanketing.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221D 83	All other fabric.....	(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)	(D)	(D)
	Blue denim.....	3,603	830,831	3,480	186,128	3,509	212,878	3,674	214,227	3,603	217,598
	More than 50 percent cotton.....	3,472	806,026	3,368	181,362	3,418	206,784	3,541	207,667	3,472	210,213
2211C 01	Weighing 10.7 ounces or less per square yard ...	432	98,226	420	19,927	771	38,104	339	20,153	432	20,042
2211C 03	Weighing more than 10.7 ounces per square yard.	3,040	707,800	2,948	161,435	2,647	168,680	3,202	187,514	3,040	190,171
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.....	880	217,878	870	48,265	1,047	61,643	830	56,984	880	50,986
	More than 50 percent cotton.....	856	208,845	793	45,324	971	58,315	809	55,330	856	49,876
2211C 11	Weighing 10.7 ounces or less per square yard ...	107	17,136	85	4,889	76	5,093	38	2,766	107	4,388
2211C 13	Weighing more than 10.7 ounces per square yard.	749	191,709	708	40,435	895	53,222	771	52,564	749	45,488
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.....	365	19,407	370	5,431	370	4,339	365	4,958	365	4,679
	All other twill weaves.....	5,890	1,092,601	6,308	262,529	5,962	269,660	5,946	275,136	5,890	285,276
	More than 50 percent cotton.....	2,672	510,360	2,547	112,841	2,585	123,775	2,829	135,621	2,672	138,123
2211C 31	Weighing 5.9 ounces or less per square yard ...	726	101,048	822	23,049	759	27,649	779	24,046	726	26,304
2211C 33	Weighing more than 5.9 ounces per square yard.	1,946	409,312	1,725	89,792	1,826	96,126	2,050	111,575	1,946	111,819
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: 1994—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	1,952	347,429	2,174	90,988	1,918	88,179	1,851	83,815	1,952	84,447
2221E 25	Weighing 5.0 ounces or less per square yard . . .	235	30,075	358	9,377	258	8,677	245	6,428	235	5,593
2221E 26	Weighing more than 5.0 ounces per square yard.	1,717	317,354	1,816	81,611	1,660	79,502	1,606	77,387	1,717	78,854
2221E 27	Chiefly spun rayon and/or acetate	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211C 35	All other fabrics, 85 percent or more spun yarn	252	39,625	628	12,694	518	10,687	264	7,645	252	8,599
2221C 39	Spun/filament combinations	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 05	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	649	97,300	621	23,823	634	20,673	732	24,316	649	28,488
2221F 05	More than 50 percent cotton	234	45,267	171	10,944	173	8,981	258	10,832	234	14,510
2221F 06	Chiefly spun polyester mixed with cotton	120	13,153	100	3,514	100	2,989	123	3,013	120	3,637
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	166	29,339	168	7,331	163	6,153	197	7,717	166	8,138
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	1,071	167,690	1,119	37,301	1,129	42,894	1,155	43,192	1,071	44,303
2221F 11	More than 50 percent cotton	481	111,709	536	23,185	526	27,576	623	30,717	481	30,231
2221F 17	Chiefly spun polyester mixed with cotton	295	15,777	297	3,923	318	5,109	284	3,297	295	3,448
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)
2211D 31	Chiefly cotton	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 35	Chiefly manmade	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2211D 45	Birdseye diaper cloth	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221F 32	Huck and crash toweling	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221F 37	Table damask	357	77,070	361	20,549	344	20,638	341	18,101	357	17,782
2211D 07	More than 50 percent cotton	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 82	Chiefly spun polyester mixed with cotton	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221G 82	All other fabrics, 85 percent or more spun yarn	-	-	-	-	-	-	-	-	-	-
2211D 07	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	984	73,635	859	19,084	787	19,961	1,006	19,844	984	14,746
2221F 41	More than 50 percent cotton	49	16,929	97	5,293	79	5,426	53	4,149	49	2,061
	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: 1994—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 fabric, 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	5,166	682,635	5,221	'162,997	5,341	'178,110	5,111	165,319	5,166	176,209
	More than 50 percent cotton	1,362	164,670	1,147	36,744	1,224	39,391	1,290	41,602	1,362	46,933
2211D 62	Weighing 5.9 ounces or less per square yard . .	232	41,043	203	9,188	216	9,809	234	10,942	232	11,104
2211D 64	Weighing more than 5.9 ounces per square yard.	1,130	123,627	944	27,556	1,008	29,582	1,056	30,660	1,130	35,829
2221F 52	85 percent or more spun polyester	204	20,875	'184	'4,886	'195	'5,691	'222	5,110	'204	5,188
	Chiefly spun polyester mixed with cotton	568	49,666	'508	9,851	'466	15,162	'516	12,251	'568	12,402
2221F 54	Weighing 5.0 ounces or less per square yard . . .	169	14,205	'158	'3,110	'118	'4,378	'162	'3,353	'169	'3,364
2221F 56	Weighing more than 5.0 ounces per square yard.	399	35,461	350	6,741	348	10,784	354	8,898	399	9,038
2221F 58	All other fabrics, 85 percent or more spun yarn	721	100,416	'1,004	'27,105	'898	'22,898	'786	'24,551	'721	'25,862
	Spun/filament combinations	2,311	347,008	'2,378	'84,411	'2,558	'94,968	'2,297	'81,805	2,311	85,824
2211D 66	Chiefly cotton	110	10,836	58	2,148	77	2,937	96	3,267	'110	'2,484
2221G 87	Chiefly manmade	2,201	336,172	'2,320	'82,263	'2,481	'92,031	'2,201	'78,538	2,201	83,340

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

Table 30. Production and Loom Assignment of 85 Percent or More Filament Yarn Fabrics: 1994

[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	18,884	6,063,865	19,756	1,489,559	19,335	1,485,238	19,529	1,465,242	18,884	1,623,826
2221B 02	High tenacity yarn fabrics	611	102,245	'522	'21,103	536	25,766	626	28,074	611	27,302
2221C 02	100 percent and chiefly rayon	224	18,835	228	3,518	217	4,852	229	4,226	224	6,239
2221C 04	100 percent and chiefly nylon	188	45,985	'153	'9,574	'173	11,053	'207	13,231	'188	12,127
2221C 07	100 percent and chiefly polyester	199	37,425	'141	'8,011	146	9,861	190	10,617	199	8,936
	85 percent or more filament yarn fabric 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	3,539	563,412	4,087	145,612	4,038	144,538	4,036	139,004	3,539	134,258
	Weighing not more than 5 ounces per square yard ..	3,132	511,781	3,645	133,774	3,603	130,108	3,632	125,577	3,132	122,322
2221B 11	Plain weave	2,203	344,907	2,599	87,780	2,609	90,204	2,543	83,945	2,203	82,978
2221B 13	Other weaves	929	166,874	1,046	45,994	994	39,904	1,089	41,632	929	39,344
	Weighing more than 5 ounces per square yard ..	407	51,631	442	11,838	435	14,430	404	13,427	407	11,936
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	690	62,418	888	'18,199	797	16,740	839	13,994	690	'13,485
2221B 32	Weighing not more than 5 ounces per square yard ..	416	35,759	'423	'10,800	371	9,416	412	7,477	416	'8,066
2221B 34	Weighing more than 5 ounces per square yard ..	274	26,659	465	7,399	426	7,324	427	6,517	274	5,419
	85 percent or more nylon filament yarn fabrics	3,024	477,839	3,544	126,791	3,189	122,541	2,939	110,370	3,024	118,137
2221C 11	Typewriter and other impression fabrics	731	87,689	724	22,325	694	22,750	695	21,376	731	21,238
	Other 85 percent or more nylon filament yarn fabrics	2,293	390,150	2,820	104,466	2,495	99,791	2,244	88,994	2,293	96,899
	Weighing not more than 5 ounces per square yard	2,106	329,473	2,495	88,059	2,121	82,098	1,959	75,393	2,106	83,923
2221C 14	Flat, non-textured	1,819	284,614	2,119	74,973	1,789	69,306	1,717	66,312	1,819	74,023
2221C 16	All other	287	44,859	376	13,086	332	12,792	242	9,081	287	9,900
	Weighing more than 5 ounces per square yard	187	60,677	325	'16,407	374	17,693	285	13,601	187	12,976
2221C 22	Flat, non-textured	134	30,892	220	6,763	281	10,718	239	7,498	134	5,913
2221C 24	All other	53	29,785	105	'9,644	93	6,975	46	6,103	53	7,063
	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: 1994—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	4,891	728,946	4,745	174,967	4,740	184,067	4,964	185,112	4,891	184,800
	Textured	3,468	528,939	3,368	124,496	3,446	138,794	3,495	134,847	3,468	130,802
	Weighing not more than 5 ounces per square yard ¹	1,886	303,462	1,805	72,371	1,818	77,414	1,808	76,888	1,886	76,789
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 ¹	1,582	225,477	1,563	52,125	1,628	61,380	1,687	57,959	1,582	54,013
	Non-textured	1,423	200,007	1,377	50,471	1,294	45,273	1,469	50,265	1,423	53,998
2221C 50	Weighing not more than 5 ounces per square yard ¹	959	112,919	881	25,781	855	24,529	994	30,174	959	32,435
2221C 55	Weighing more than 5 ounces per square yard ¹	464	87,088	496	24,690	439	20,744	475	20,091	464	21,563
2221C 62	Other chiefly polyester filament fabrics	172	12,432	158	2,799	158	2,684	165	3,339	172	3,610
	Glass fiber fabrics	2,387	415,642	2,448	107,709	2,405	101,585	2,437	102,838	2,387	103,510
2221C 72	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	3,399	3,671,327	3,228	884,644	3,301	881,053	3,342	874,242	3,399	1,031,388
	Carpet backing	2,867	3,460,741	2,697	836,351	2,768	827,216	2,810	820,659	2,867	976,515
2221C 80	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	532	210,586	531	48,293	533	53,837	532	53,583	532	54,873

¹Classified on a finished weight basis.

D Data withheld to avoid disclosing figures for individual companies.

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

Table 31. Production and Loom Assignment of Pile Fabrics, Including Yarn Dyed Fabrics: 1994

[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	4,424	583,811	4,745	143,487	4,697	147,921	4,545	144,212	4,424	148,191
	Corduroy	333	36,907	444	9,403	439	12,282	277	8,441	333	6,781
	More than 50 percent cotton	333	36,907	444	9,403	439	12,282	277	8,441	333	6,781
2211E 01	Finewales and pinwales	109	14,324	114	2,701	138	4,253	126	4,182	109	3,188
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 fabric	538	53,781	569	12,747	548	12,782	536	14,108	538	14,144
2211E 21	More than 50 percent cotton	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 11	Chiefly manmade fiber ...	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Terry cloth and terry toweling	3,553	493,123	3,732	121,337	3,710	122,857	3,732	121,663	3,553	127,266
2211E 32	Terry toweling	3,482	481,994	3,658	118,559	3,638	119,819	3,664	119,078	3,482	124,538
2211E 34	Terry cloth	71	11,129	74	2,778	72	3,038	68	2,585	71	2,728

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 32. Production and Loom Assignment of Woolen and Worsted Fabrics, Including Chiefly Manmade/Wool Blends and Chiefly Cotton/Wool Blends: 1994

[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) ¹	1,925	178,591	2,025	49,128	2,059	51,058	1,848	39,436	1,925	38,969
	Apparel fabrics, including government orders	1,827	170,241	1,923	47,170	1,955	48,972	1,732	37,214	1,827	36,885
	Worsted fabrics	1,126	101,841	1,216	28,123	1,204	29,041	1,033	21,649	1,126	23,028
22312 01	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	701	68,400	707	19,047	751	19,931	699	15,565	701	13,857
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)	98	8,350	¹ 102	1,958	¹ 104	2,086	¹ 116	2,222	¹ 98	2,084
22312 62	Blanketing, including thermal	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312 61	Upholstery fabric	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312 85	All other fabrics	28	2,117	48	646	48	659	48	622	28	190
22312 92	Woven felts (thousands of pounds)	134	4,126	127	1,129	123	1,009	125	980	¹ 134	1,008
	Chiefly manmade/wool blend and chiefly cotton/wool blend fabrics	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Chiefly spun polyester mixed mainly or solely with wool	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 21	Woolen	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Worsted	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 25	Weighing not more than 5.9 ounces per square yard	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 27	Weighing more than 5.9 ounces per square yard	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 32	All other chiefly spun fibers mixed mainly or solely with wool	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Chiefly filament polyester mixed mainly or solely with wool or spun polyester/wool blends (less than 36 percent wool)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 51	Woolen	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Worsted	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 53	Weighing not more than 5.9 ounces per square yard	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221H 55	Weighing more than 5.9 ounces per square yard	-	-	-	-	-	-	-	-	-	-
22211 63	All other chiefly filament yarn mixed mainly or solely with wool	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹Includes 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.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ¹Revised by 5 percent or more from previously published figures.

Table 33. Production and Loom Assignment of Upholstery Fabrics: 1994

[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	4,269	491,784	'4,144	'117,506	'4,154	'127,776	'4,250	'119,634	4,269	126,868
	85 percent or more spun yarn and spun/filament combinations	3,377	384,930	'3,261	'90,308	'3,293	'100,085	'3,391	'94,727	3,377	99,810
2211E 41	Pile woven	731	89,819	'674	'21,978	'661	'22,409	'717	'23,352	731	22,080
	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	2,646	295,111	'2,587	'68,330	'2,632	77,676	'2,674	'71,375	'2,646	'77,730
	All cotton and chiefly cotton	1,029	104,163	'972	'21,386	'974	'26,674	'997	'26,350	'1,029	'29,753
	All manmade and chiefly manmade	1,617	190,948	1,615	46,944	1,658	51,002	1,677	45,025	1,617	47,977
2221X 01	Olefin	400	53,601	395	12,840	404	15,132	434	13,018	400	12,611
2221X 03	All other flat woven manmade fiber fabrics	1,217	137,347	1,220	34,104	1,254	35,870	1,243	32,007	1,217	35,366
	85 percent or more filament yarn	892	106,854	'883	'27,198	'861	'27,691	'859	'24,907	'892	'27,058
2221X 01	All polyester and chiefly polyester	329	41,567	317	10,607	301	11,004	314	9,414	329	10,542
2221X 03	All nylon and chiefly nylon	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2221X 05	All olefin and chiefly olefin	450	61,175	'447	'15,087	'457	'15,777	'439	'14,706	'450	'15,605
2221X 07	All other filament fiber fabrics	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

D Data withheld to avoid disclosing figures for individual companies. 'Revised by 5 percent or more from previously published figures.

Table 34. Production of Tire Cord and Tire Cord Fabrics: 1994

[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	877,891	220,926	207,398	217,986	231,581
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	135,896	35,602	33,522	33,963	32,809
22960 37	Polyester tire cord and tire cord fabrics	265,330	67,169	69,456	64,035	64,670
22960 38	Glass tire cord and tire cord fabrics	678	157	128	247	146
22960 45	Steel tire cord	460,758	'114,524	'100,354	115,521	130,359
22960 49	All other tire cord and tire cord fabrics, including chafer	14,202	3,108	3,657	4,038	3,399

D Data withheld to avoid disclosing figures for individual companies. 'Revised by 5 percent or more from previously published figures.

Table 35. Looms in Place and Loom Hours Operated in Broadwoven Fabric Mills: 1994

[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, 1994	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
Total	83,724	603,988	86,668	155,288	85,513	153,611	84,398	146,121	83,724	148,968
Shuttle type looms	17,853	121,146	20,879	33,098	19,784	31,179	18,909	28,868	17,853	28,001
Single shuttle cam looms	11,612	80,548	13,394	22,076	12,233	20,667	11,824	18,606	11,612	19,199
Single shuttle dobby looms	3,239	22,505	4,193	6,258	4,296	5,808	3,914	5,836	3,239	4,603
Multiple shuttle box or head motion looms	2,119	13,164	2,307	3,368	2,270	3,297	2,273	3,288	2,119	3,211
Double shuttle pile and plush, and jacquard looms	883	4,929	985	1,396	985	1,407	'898	1,138	'883	988
Shuttleless looms and weaving machines	65,871	482,842	65,789	122,190	65,729	122,432	65,489	117,253	65,871	120,967
Single filling insertion capability	38,714	296,552	39,271	75,790	39,032	75,674	38,419	71,038	38,714	74,050
Air jet looms	16,272	129,358	16,442	33,167	16,382	33,084	16,075	30,591	16,272	32,516
Water jet looms	5,835	41,061	6,167	10,939	6,090	10,348	5,916	9,862	5,835	9,912
Projectile looms	12,710	97,266	12,616	24,265	12,567	24,790	12,589	23,795	12,710	24,416
Rapier looms	3,897	28,867	'4,046	'7,419	3,993	7,452	3,839	6,790	3,897	'7,206
Multiple filling insertion capability	26,277	181,741	25,677	45,185	25,850	45,546	26,200	45,130	26,277	45,880
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	8,481	64,265	9,317	16,963	8,939	16,342	8,612	15,529	8,481	15,431
Rapier looms	12,925	83,039	'12,572	'20,818	12,646	21,010	12,743	20,290	12,925	20,921
Pile and plush looms	880	4,549	'841	'1,215	'847	'1,212	'870	'1,085	880	1,037

D Data withheld to avoid disclosing figures for individual companies.

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

Table 36. Production, Exports, Imports, and Apparent Consumption of Broadwoven Fabrics: 1994

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

Product description	Manufacturers' shipments ¹ (quantity)	Imports for consumption ²		Percent imports to manufacturers' shipments (quantity)	Exports of domestic merchandise ⁴		Percent exports to manufacturers' shipments (quantity)	Apparent consumption ⁵
		Quantity	Value ³		Quantity	Value		
Cotton fabrics ⁶	3,739,599	1,589,069	1,591,184	42.5	246,734	541,087	6.6	5,081,934
Cheesecloth and batistes	685,127	38,936	27,072	5.7	24,633	45,624	3.6	699,430
Print cloth	251,933	346,241	192,592	137.4	10,409	19,464	4.1	587,765
Poplin and broadcloth	35,471	207,270	150,481	584.3	15,715	31,067	44.3	227,026
Weighing 5.9 ounces or less per square yard	(D)	205,553	144,503	(D)	8,827	19,350	(D)	(D)
Weighing more than 5.9 ounces per square yard	(D)	1,717	5,978	(D)	6,888	11,717	(D)	(D)
Duck, including tape warp	43,353	121,264	107,396	279.7	9,267	22,110	21.4	155,350
Sheeting	598,291	351,251	258,062	58.7	20,321	42,315	3.4	929,221
Twills and sateens	485,419	222,295	252,001	45.8	26,273	49,539	5.4	681,441
Oxfords	41,528	7,310	16,467	17.6	(NA)	(NA)	(NA)	(NA)
All other constructions	146,893	74,181	152,286	50.5	(NA)	(NA)	(NA)	(NA)
Blue denim	687,110	109,444	194,238	15.9	87,482	210,764	12.7	709,072
Yarn dyed fabric	319,232	97,603	191,800	30.6	45,521	97,261	14.3	371,314
Pile fabrics (except terry), including yarn dyed	32,932	10,596	42,892	32.2	5,588	18,219	17.0	37,940
Terry, including yarn dyed	412,310	2,678	5,897	0.6	1,525	4,724	0.4	413,463
Manmade fiber fabrics	9,999,214	892,827	1,178,418	8.9	315,000	761,272	3.2	0,577,041
85 percent or more filament yarn fabrics	5,070,121	443,370	566,034	8.7	170,065	416,612	3.4	5,343,426
Nylon and polyester high tenacity fabric	69,741	6,198	22,877	8.9	21,433	51,370	30.7	54,506
Rayon high tenacity fabric	15,748	1,280	2,615	8.1	8,048	16,341	51.1	8,980
Typewriter fabric	73,319	1	1	(NA)	(NA)	(NA)	(NA)	(NA)
Rayon or acetate filament yarn fabrics	523,269	25,304	87,795	4.8	13,426	30,726	2.6	535,147
Polyester filament yarn fabric	619,881	223,442	316,655	36.0	50,463	92,197	8.1	792,860
Glass fiber fabric	347,527	42,989	42,308	12.4	16,658	56,863	4.8	373,858
Nylon filament yarn fabric	330,688	38,667	46,913	11.7	(NA)	(NA)	(NA)	(NA)
85 percent or more filament yarn obtained from strip	(D)	90,380	24,773	(D)	15,028	35,690	(D)	(D)
All other filament yarn fabric	(D)	15,109	22,097	(D)	45,009	133,425	(D)	(D)
85 percent or more spun yarn fabric	3,460,222	256,471	295,449	7.4	116,739	268,109	3.4	3,599,954
Cheesecloth and batistes	115,828	6,893	4,550	6.0	(?)	(?)	(?)	(?)
Poplin and broadcloth	458,413	71,161	59,046	15.5	(?)	(?)	(?)	(?)
Poly/cotton blends weighing less than 5.0 ounces per square yard	342,783	57,906	37,598	16.9	(?)	(?)	(?)	(?)
Poly/cotton blends weighing more than 5.0 ounces per square yard	25,244	1,122	2,031	4.4	(?)	(?)	(?)	(?)
All other spun yarns	90,386	12,133	19,417	13.4	(?)	(?)	(?)	(?)
Print cloth	535,171	58,556	39,361	10.9	(?)	(?)	(?)	(?)
Duck	22,125	448	1,622	2.0	(?)	(?)	(?)	(?)
Sheeting	1,522,347	19,919	21,496	1.3	(?)	(?)	(?)	(?)
Poly/cotton blends weighing 5.0 ounces or less per square yard	1,377,110	13,653	8,590	1.0	(?)	(?)	(?)	(?)
Poly/cotton blends weighing more than 5.0 ounces per square yard	17,287	114	258	0.7	(?)	(?)	(?)	(?)
All other spun yarn	127,950	6,152	12,648	4.8	(?)	(?)	(?)	(?)
Sateens or twills	425,238	59,233	45,320	13.9	(?)	(?)	(?)	(?)
Oxford	28,199	162	346	0.6	(?)	(?)	(?)	(?)
All other spun manmade fiber fabrics	159,773	18,422	56,741	11.5	(?)	(?)	(?)	(?)
Yarn dyed fabric	150,235	8,649	10,227	5.8	(?)	(?)	(?)	(?)
Pile fabrics	42,894	13,028	56,740	30.4	(?)	(?)	(?)	(?)
Spun/filament yarn combinations, including yarn dyed	1,401,461	179,251	272,076	12.8	38,825	101,277	2.8	1,541,887
Poplin and broadcloth	372,250	84,630	101,121	22.7	(?)	(?)	(?)	(?)
Sheeting	(D)	3,904	6,771	(D)	(?)	(?)	(?)	(?)
Print cloth	(D)	40,320	25,296	(D)	(?)	(?)	(?)	(?)
Twills and sateens	(D)	5,691	18,309	(D)	(?)	(?)	(?)	(?)
All other	371,786	44,706	120,579	12.0	(?)	(?)	(?)	(?)
Chiefly manmade/wool blends	67,410	13,735	44,859	20.4	(NA)	(NA)	(NA)	(NA)
Silk fabrics	487	30,870	314,237	6,343.7	1,628	11,739	334.6	29,729
Wool fabrics	149,324	29,926	256,868	20.0	7,802	38,936	5.2	171,448

¹Represents 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. ²Source: Bureau of the Census report IM145, U.S. Imports for Consumption. ³This dollar value represents the c.i.f. (cost, insurance, and freight) at the first port of entry in the United States plus calculated import duty. ⁴Source: Bureau of the Census report EM545, U.S. Exports. ⁵Apparent consumption represents new domestic supply and is derived by subtracting exports from the total manufacturers' shipments plus imports. ⁶Includes all cotton and chiefly cotton mixed with manmade fiber. ⁷Individual export data are not available for these products; however, export data are available on a total basis.

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Note: Fabric blends as shown in Current Industrial Reports Series MQ22T are reported based on the chief weight of the fiber; whereas, fabric blends as shown for imports and exports are based on the chief value of the 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 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 Robert Reinard, 301-457-4637.

2.5 KNIT FABRIC PRODUCTION

INTRODUCTION

The data from the MA22K, Knit Fabric survey include all firms producing knit fabric, 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 fabric 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 fabric made from yarn owned by others.

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

Table 37. **Summary of Knit Fabric Production: 1984 to 1994**

[Millions of pounds]

Year	Total	Warp knit	Weft knit
1994	2,230	350	1,880
1993	2,188	323	1,865
1992 ¹	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
1984	1,514	360	1,154

¹For 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 4.8 percent of the total knit fabric production.

Note: Detail may not add due to independent rounding.

Table 38. Production of Knit Fabrics Off Knitting Machine, by Type: 1994 and 1993

[Thousands of pounds]

Product code	Product description	1994		1993	
		Number of knitting machines ¹	Total production	Number of knitting machines ¹	Total production
	Knit fabric production, excluding narrow knit fabric and knit garment lengths, trimmings, and collars.....	21,466	2,229,563	21,814	2,187,889
	Warp knit fabric yard goods (over 12 inches in width) ..	5,144	350,003	4,827	323,175
22581 01	Pile fabrics (raschel and raschel crochet)	1,730	98,629	1,499	84,135
22581 02	Long pile fabrics	(X)	36,038	(X)	33,125
22581 03	All acrylic or modacrylic and chiefly acrylic or modacrylic	(X)	2,932	(X)	3,013
22581 04	All polyester and chiefly polyester	(X)	29,973	(X)	26,538
22581 05	All other fibers	(X)	(D)	(X)	(D)
	Fiber, n.s.k.	(X)	(D)	(X)	(D)
22581 07	Looped pile fabrics (terry cloth)	(X)	26,787	(X)	20,530
22581 08	All cotton and chiefly cotton	(X)	10,846	(X)	9,200
22581 09	All manmade and chiefly manmade	(X)	13,415	(X)	10,494
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)	35,804	(X)	30,478
22581 16	All cotton and chiefly cotton	(X)	(D)	(X)	(D)
22581 17	All manmade and chiefly manmade	(X)	35,015	(X)	29,657
22581 19	All other fibers	(X)	(D)	(X)	(D)
	Fiber, n.s.k.	(X)	-	(X)	-
	Fabric, n.s.k.	(X)	-	(X)	2
22581 51	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread)	854	34,705	870	34,221
22581 61	All other warp knit fabrics	2,560	216,669	2,458	204,819
	By type:				
22581 62	Tricot, simplex and milanese	(X)	170,258	(X)	159,305
22581 63	All other	(X)	46,370	(X)	45,509
	Type, n.s.k.	(X)	41	(X)	5
	By fiber:				
22581 71	All cotton and chiefly cotton	(X)	18,262	(X)	18,145
22581 72	All wool and chiefly wool	(X)	(D)	(X)	(D)
22581 73	All manmade and chiefly manmade	(X)	197,667	(X)	185,122
22581 75	All other fibers	(X)	(D)	(X)	(D)
	Fiber, n.s.k.	(X)	5	(X)	25
22571 01	Weft knit yard goods (over 12 inches in width)	16,322	1,879,560	16,987	1,864,714
	Pile fabrics	688	51,604	796	55,360
22571 03	Long pile fabrics, including sliver knit	(X)	30,802	(X)	32,023
22571 04	All polyester and chiefly polyester	(X)	12,281	(X)	9,872
22571 05	All acrylic or modacrylic and chiefly acrylic or modacrylic	(X)	16,749	(X)	20,733
22571 06	All other fibers	(X)	1,772	(X)	1,418
	Fiber, n.s.k.	(X)	-	(X)	-
22571 10	Looped pile fabrics (terry cloth)	(X)	14,092	(X)	17,244
22571 14	All cotton and chiefly cotton	(X)	8,548	(X)	7,673
22571 16	All manmade and chiefly manmade	(X)	4,863	(X)	7,978
22571 19	All other fibers	(X)	(D)	(X)	(D)
	Fiber, n.s.k.	(X)	(D)	(X)	(D)
22571 21	All other pile fabrics (velour, etc.)	(X)	6,710	(X)	6,093
22571 23	All cotton and chiefly cotton	(X)	(D)	(X)	4,339
22571 24	All manmade and chiefly manmade	(X)	(D)	(X)	1,715
22571 28	All other fibers	(X)	-	(X)	(D)
	Fiber, n.s.k.	(X)	-	(X)	(D)
	Fabric, n.s.k.	(X)	-	(X)	-
22571 71	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread)	207	28,607	202	22,863
22571 31	Single circular knit (except pile and elastic)	10,456	1,413,377	10,808	1,412,909
	By type:				
22571 32	Fleece or flannel	(X)	408,805	(X)	443,432
22571 33	Underwear and nightwear	(X)	286,782	(X)	295,698
22571 34	All other apparel uses	(X)	579,910	(X)	536,184
22571 36	All other uses	(X)	136,948	(X)	132,486
	Type, n.s.k.	(X)	932	(X)	5,109

See footnotes at end of table.

Table 38. Production of Knit Fabrics Off Knitting Machine, by Type: 1994 and 1993—Con.

[Thousands of pounds]

Product code	Product description	1994		1993	
		Number of knitting machines ¹	Total production	Number of knitting machines ¹	Total production
	Knit fabric production—Con.				
22571 31	Weft knit goods (over 12 inches in width)—Con.				
	Single circular knit (except pile and elastic)—Con.				
	By fiber:				
22571 37	All cotton and chiefly cotton	(X)	849,137	(X)	794,121
22571 38	All wool and chiefly wool	(X)	2,563	(X)	2,107
22571 55	All nylon and chiefly nylon	(X)	12,688	(X)	8,166
22571 56	All polyester and chiefly polyester	(X)	215,144	(X)	237,461
22571 39	All manmade and chiefly manmade	(X)	322,953	(X)	352,974
22571 40	All other fibers	(X)	10,848	(X)	17,254
	Fiber, n.s.k.	(X)	44	(X)	826
22571 41	Double knit and interlock	2,663	277,504	2,830	276,416
	By fiber:				
22571 51	All cotton and chiefly cotton	(X)	99,335	(X)	91,439
22571 52	All wool and chiefly wool	(X)	683	(X)	1,419
22571 53	All manmade and chiefly manmade	(X)	164,249	(X)	170,157
22571 54	All other fibers	(X)	13,237	(X)	13,291
	Fiber, n.s.k.	(X)	-	(X)	110
	By type:				
22571 45	Outerwear apparel, other than shirts	(X)	95,314	(X)	95,832
22571 44	Outer shirts, blouses, and tops	(X)	116,738	(X)	120,044
22571 47	All other uses	(X)	65,440	(X)	55,083
	Type, n.s.k.	(X)	12	(X)	5,457
22571 60	Rib other than double knit and interlock	2,308	108,468	2,351	97,166
22571 61	All cotton and chiefly cotton	(X)	65,431	(X)	55,766
22571 62	All wool and chiefly wool	(X)	2,411	(X)	1,947
22571 63	All manmade and chiefly manmade	(X)	39,553	(X)	37,995
22571 65	All other fibers	(X)	1,067	(X)	1,298
	Fiber, n.s.k.	(X)	6	(X)	160
	Narrow knit fabric production	1,134	35,434	1,160	41,339
22581 91	Narrow warp knit yard goods (12 inches and narrower in width)	722	25,835	760	33,062
22581 93	Elastic fabrics	(D)	(D)	471	21,354
22581 95	All other narrow knit fabric	(D)	(D)	289	11,708
22571 81	Narrow weft knit yard goods (12 inches or less)	412	9,599	400	8,277
22571 83	Elastic fabrics	(D)	(D)	(D)	(D)
22571 84	All other narrow knit fabric	(D)	(D)	(D)	(D)
	Knit garment lengths, trimmings, and collars ²	4,263	22,445	3,133	19,925
	Knit garment lengths, made on sweater, strip, v-bed strip, and full-fashioned machines	2,932	7,521	1,945	6,964
	Knit trimmings and collars	1,331	14,924	1,188	12,961

¹Knitting machines operating on last workday of the year.²Quantity produced in thousands of dozens.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. n.s.k. Not specified by kind. †Revised by 5 percent or more from previously published figures. X Not applicable.

Table 39. Production of Knit Fabrics Off Knitting Machine, by Method of Distribution: 1994 and 1993

[Thousands of pounds]

Product code	Product description	1994				1993			
		Produced for own use	Produced for sale	Produced on commission	Not specified by kind	Produced for own use	Produced for sale	Produced on commission	Not specified by kind
	Knit fabric production, excluding narrow knit fabric and knit garment lengths, trimmings, and collars	1,146,631	795,966	286,959	7	1,132,858	792,722	262,293	16
22581 01	Warp knit fabric yard goods (over 12 inches in width)	98,654	224,857	26,485	7	93,472	203,387	26,300	16
22581 51	Pile fabrics (raschel and raschel crochet)	31,864	60,762	5,996	7	31,533	43,595	8,991	16
22581 61	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread)	(D)	17,244	(D)	-	(D)	18,572	(D)	-
	All other warp knit fabrics	(D)	146,851	(D)	-	(D)	141,220	(D)	-
22571 01	Weft knit fabric yard goods (over 12 inches in width)	1,047,977	571,109	260,474	-	1,039,386	589,335	235,993	-
22571 71	Pile fabrics	16,482	25,752	9,370	-	16,408	29,520	9,432	-
22571 31	Elastic fabrics (containing by weight 5 percent or more elastomeric yarn or rubber thread)	1,496	17,227	9,884	-	1,755	15,094	6,014	-
22571 41	Single circular knit (except pile and elastic)	891,655	401,252	120,470	-	893,197	404,835	114,877	-
22571 60	Double knit and interlock	86,361	84,332	106,811	-	76,663	105,121	94,632	-
	Rib other than double knit and interlock	51,983	42,546	13,939	-	51,363	34,765	11,038	-
22581 91	Narrow knit fabric production	9,466	25,212	756	-	8,090	32,472	777	-
22581 93	Narrow warp knit yard goods (12 inches and narrower in width)	8,015	17,375	445	-	6,362	26,255	445	-
22581 95	Elastic fabrics	(D)	13,213	(D)	-	(D)	20,436	(D)	-
22571 81	All other narrow knit fabric	(D)	4,162	(D)	-	(D)	5,819	(D)	-
22571 83	Narrow weft knit fabric yard goods (12 inches or less)	1,451	7,837	311	-	1,728	6,217	332	-
22571 84	Elastic fabrics	(D)	(D)	(D)	-	-	(D)	(D)	-
	All other narrow knit fabric	(D)	(D)	(D)	-	1,728	(D)	(D)	-
	Knit garment lengths, trimmings, and collars ¹	8,682	9,106	4,657	-	7,296	8,186	4,393	50
	Knit garment lengths, made on sweater, strip, v- bed strip, and full-fashioned machines	4,101	1,415	2,005	-	3,202	1,396	2,316	50
	Knit trimmings and collars	4,581	7,691	2,652	-	4,094	6,790	2,077	-

¹Quantity produced in thousands of dozens.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

Table 40. Shipments, Exports, Imports, and Apparent Consumption of Knit Fabric: 1994

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

Product description	Domestic production (quantity)	Exports of domestic merchandise ¹		Percent exports to manufacturers' shipments (quantity)	Imports for consumption ²		Percent imports to domestic merchandise (quantity)
		Quantity	Value at port		Quantity	Value ³	
Total	1,056,121	36,835	280,278	3.5	74,931	395,413	7.1
Pile fabrics	68,146	15,939	119,867	23.4	45,308	82,787	66.5
Long pile fabrics	30,319	450	3,253	1.5	1,071	3,943	3.5
Looped pile fabrics	18,543	8,611	57,612	46.4	25,795	40,478	139.1
Of cotton fibers	8,797	112	459	1.3	6,015	10,069	68.4
Of manmade fibers	8,291	8,094	55,622	97.6	19,586	27,126	236.2
Of other fibers	1,455	405	1,531	27.8	194	3,283	13.3
Other pile fabrics	19,284	6,878	59,002	35.7	18,442	38,366	95.6
Of cotton fibers	(D)	192	851	(D)	522	1,951	(D)
Of manmade fibers	16,833	2,703	40,866	16.1	17,855	36,231	106.1
Of other fibers	(D)	3,983	17,285	(D)	65	184	(D)
Elastic fabrics	(D)	5,533	49,878	(D)	9,616	129,232	(D)
12 inches or less in width	(D)	4,016	29,211	(D)	368	4,366	(D)
Over 12 inches in width	28,718	1,517	20,667	5.3	9,248	124,866	32.2
Other warp knit fabrics	114,023	4,371	43,824	3.8	3,885	40,610	3.4
Of cotton fibers	8,284	1,098	9,715	13.3	409	4,117	4.9
Of wool fibers	(D)	7	122	(D)	9	354	(D)
Of manmade fibers	89,662	3,095	32,640	3.5	3,454	35,850	3.9
Of other fibers	(D)	171	1,347	(D)	13	289	(D)
Other narrow knit fabrics	(D)	687	6,466	(D)	408	6,265	(D)
Other knit fabrics	829,161	10,305	60,243	1.2	15,714	136,519	1.9
Of cotton fibers	459,906	9,299	51,630	2.0	9,149	55,033	2.0
Of wool fibers	2,566	32	235	1.2	54	2,040	2.1
Of manmade fibers	342,281	(NA)	(NA)	-	6,417	77,573	1.9
Double knit or interlock	74,503	(NA)	(NA)	(NA)	3,384	41,834	4.5
Other	267,777	(NA)	(NA)	(NA)	3,033	35,739	1.1
Of other fibers	11,409	974	8,378	8.5	94	1,873	0.8

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Note: 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 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 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.

2.6 APPAREL

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 fabric 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: 1994 and 1993

[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
1994										
Men's and boys' apparel:										
Suits	986	1,095.5	262	263.2	265	295.3	226	264.6	234	272.4
Coats	5,346	2,092.1	1,421	542.4	1,406	574.9	1,221	468.2	1,299	506.6
Tops	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Bottoms	54,582	8,384.3	13,575	2,153.6	13,786	2,176.5	14,228	2,128.4	12,993	1,925.8
Underwear and nightwear	102,547	1,815.7	24,966	548.3	27,259	482.0	25,544	402.5	24,778	382.9
Other garments	8,586	1,250.4	2,136	321.9	2,249	383.7	1,976	262.7	2,225	282.1
Women's and girls' apparel:										
Dresses	16,425	4,782.4	3,683	1,080.5	3,975	1,175.3	4,192	1,244.9	4,575	1,281.7
Coats	(D)	(D)	(D)	(D)	1,231	599.1	1,038	452.8	1,162	465.1
Tops	55,954	5,295.5	14,448	1,343.8	13,820	1,369.2	14,497	1,325.8	13,189	1,256.7
Bottoms	49,465	6,440.0	11,552	1,543.1	13,186	1,778.5	12,566	1,597.9	12,161	1,520.5
Underwear and nightwear	108,216	3,925.6	27,951	1,068.5	29,160	1,056.7	27,385	938.2	23,720	862.2
Other garments	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Infants' apparel:										
Coats and jackets	12,957	701.0	3,345	173.1	3,858	222.8	2,776	142.7	2,978	162.4
Dresses	36	9.2	9	2.2	9	2.3	9	2.4	9	2.3
Knit shirts	524	65.2	156	17.9	127	15.4	89	12.6	152	19.3
Woven shirts	1,499	71.3	361	16.1	505	25.9	348	15.8	285	13.5
Sweaters	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sets	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sets	1,125	83.2	308	23.7	308	23.9	254	18.6	255	17.0
Pants and shorts	1,076	45.3	316	12.0	365	15.8	250	11.2	145	6.3
Play clothing	2,442	165.9	609	37.2	680	46.2	498	35.4	655	47.1
Underwear	2,734	54.4	677	12.5	728	16.3	610	12.1	719	13.5
Nightwear	3,429	199.5	893	50.3	1,097	73.7	693	33.0	746	42.5
1993										
Men's and boys' apparel:										
Suits	810	1,030.9	206	254.2	187	247.5	195	246.1	223	283.1
Coats	4,930	2,103.1	1,263	538.0	1,230	553.1	1,184	486.9	1,253	525.1
Tops	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Bottoms	52,635	7,488.2	12,875	1,813.3	13,067	1,907.9	13,693	1,953.0	12,999	1,814.0
Underwear and nightwear	111,488	1,842.3	24,777	512.3	27,824	491.1	28,754	456.3	30,133	382.6
Other garments	8,117	1,167.1	2,068	303.3	1,955	315.7	1,994	272.4	2,100	275.7
Women's and girls' apparel:										
Dresses	14,781	4,632.9	3,240	1,013.4	3,581	1,138.3	3,789	1,187.6	4,171	1,293.6
Coats	4,843	2,058.5	1,080	499.2	1,303	643.0	1,213	460.3	1,247	456.0
Tops	53,810	5,236.1	12,804	1,234.3	14,562	1,447.5	13,198	1,274.3	13,246	1,280.0
Bottoms	(D)	(D)	11,362	1,514.7	12,739	1,744.6	12,568	1,735.8	(D)	(D)
Underwear and nightwear	97,323	3,661.2	22,265	917.8	25,005	972.9	25,090	883.5	24,963	887.0
Other garments	12,595	1,926.4	3,164	431.6	2,621	390.9	3,158	499.9	3,652	604.0
Infants' apparel:										
Coats and jackets	13,259	723.2	3,392	181.0	3,303	204.4	3,190	162.7	3,374	175.1
Dresses	57	10.4	17	3.1	13	2.3	14	2.6	13	2.4
Knit shirts	524	69.9	143	19.0	116	17.0	93	11.7	172	22.2
Woven shirts	1,423	67.4	369	16.4	328	17.4	338	15.6	388	18.0
Sweaters	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sets	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Sets	1,176	76.1	260	16.7	332	21.9	257	16.7	327	20.8
Pants and shorts	1,131	51.2	245	11.1	373	18.4	256	11.0	257	10.7
Play clothing	2,669	203.8	654	47.8	740	58.9	602	43.0	673	54.1
Underwear	2,966	56.5	722	12.6	497	11.0	736	15.4	1,011	17.5
Nightwear	3,255	184.3	971	53.5	889	56.5	871	45.6	524	28.7

D Data withheld to avoid disclosing figures for individual companies.

Note: For 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. Also, in 1993, a number of companies were added based on information in the 1992 Census of Manufactures. Data were received from those companies for 1993; therefore, the information shown for the prior year may not be directly comparable. These changes are shown in table 50. Revisions to the 1993 data were based on a reconciliation with the 1993 Annual Survey of Manufactures.

Table 42. Total Quantity of Production and Value of Shipments of Men's, Junior Boys', and Little Boys' Apparel: 1994 and 1993

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994											
Suits	1,000 units	11,828	1,095.5	3,143	263.2	3,176	295.3	2,707	264.6	2,802	272.4
Trios .....	.....do.....	10	(NA)	8	(NA)	-	(NA)	1	(NA)	1	(NA)
Coats, jackets, and vests:											
Down and feather filled coats, jackets, and vests .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	.....do.....	13,864	841.0	(D)	(D)	(D)	(D)	(D)	(D)	3,530	219.6
Heavy nontailored coats and jackets .....	.....do.....	15,629	514.3	4,054	151.9	4,074	139.9	3,772	104.9	3,729	117.6
Lightweight nontailored coats and jackets .....	.....do.....	24,915	428.5	7,113	118.6	6,806	115.4	5,056	92.6	5,940	101.9
Overcoats and top coats .....	.....do.....	1,015	75.0	273	23.8	326	25.3	232	13.4	184	12.5
Raincoats .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Work jackets	1,000 dozens	428	132.4	111	33.7	107	34.5	105	31.0	105	33.2
Tops:											
Woven dress and business shirts	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven sport shirts .....	.....do.....	2,571	303.2	603	71.7	683	84.5	612	71.3	673	75.7
Work shirts .....	.....do.....	4,588	533.7	1,211	151.3	1,176	142.9	1,152	116.0	1,049	123.5
Knit T-shirts and tank tops made for outerwear .....	.....do.....	69,353	3,442.7	16,313	785.0	16,436	818.1	19,427	1,033.7	17,177	805.9
Sweatshirts .....	.....do.....	18,399	1,134.1	5,046	337.3	5,697	367.1	4,180	237.5	3,476	192.2
Other knit shirts .....	.....do.....	10,186	892.7	2,227	211.5	2,672	231.6	2,617	221.8	2,670	227.8
Sweaters .....	.....do.....	1,780	257.4	545	86.5	565	81.7	353	51.0	317	38.2
Bottoms:											
Dress and sport trousers	1,000 units	112,319	2,101.8	26,686	515.1	29,392	564.2	28,802	521.1	27,439	501.4
Junior boys' dress and sport trousers .....	.....do.....	5,147	(NA)	1,397	(NA)	1,435	(NA)	980	(NA)	1,335	(NA)
Jean and jean-cut casual slacks .....	.....do.....	325,814	4,496.2	84,774	1,189.9	88,330	1,229.9	84,954	1,154.1	67,756	922.3
Junior boys' jean and jean-cut slacks .....	.....do.....	34,225	(NA)	6,875	(NA)	10,160	(NA)	11,394	(NA)	5,796	(NA)
Shorts .....	.....do.....	112,392	980.6	25,510	239.3	19,866	174.7	29,649	252.2	37,367	314.4
Athletic shorts .....	.....do.....	33,412	(NA)	7,468	(NA)	7,941	(NA)	9,604	(NA)	8,399	(NA)
Sweatpants	1,000 dozens	4,965	375.3	1,212	105.2	1,388	106.3	1,281	81.6	1,084	82.2
Workpants .....	.....do.....	3,740	430.4	949	104.1	932	101.4	997	119.4	862	105.5
Underwear and nightwear:											
Pajamas and nightwear	1,000 dozens	2,488	197.9	697	62.0	696	61.6	566	37.7	529	36.6
Robes .....	.....do.....	(D)	(D)	185	43.4	173	25.7	78	10.2	(D)	(D)
Underwear total .....	.....do.....	99,544	1,530.3	24,084	442.9	26,390	394.7	24,900	354.6	24,170	338.1
Thermal underwear .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:											
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jumpsuits .....	.....do.....	107	(NA)	31	(NA)	35	(NA)	22	(NA)	19	(NA)
Jogging and warm-up suits .....	.....do.....	1,124	114.6	293	29.2	367	36.8	214	23.2	250	25.4
Playsuits .....	.....do.....	(D)	(D)	24	2.3	30	3.0	20	2.0	(D)	(D)
Ski apparel .....	.....do.....	(D)	(D)	127	59.5	202	86.2	(D)	(D)	(D)	(D)
Swimwear .....	.....do.....	347	34.0	46	5.6	32	4.8	100	9.6	169	14.0
Team sports uniforms .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washable service apparel .....	.....do.....	2,489	245.1	603	59.8	657	61.2	638	63.2	591	60.9

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: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993											
Suits	1,000 units	9,722	1,030.9	2,469	254.2	2,239	247.5	2,338	246.1	2,676	283.1
Trios .....	.....do.....	4	(NA)	2	(NA)	1	(NA)	1	(NA)	-	(NA)
Coats, jackets, and vests:											
Down and feather filled coats, jackets, and vests .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	.....do.....	13,104	829.5	(D)	(D)	(D)	(D)	(D)	(D)	3,705	216.3
Heavy nontailored coats and jackets .....	.....do.....	18,095	614.1	4,785	161.7	4,373	155.7	4,536	142.0	4,401	154.7
Lightweight nontailored coats and jackets .....	.....do.....	17,603	344.1	4,732	105.8	4,630	90.3	3,897	70.1	4,344	77.9
Overcoats and top coats .....	.....do.....	871	65.0	199	16.8	174	13.5	245	15.7	253	19.0
Raincoats .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Work jackets	1,000 dozens	406	113.1	106	31.3	100	26.1	104	27.1	96	28.6
Tops:											
Woven dress and business shirts	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	1,610	213.8	(D)	(D)
Woven sport shirts .....	.....do.....	2,671	351.5	658	83.1	743	98.6	577	76.0	693	93.8
Work shirts .....	.....do.....	4,206	473.3	1,131	142.6	1,058	113.2	1,046	108.5	971	109.0
Knit T-shirts and tank tops made for outerwear .....	.....do.....	65,869	3,074.0	14,700	631.3	14,086	688.8	17,403	866.9	19,680	887
Sweatshirts .....	.....do.....	19,968	1,237.3	4,947	330.7	5,828	391.8	4,573	276.5	4,620	238.3
Other knit shirts .....	.....do.....	9,946	840.8	2,215	195.3	2,471	205.0	2,752	218.1	2,508	222.4
Sweaters .....	.....do.....	2,083	224.3	689	68.4	581	70.1	439	47.6	374	38.2
Bottoms:											
Dress and sport trousers	1,000 units	108,680	1,663.7	27,225	421.0	28,588	450.0	26,873	391.6	25,994	401.1
Junior boys' dress and sport trousers .....	.....do.....	6,066	(NA)	1,134	(NA)	1,842	(NA)	1,842	(NA)	1,248	(NA)
Jean and jean-cut casual slacks .....	.....do.....	307,158	4,320.0	73,270	1,015.2	81,102	1,140.6	83,326	1,193.3	69,460	970.9
Junior boys' jean and jean-cut slacks .....	.....do.....	35,309	(NA)	6,812	(NA)	11,012	(NA)	10,615	(NA)	6,870	(NA)
Shorts .....	.....do.....	99,257	730.2	23,626	165.7	14,959	110.8	25,151	180.7	35,521	273.0
Athletic shorts .....	.....do.....	29,622	(NA)	6,835	(NA)	5,514	(NA)	8,637	(NA)	8,636	(NA)
Sweatpants	1,000 dozens	6,223	347.2	1,667	102.9	1,821	101.5	1,530	78.5	1,205	64.3
Workpants .....	.....do.....	3,487	427.1	865	108.5	859	105.0	884	108.9	879	104.7
Underwear and nightwear:											
Pajamas and nightwear	1,000 dozens	2,309	193.0	675	64.3	667	55.6	476	35.9	491	37.2
Robes .....	.....do.....	566	83.0	193	38.3	(D)	(D)	(D)	(D)	67	7.4
Underwear total .....	.....do.....	108,613	1,566.3	23,909	409.7	26,950	405.0	28,179	413.6	29,575	338.0
Thermal underwear .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:											
Coveralls, overalls, and jumpsuits	1,000 dozens	1,689	347.6	437	96.0	407	108.8	414	72.9	431	69.9
Jumpsuits .....	.....do.....	77	(NA)	15	(NA)	17	(NA)	22	(NA)	23	(NA)
Jogging and warm-up suits .....	.....do.....	799	93.0	206	25.0	227	29.0	176	19.3	190	19.7
Playsuits .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Ski apparel .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	.....do.....	479	40.7	104	6.2	78	5.1	158	13.8	139	15.6
Team sports uniforms .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washable service apparel .....	.....do.....	2,645	264.1	646	66.1	648	65.8	677	69.5	674	62.7

- Represents zero.

D Data withheld to avoid disclosing figures for individual companies.

NA Not available.

Table 43. Quantity of Production and Value of Shipments of Men's and Junior Boys' Apparel: 1994 and 1993

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994											
Suits	1,000 units	11,207	1,075.7	(D)	(D)	(D)	(D)	2,573	260.7	2,669	268.0
Coats, jackets, and vests:											
Down and feather filled coats, jackets, and vests .....	.do	426	25.6	94	6.3	84	6.6	132	6.8	116	5.9
Dress and sport coats (tailored) .....	.do	13,515	831.2	3,267	189.3	3,433	227.7	3,358	196.8	3,457	217.4
Heavy nontailored coats and jackets .....	.do	14,790	495.6	3,868	147.2	3,800	133.7	3,599	100.7	3,523	114.0
Lightweight nontailored coats and jackets .....	.do	23,694	415.6	6,731	114.6	6,506	112.2	4,795	89.9	5,662	98.9
Overcoats and top coats .....	.do	1,015	75.0	273	23.8	326	25.3	232	13.4	184	12.5
Raincoats .....	.do	1,757	58.7	418	12.7	442	16.9	459	16.5	438	12.6
Separate vests .....	.do	814	14.4	253	3.6	190	5.6	173	2.5	198	2.7
Work jackets	1,000 dozens	428	132.4	111	33.7	107	34.5	105	31.0	105	33.2
Tops:											
Woven dress and business shirts	1,000 dozens	6,111	735.8	1,674	185.9	1,660	187.9	1,362	177.8	1,415	184.2
Woven sport shirts .....	.do	2,183	277.3	526	66.0	557	75.3	534	66.7	566	69.3
Work shirts .....	.do	4,588	533.7	1,211	151.3	1,176	142.9	1,152	116.0	1,049	123.5
Knit T-shirts and tank tops made for outerwear .....	.do	66,772	3,354.1	15,718	764.1	15,908	796.4	18,806	1,013.8	16,340	779.8
Sweatshirts .....	.do	17,961	1,113.9	4,955	333.0	5,572	361.2	4,049	231.4	3,385	188.3
Other knit shirts .....	.do	8,051	784.0	1,900	192.7	2,010	197.4	2,064	195.3	2,077	198.6
Sweaters .....	.do	1,528	239.2	477	82.5	502	76.3	283	45.5	266	34.9
Bottoms:											
Dress and sport trousers	1,000 units	98,018	2,002.4	22,690	487.7	25,748	537.3	25,666	500.1	23,914	477.3
Jean and jean-cut casual slacks .....	.do	298,796	4,260.5	78,478	1,139.7	80,717	1,166.9	77,225	1,083.1	62,376	870.8
Shorts .....	.do	90,009	868.3	20,654	212.4	15,742	155.1	24,538	223.6	29,075	277.2
Sweatpants	1,000 dozens	4,373	353.5	1,119	101.1	1,193	99.9	1,068	74.3	993	78.2
Workpants .....	.do	3,698	427.1	931	102.7	908	99.5	997	119.4	862	105.5
Underwear and nightwear:											
Pajamas and nightwear	1,000 dozens	1,751	152.9	544	51.9	522	50.3	383	26.2	302	24.5
Robes .....	.do	501	86.3	182	43.1	169	25.4	73	9.8	77	8.0
Underwear total .....	.do	96,055	1,405.9	22,675	402.1	25,740	362.8	24,413	331.6	23,227	309.4
Thermal underwear .....	.do	4,700	199.6	1,349	57.7	1,287	53.4	1,100	47.2	964	41.3
Undershirts (1/4 sleeve and athletic types) .....	.do	41,583	473.1	10,413	131.5	10,622	117.0	9,578	112.7	10,970	111.9
Knit undershorts and briefs .....	.do	41,314	506.1	8,963	155.2	11,661	131.4	11,373	114.4	9,317	105.1
Woven boxer shorts .....	.do	8,458	227.1	1,950	57.7	2,170	61.0	2,362	57.3	1,976	51.1
Other garments:											
Coveralls, overalls, and jumpsuits	1,000 dozens	1,349	353.1	312	83.5	311	109.7	372	70.4	354	89.5
Jogging and warm-up suits .....	.do	382	48.5	98	12.0	109	12.5	90	12.5	85	11.5
Playsuits .....	.do	(D)	(D)	3	0.3	4	0.3	3	0.3	(D)	(D)
Ski apparel .....	.do	(D)	(D)	127	59.4	202	86.1	(D)	(D)	(D)	(D)
Swimwear .....	.do	277	28.3	37	4.9	27	4.2	77	8.0	136	11.2
Team sports uniforms .....	.do	1,802	235.6	510	63.2	377	57.6	379	54.6	536	60.2
Washable service apparel .....	.do	2,489	245.1	603	59.8	657	61.2	638	63.2	591	60.9

See footnotes at end of table.

Table 43. Quantity of Production and Value of Shipments of Men's and Junior Boys' Apparel: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993											
Suits	1,000 units	9,407	1,023.0	2,406	252.5	2,169	245.8	2,248	243.9	2,584	280.8
Coats, jackets, and vests:											
Down and feather filled coats, jackets, and vests .....	.....do.....	591	36.9	155	8.1	178	15.7	139	6.5	119	6.6
Dress and sport coats (tailored) .....	.....do.....	12,936	824.1	3,033	189.9	3,202	224.8	3,035	195.4	3,666	214.0
Heavy nontailored coats and jackets .....	.....do.....	17,115	590.4	4,526	154.8	4,105	149.5	4,222	134.3	4,262	151.8
Lightweight nontailored coats and jackets .....	.....do.....	16,337	331.6	4,362	102.5	4,260	86.9	3,637	67.1	4,078	75.1
Overcoats and top coats .....	.....do.....	871	65.0	199	16.8	174	13.5	245	15.7	253	19.0
Raincoats .....	.....do.....	2,314	82.1	539	18.9	572	21.8	632	23.6	571	17.8
Separate vests .....	.....do.....	967	16.0	216	4.1	247	3.6	288	4.8	216	3.5
Work jackets	1,000 dozens	406	113.1	106	31.3	100	26.1	104	27.1	96	28.6
Tops:											
Woven dress and business shirts	1,000 dozens	6,109	789.8	1,443	175.8	1,486	191.9	1,524	208.4	1,656	213.7
Woven sport shirts .....	.....do.....	2,308	326.5	565	77.1	642	91.0	506	70.0	595	88.4
Work shirts .....	.....do.....	4,206	473.3	1,131	142.6	1,058	113.2	1,046	108.5	971	109.0
Knit T-shirts and tank tops made for outerwear .....	.....do.....	63,584	2,987.4	14,134	611.8	13,678	670.9	16,862	845.6	18,910	859.1
Sweatshirts .....	.....do.....	19,392	1,205.6	4,833	324.8	5,610	379.5	4,446	269.4	4,503	231.9
Other knit shirts .....	.....do.....	7,742	729.1	1,785	171.8	1,831	174.0	2,149	189.8	1,977	193.5
Sweaters .....	.....do.....	1,882	211.1	642	65.6	525	65.6	396	45.0	319	34.9
Bottoms:											
Dress and sport trousers	1,000 units	97,078	1,571.9	24,287	398.7	25,949	426.5	24,010	369.8	22,832	376.9
Jean and jean-cut casual slacks .....	.....do.....	279,516	4,085.3	66,947	961.5	71,637	1,067.5	76,246	1,130.6	64,686	925.7
Shorts .....	.....do.....	76,943	611.6	17,909	134.9	12,253	92.6	20,180	157.8	26,601	226.3
Sweatpants	1,000 dozens	5,438	313.1	1,561	98.3	1,554	90.2	1,291	68.6	1,032	56.0
Workpants .....	.....do.....	3,487	427.1	865	108.5	859	105.0	884	108.9	879	104.7
Underwear and nightwear:											
Pajamas and nightwear	1,000 dozens	1,798	155.7	560	55.8	526	45.0	343	26.4	369	28.5
Robes .....	.....do.....	542	80.6	189	37.8	193	29.1	95	6.5	65	7.2
Underwear total .....	.....do.....	104,469	1,376.8	23,050	368.5	25,861	349.0	27,024	353.7	28,534	305.6
Thermal underwear .....	.....do.....	4,076	172.9	1,294	56.7	1,073	45.8	935	39.2	774	31.2
Undershirts (1/4 sleeve and athletic types) .....	.....do.....	51,627	483.1	10,807	128.3	12,702	117.7	13,777	131.1	14,341	106.0
Knit undershorts and briefs .....	.....do.....	41,125	513.3	8,986	128.3	10,212	133.0	10,452	136.9	11,475	115.1
Woven boxer shorts .....	.....do.....	7,641	207.5	1,963	55.2	1,874	52.5	1,860	46.5	1,944	53.3
Other garments:											
Coveralls, overalls, and jumpsuits	1,000 dozens	1,355	307.7	334	84.9	338	97.6	352	65.9	331	59.3
Jogging and warm-up suits .....	.....do.....	245	40.8	67	11.1	72	11.5	51	9.2	55	9.0
Playsuits .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Ski apparel .....	.....do.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	.....do.....	396	34.4	91	5.3	70	4.8	136	12.4	99	11.9
Team sports uniforms .....	.....do.....	1,668	221.7	461	59.3	390	56.3	382	49.1	435	57.0
Washable service apparel .....	.....do.....	2,645	264.1	646	66.1	648	65.8	677	69.5	674	62.7

D Data withheld to avoid disclosing figures for individual companies.

Table 44. Quantity of Production and Value of Shipments of Little Boys' Apparel: 1994 and 1993

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994											
Suits	1,000 units	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 .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	.do	349	9.8	(D)	(D)	(D)	(D)	(D)	(D)	73	2.2
Heavy nontailored coats and jackets .....	.do	839	18.7	186	4.7	274	6.2	173	4.2	206	3.6
Lightweight nontailored coats and jackets .....	.do	1,221	12.9	382	4.0	300	3.2	261	2.7	278	3.0
Overcoats and top coats .....	.do	-	-	-	-	-	-	-	-	-	-
Raincoats .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Work jackets	1,000 dozens	-	-	-	-	-	-	-	-	-	-
Tops:											
Woven dress and business shirts	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven sport shirts .....	.do	388	25.9	77	5.7	126	9.2	78	4.6	107	6.4
Work shirts .....	.do	-	-	-	-	-	-	-	-	-	-
Knit T-shirts and tank tops made for outerwear .....	.do	2,581	88.6	595	20.9	528	21.7	621	19.9	837	26.1
Sweatshirts .....	.do	438	20.2	91	4.3	125	5.9	131	6.1	91	3.9
Other knit shirts .....	.do	2,135	108.7	327	18.8	662	34.2	553	26.5	593	29.2
Sweaters .....	.do	252	18.2	68	4.0	63	5.4	70	5.5	51	3.3
Bottoms:											
Dress and sport trousers	1,000 units	14,301	99.4	3,996	27.4	3,644	26.9	3,136	21.0	3,525	24.1
Jean and jean-cut casual slacks .....	.do	27,018	235.7	6,296	50.2	7,613	63.0	7,729	71.0	5,380	51.5
Shorts .....	.do	22,383	112.3	4,856	26.9	4,124	19.6	5,111	28.6	8,292	37.2
Sweatpants	1,000 dozens	592	21.8	93	4.1	195	6.4	213	7.3	91	4.0
Workpants .....	.do	42	3.3	18	1.4	24	1.9	-	-	-	-
Underwear and nightwear:											
Pajamas and nightwear	1,000 dozens	737	45.0	153	10.1	174	11.3	183	11.5	227	12.1
Robes .....	.do	(D)	(D)	3	0.3	4	0.3	5	0.4	(D)	(D)
Underwear total .....	.do	3,489	124.4	1,409	40.8	650	31.9	487	23.0	943	28.7
Thermal underwear .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:											
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jogging and warm-up suits .....	.do	742	66.1	195	17.2	258	24.3	124	10.7	165	13.9
Playsuits .....	.do	114	11.1	21	2.0	26	2.7	17	1.7	50	4.7
Ski apparel .....	.do	-	-	-	-	-	-	-	-	-	-
Swimwear .....	.do	70	5.7	9	0.7	5	0.6	23	1.6	33	2.8
Team sports uniforms .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washable service apparel .....	.do	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 44. Quantity of Production and Value of Shipments of Little Boys' Apparel: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993											
Suits	1,000 units	315	7.9	63	1.7	70	1.7	90	2.2	92	2.3
Coats, jackets, and vests:											
Down and feather filled coats, jackets, and vests .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Dress and sport coats (tailored) .....	.do	168	5.4	(D)	(D)	(D)	(D)	(D)	(D)	39	2.3
Heavy nontailored coats and jackets .....	.do	980	23.7	259	6.9	268	6.2	314	7.7	139	2.9
Lightweight nontailored coats and jackets .....	.do	1,266	12.5	370	3.3	370	3.4	260	3.0	266	2.8
Overcoats and top coats .....	.do	-	-	-	-	-	-	-	-	-	-
Raincoats .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Work jackets	1,000 dozens	-	-	-	-	-	-	-	-	-	-
Tops:											
Woven dress and business shirts	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	86	5.4	(D)	(D)
Woven sport shirts .....	.do	363	25.0	93	6.0	101	7.6	71	6.0	98	5.4
Work shirts .....	.do	-	-	-	-	-	-	-	-	-	-
Knit T-shirts and tank tops made for outerwear .....	.do	2,285	86.6	566	19.5	408	17.9	541	21.3	770	27.9
Sweatshirts .....	.do	576	31.7	114	5.9	218	12.3	127	7.1	117	6.4
Other knit shirts .....	.do	2,204	111.7	430	23.5	640	31.0	603	28.3	531	28.9
Sweaters .....	.do	201	13.2	47	2.8	56	4.5	43	2.6	55	3.3
Bottoms:											
Dress and sport trousers	1,000 units	11,602	91.8	2,938	22.3	2,639	23.5	2,863	21.8	3,162	24.2
Jean and jean-cut casual slacks .....	.do	27,642	234.7	6,323	53.7	9,465	73.1	7,080	62.7	4,774	45.2
Shorts .....	.do	22,314	118.6	5,717	30.8	2,706	18.2	4,971	22.9	8,920	46.7
Sweatpants	1,000 dozens	785	34.1	106	4.6	267	11.3	239	9.9	173	8.3
Workpants .....	.do	-	-	-	-	-	-	-	-	-	-
Underwear and nightwear:											
Pajamas and nightwear	1,000 dozens	511	37.3	115	8.5	141	10.6	133	9.5	122	8.7
Robes .....	.do	24	2.4	4	0.5	(D)	(D)	(D)	(D)	2	0.2
Underwear total .....	.do	4,144	189.5	859	41.2	1,089	56.0	1,155	59.9	1,041	32.4
Thermal underwear .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Undershirts (1/4 sleeve and athletic types) .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Knit undershorts and briefs .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Woven boxer shorts .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:											
Coveralls, overalls, and jumpsuits	1,000 dozens	334	39.9	103	11.1	69	11.2	62	7.0	100	10.6
Jogging and warm-up suits .....	.do	554	52.2	139	13.9	155	17.5	125	10.1	135	10.7
Playsuits .....	.do	223	19.0	46	3.9	51	4.3	40	3.5	86	7.3
Ski apparel .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear .....	.do	83	6.3	13	0.9	8	0.3	22	1.4	40	3.7
Team sports uniforms .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washable service apparel .....	.do	-	-	-	-	-	-	-	-	-	-

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 45. Total Quantity of Production and Value of Shipments of Women's, Misses', Juniors', and Girls' Apparel: 1994 and 1993

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994											
Dresses	1,000 units	197,096	4,782.4	44,198	1,080.5	47,695	1,175.3	50,308	1,244.9	54,895	1,281.7
Coats, jackets, and vests:											
Coats and capes	1,000 units	7,927	637.5	1,577	143.8	2,769	220.8	(D)	(D)	(D)	(D)
Down and feather filled coats, jackets, and vests . . . . .	. . . . .do	161	8.5	42	2.1	39	2.2	37	1.5	43	2.7
Nontailored jackets . . . . .	. . . . .do	9,881	258.3	2,363	60.7	2,832	78.6	2,384	57.3	2,302	61.7
Raincoats . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests . . . . .	. . . . .do	2,034	48.4	(D)	(D)	(D)	(D)	(D)	(D)	483	11.7
Tailored suit-type jackets . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:											
Woven blouses and shirts	1,000 dozens	20,164	2,454.7	5,109	598.7	4,766	610.6	5,195	622.2	5,094	623.2
Knit T-shirts and tank tops made for outerwear . . . . .	. . . . .do	16,329	996.3	4,193	260.3	3,549	228.4	4,385	266.6	4,202	241.0
Sweatshirts . . . . .	. . . . .do	4,284	282.0	989	65.3	1,159	86.9	1,178	73.9	958	55.9
Other knit blouses and shirts . . . . .	. . . . .do	11,007	924.2	3,122	260.2	3,072	244.6	2,705	211.9	2,108	207.5
Sweaters, including coat, cardigan, pullover, and vest sweaters . . . . .	. . . . .do	4,170	638.3	1,035	159.3	1,274	198.7	1,034	151.2	827	129.1
Bottoms:											
Shorts	1,000 units	89,320	728.3	21,132	178.7	14,638	134.3	24,063	195.5	29,487	219.8
Skirts and divided skirts . . . . .	. . . . .do	96,123	1,340.9	18,715	270.0	25,975	370.7	25,298	336.4	26,135	363.8
Slacks, pants, and jeans, including jean-cut casual slacks . . . . .	. . . . .do	358,381	4,165.7	86,132	1,039.5	101,324	1,204.4	89,457	1,019.2	81,468	902.6
Sweatpants	1,000 dozens	4,147	205.1	1,054	54.9	1,358	69.1	998	46.8	737	34.3
Underwear and nightwear:											
Brassieres, bra-lettes, and bandeaux	1,000 dozens	21,597	1,404.5	(D)	(D)	(D)	(D)	5,499	347.0	4,700	300.8
Total produced in Puerto Rico . . . . .	. . . . .do	3,619	(NA)	944	(NA)	987	(NA)	878	(NA)	810	(NA)
Girdles, corsets, and other foundation garments . . . . .	. . . . .do	7,504	390.3	2,009	113.8	1,985	97.9	1,880	95.5	1,630	83.1
Total produced in Puerto Rico . . . . .	. . . . .do	816	(NA)	214	(NA)	227	(NA)	197	(NA)	178	(NA)
Nightgowns, pajamas, and other nightwear . . . . .	. . . . .do	8,137	722.3	2,174	205.9	2,242	200.7	1,737	148.9	1,984	166.8
Other underwear, including camisoles, teddies, undershirts, and union suits . . . . .	. . . . .do	4,509	253.1	1,302	70.1	1,297	69.6	991	58.9	919	54.5
Panties . . . . .	. . . . .do	63,306	859.7	15,937	212.9	17,115	231.0	16,570	224.4	13,684	191.4
Robes and dressing gowns . . . . .	. . . . .do	2,032	238.5	(D)	(D)	(D)	(D)	(D)	(D)	514	51.2
Slips . . . . .	. . . . .do	1,131	57.2	271	13.9	307	15.2	264	13.7	289	14.4
Other garments:											
Bodysuits and bodyshirts	1,000 dozens	1,905	182.1	397	38.5	526	45.5	(D)	(D)	(D)	(D)
Jogging and warm-up suits . . . . .	. . . . .do	1,249	114.2	342	30.0	350	35.9	250	23.0	307	25.3
Overalls, coveralls, and jumpsuits . . . . .	. . . . .do	1,054	92.8	310	25.6	324	27.1	193	18.0	227	22.1
Playsuits, rompers, halters, etc. . . . .	. . . . .do	1,493	90.3	396	24.4	417	22.8	321	19.9	359	23.2
Ski apparel . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear . . . . .	. . . . .do	4,220	683.2	1,278	187.6	551	55.9	978	185.9	1,413	253.8
Washable service apparel . . . . .	. . . . .do	1,765	191.6	426	44.9	455	50.1	473	52.0	411	44.6
Smocks and lab coats . . . . .	. . . . .do	527	(NA)	137	(NA)	127	(NA)	138	(NA)	125	(NA)
Uniform dresses . . . . .	. . . . .do	338	(NA)	77	(NA)	85	(NA)	98	(NA)	78	(NA)
Uniform pant sets . . . . .	. . . . .do	120	(NA)	30	(NA)	36	(NA)	31	(NA)	23	(NA)
All other garment types . . . . .	. . . . .do	387	(NA)	95	(NA)	109	(NA)	99	(NA)	84	(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: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993											
Dresses	1,000 units	177,374	4,632.9	38,881	1,013.4	42,976	1,138.3	45,464	1,187.6	50,053	1,293.6
Coats, jackets, and vests:											
Coats and capes	1,000 units	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Down and feather filled coats, jackets, and vests . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nontailored jackets . . . . .	. . . . .do	11,919	256.4	2,609	61.1	3,417	74.9	2,959	60.8	2,934	59.6
Raincoats . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tailored suit-type jackets . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:											
Woven blouses and shirts	1,000 dozens	17,680	2,324.7	3,895	504.6	4,562	614.3	4,622	591.4	4,601	614.4
Knit T-shirts and tank tops made for outerwear . . . . .	. . . . .do	15,890	1,004.3	3,859	245.1	3,587	238.8	4,058	249.2	4,386	271.2
Sweatshirts . . . . .	. . . . .do	5,613	307.3	1,501	81.1	1,691	91.9	1,319	69.2	1,102	65.1
Other knit blouses and shirts . . . . .	. . . . .do	10,593	929.6	2,468	219.4	3,300	269.7	2,352	222.7	2,473	217.8
Sweaters, including coat, cardigan, pullover, and vest sweaters . . . . .	. . . . .do	4,034	670.2	1,081	184.1	1,422	232.8	847	141.8	684	111.5
Bottoms:											
Shorts	1,000 units	90,617	717.6	19,587	156.6	14,813	124.3	24,111	187.6	32,106	249.1
Skirts and divided skirts . . . . .	. . . . .do	95,313	1,582.8	19,328	302.6	24,339	377.4	25,713	453.6	25,933	449.2
Slacks, pants, and jeans, including jean-cut casual slacks . . . . .	. . . . .do	348,468	4,207.0	82,379	997.9	96,799	1,178.8	87,276	1,043.4	82,014	986.9
Sweatpants	1,000 dozens	(D)	(D)	1,254	57.6	1,410	64.1	1,143	51.2	(D)	(D)
Underwear and nightwear:											
Brassieres, bra-lettes, and bandeaux	1,000 dozens	19,939	1,265.3	4,620	298.9	5,327	338.5	5,038	322.4	4,954	305.5
Total produced in Puerto Rico . . . . .	. . . . .do	3,813	(NA)	832	(NA)	1,030	(NA)	915	(NA)	1,036	(NA)
Girdles, corsets, and other foundation garments . . . . .	. . . . .do	6,246	322.2	1,556	79.7	1,632	85.5	1,576	82.3	1,482	74.7
Total produced in Puerto Rico . . . . .	. . . . .do	697	(NA)	187	(NA)	171	(NA)	186	(NA)	153	(NA)
Nightgowns, pajamas, and other nightwear . . . . .	. . . . .do	8,061	742.4	2,049	202.0	2,020	197.0	1,768	154.4	2,224	189.0
Other underwear, including camisoles, teddies, undershirts, and union suits . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Panties . . . . .	. . . . .do	55,439	765.6	12,030	181.0	13,983	199.2	14,851	195.4	14,575	190.0
Robes and dressing gowns . . . . .	. . . . .do	2,288	299.2	659	91.5	581	83.9	491	61.0	557	62.8
Slips . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:											
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jogging and warm-up suits . . . . .	. . . . .do	1,042	107.3	280	28.7	251	30.3	243	23.3	268	25.0
Overalls, coveralls, and jumpsuits . . . . .	. . . . .do	557	77.2	143	19.4	125	18.9	128	16.8	161	22.1
Playsuits, rompers, halters, etc. . . . .	. . . . .do	1,283	96.9	309	21.3	297	28.7	329	19.0	348	27.9
Ski apparel . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear . . . . .	. . . . .do	4,517	700.7	1,161	136.4	755	81.9	1,128	206.0	1,473	276.4
Washable service apparel . . . . .	. . . . .do	2,045	239.2	497	58.6	509	59.6	501	60.8	538	60.2
Smocks and lab coats . . . . .	. . . . .do	490	(NA)	121	(NA)	113	(NA)	110	(NA)	146	(NA)
Uniform dresses . . . . .	. . . . .do	376	(NA)	91	(NA)	96	(NA)	95	(NA)	94	(NA)
Uniform pant sets . . . . .	. . . . .do	160	(NA)	37	(NA)	38	(NA)	41	(NA)	44	(NA)
All other garment types . . . . .	. . . . .do	358	(NA)	91	(NA)	94	(NA)	86	(NA)	87	(NA)

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Table 46. **Quantity of Production and Value of Shipments of Women's, Misses', and Juniors' Apparel: 1994 and 1993**

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994											
Dresses	1,000 units	156,780	4,313.8	34,657	960.9	37,994	1,054.3	40,968	1,145.4	43,161	1,153.2
Coats, jackets, and vests:											
Coats and capes	1,000 units	7,619	620.0	1,561	143.1	2,691	215.7	2,016	156.0	1,351	105.2
Down and feather filled coats, jackets, and vests . . . . .	. . . . .do	129	8.1	34	2.0	31	2.1	29	1.4	35	2.6
Nontailored jackets. . . . .	. . . . .do	9,192	250.8	2,184	58.8	2,664	76.4	2,215	55.6	2,129	60.0
Raincoats . . . . .	. . . . .do	(D)	(D)	140	9.7	188	13.5	179	11.4	(D)	(D)
Separate vests . . . . .	. . . . .do	1,946	45.2	447	8.9	517	11.9	507	12.8	475	11.6
Tailored suit-type jackets . . . . .	. . . . .do	31,560	958.1	6,526	211.1	8,361	270.8	7,179	210.0	9,494	266.2
Tops:											
Woven blouses and shirts	1,000 dozens	17,764	2,231.8	4,544	549.4	4,127	552.5	4,567	560.7	4,526	569.2
Knit T-shirts and tank tops made for outerwear . . . . .	. . . . .do	12,233	815.3	3,217	221.1	2,620	183.0	3,321	220.2	3,075	191.0
Sweatshirts . . . . .	. . . . .do	3,471	246.7	759	54.8	898	75.1	976	65.8	838	51.0
Other knit blouses and shirts . . . . .	. . . . .do	8,153	759.5	2,476	222.3	2,133	192.4	2,044	175.4	1,500	169.4
Sweaters, including coat, cardigan, pullover, and vest sweaters. . . . .	. . . . .do	3,752	599.7	944	150.2	1,125	184.3	903	140.2	780	125.0
Bottoms:											
Shorts	1,000 units	65,881	588.0	15,980	145.1	11,182	108.0	17,765	158.7	20,954	176.2
Skirts and divided skirts . . . . .	. . . . .do	88,729	1,277.4	17,048	255.9	23,876	351.0	23,594	321.7	24,211	348.8
Slacks, pants, and jeans, including jean-cut casual slacks . . . . .	. . . . .do	319,472	3,885.9	77,343	975.2	88,304	1,113.9	79,704	947.3	74,121	849.5
Sweatpants	1,000 dozens	3,296	174.4	828	46.1	1,046	58.2	779	39.4	643	30.7
Underwear and nightwear:											
Brassieres, bra-lettes, and bandeaux	1,000 dozens	21,597	1,404.5	5,680	379.5	5,718	377.2	5,499	347.0	4,700	300.8
Girdles, corsets, and other foundation garments . . . . .	. . . . .do	7,504	390.3	2,009	113.8	1,985	97.9	1,880	95.5	1,630	83.1
Nightgowns, pajamas, and other nightwear . . . . .	. . . . .do	6,155	584.7	1,644	164.6	1,686	160.9	1,408	127.6	1,417	131.6
Other underwear, including camisoles, teddies, undershirts, and union suits . . . . .	. . . . .do	4,041	241.4	1,158	66.5	1,136	65.7	895	56.5	852	52.7
Panties . . . . .	. . . . .do	50,417	749.2	13,361	188.8	13,476	200.9	12,868	191.7	10,712	167.8
Robes and dressing gowns . . . . .	. . . . .do	2,003	235.6	572	71.7	484	64.0	437	49.1	510	50.8
Slips . . . . .	. . . . .do	985	51.4	245	12.9	282	14.2	239	12.8	219	11.5
Other garments:											
Bodysuits and bodyshirts	1,000 dozens	1,744	158.3	359	32.6	487	40.7	438	39.3	460	45.7
Jogging and warm-up suits . . . . .	. . . . .do	200	32.5	44	6.0	55	10.2	48	7.6	53	8.7
Overalls, coveralls, and jumpsuits . . . . .	. . . . .do	269	37.0	120	12.5	83	10.4	39	6.9	27	7.2
Playsuits, rompers, halters, etc. . . . .	. . . . .do	384	40.0	98	11.1	92	9.5	96	9.8	98	9.6
Ski apparel . . . . .	. . . . .do	133	75.7	38	23.5	59	35.5	23	11.1	13	5.6
Suits, including pant suits . . . . .	. . . . .do	982	358.5	233	75.1	231	86.6	230	81.0	288	115.8
Swimwear . . . . .	. . . . .do	3,130	591.0	899	166.1	414	49.1	781	163.5	1,036	212.3
Washable service apparel . . . . .	. . . . .do	1,765	191.6	426	44.9	455	50.1	473	52.0	411	44.6

See footnotes at end of table.

Table 46. Quantity of Production and Value of Shipments of Women's, Misses', and Juniors' Apparel: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993											
Dresses	1,000 units	136,047	4,096.1	29,221	885.1	32,853	1,004.8	35,959	1,080.0	38,014	1,126.2
Coats, jackets, and vests:											
Coats and capes	1,000 units	(D)	(D)	2,030	177.9	2,575	219.6	(D)	(D)	(D)	(D)
Down and feather filled coats, jackets, and vests .....	.do	215	16.8	58	4.6	59	4.5	52	3.1	46	4.6
Nontailored jackets .....	.do	10,547	241.4	2,364	58.3	2,803	68.1	2,693	57.9	2,687	57.1
Raincoats .....	.do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests .....	.do	2,063	46.1	640	11.3	609	15.4	422	10.0	392	9.4
Tailored suit-type jackets .....	.do	34,251	1,080.5	7,299	222.3	8,488	299.8	8,707	264.1	9,757	294.3
Tops:											
Woven blouses and shirts	1,000 dozens	15,709	2,152.3	3,483	463.7	4,008	563.2	4,053	547.8	4,165	577.6
Knit T-shirts and tank tops made for outerwear .....	.do	11,705	817.3	2,967	202.0	2,716	193.7	2,946	200.7	3,076	220.9
Sweatshirts .....	.do	4,744	263.5	1,277	70.4	1,399	76.4	1,116	59.7	952	57.0
Other knit blouses and shirts .....	.do	7,195	743.8	1,709	179.0	1,977	204.4	1,700	185.4	1,809	175.0
Sweaters, including coat, cardigan, pullover, and vest sweaters .....	.do	3,696	637.7	986	173.7	1,304	221.5	760	134.7	646	107.8
Bottoms:											
Shorts	1,000 units	67,710	590.5	14,919	127.6	11,556	100.4	18,345	160.1	22,890	202.4
Skirts and divided skirts .....	.do	88,880	1,531.1	17,564	288.7	22,929	364.8	24,182	442.6	24,205	435.0
Slacks, pants, and jeans, including jean-cut casual slacks .....	.do	311,088	3,948.2	74,093	946.0	83,763	1,094.4	77,653	974.6	75,579	933.2
Sweatpants	1,000 dozens	3,863	182.2	1,057	49.9	1,088	50.2	908	42.7	810	39.4
Underwear and nightwear:											
Brassieres, bra-lettes, and bandeaux	1,000 dozens	19,939	1,265.3	4,620	298.9	5,327	338.5	5,038	322.4	4,954	305.5
Girdles, corsets, and other foundation garments .....	.do	6,246	322.2	1,556	79.7	1,632	85.5	1,576	82.3	1,482	74.7
Nightgowns, pajamas, and other nightwear .....	.do	5,668	561.2	1,542	158.7	1,393	144.0	1,327	123.2	1,406	135.3
Other underwear, including camisoles, teddies, undershirts, and union suits .....	.do	3,718	200.1	964	48.8	1,038	52.0	935	50.6	781	48.7
Panties .....	.do	45,537	680.7	10,251	166.0	11,151	172.7	11,610	170.0	12,525	172.0
Robes and dressing gowns .....	.do	2,252	290.3	652	90.7	566	80.2	482	57.5	552	61.9
Slips .....	.do	858	44.3	214	11.2	214	10.8	221	11.1	209	11.2
Other garments:											
Bodysuits and bodyshirts	1,000 dozens	1,743	151.6	412	35.7	344	30.3	487	42.0	500	43.6
Jogging and warm-up suits .....	.do	232	43.2	61	11.1	64	12.7	53	9.5	54	9.9
Overalls, coveralls, and jumpsuits .....	.do	227	41.5	40	9.5	53	9.5	62	10.1	72	12.4
Playsuits, rompers, halters, etc. ....	.do	402	43.9	86	9.4	119	12.6	93	10.3	104	11.6
Ski apparel .....	.do	147	79.1	37	20.3	40	24.0	(D)	(D)	(D)	(D)
Suits, including pant suits .....	.do	990	440.6	253	102.3	236	108.6	237	106.0	264	123.7
Swimwear .....	.do	3,412	613.1	833	116.5	510	71.7	895	186.0	1,174	238.9
Washable service apparel .....	.do	2,045	239.2	497	58.6	509	59.6	501	60.8	538	60.2

D Data withheld to avoid disclosing figures for individual companies.

Table 47. Quantity of Production and Value of Shipments of Little Girls' Apparel: 1994 and 1993

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994											
Dresses	1,000 units	40,316	468.6	9,541	119.6	9,701	121.0	9,340	99.5	11,734	128.5
Coats, jackets, and vests:											
Coats and capes	1,000 units	308	17.5	16	0.7	78	5.1	(D)	(D)	(D)	(D)
Down and feather filled coats, jackets, and vests . . . . .	. . . . .do	32	0.4	8	0.1	8	0.1	8	0.1	8	0.1
Nontailored jackets. . . . .	. . . . .do	689	7.5	179	1.9	168	2.2	169	1.7	173	1.7
Raincoats . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Separate vests . . . . .	. . . . .do	88	3.2	(D)	(D)	(D)	(D)	(D)	(D)	8	0.1
Tailored suit-type jackets . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:											
Woven blouses and shirts	1,000 dozens	2,400	222.9	565	49.3	639	58.1	628	61.5	568	54.0
Knit T-shirts and tank tops made for outerwear . . . . .	. . . . .do	4,096	181.0	976	39.2	929	45.4	1,064	46.4	1,127	50.0
Sweatshirts . . . . .	. . . . .do	813	35.3	230	10.5	261	11.8	202	8.1	120	4.9
Other knit blouses and shirts . . . . .	. . . . .do	2,854	164.7	646	37.9	939	52.2	661	36.5	608	38.1
Sweaters, including coat, cardigan, pullover, and vest sweaters . . . . .	. . . . .do	418	38.6	91	9.1	149	14.4	131	11.0	47	4.1
Bottoms:											
Shorts	1,000 units	23,439	140.3	5,152	33.6	3,456	26.3	6,298	36.8	8,533	43.6
Skirts and divided skirts . . . . .	. . . . .do	7,394	63.5	1,667	14.1	2,099	19.7	1,704	14.7	1,924	15.0
Slacks, pants, and jeans, including jean-cut casual slacks . . . . .	. . . . .do	38,909	279.8	8,789	64.3	13,020	90.5	9,753	71.9	7,347	53.1
Sweatpants	1,000 dozens	851	30.7	226	8.8	312	10.9	219	7.4	94	3.6
Underwear and nightwear:											
Brassieres, bra-lettes, and bandeaux	1,000 dozens	-	-	(D)	(D)	(D)	(D)	-	-	-	-
Girdles, corsets, and other foundation garments . . . . .	. . . . .do	-	-	-	-	-	-	-	-	-	-
Nightgowns, pajamas, and other nightwear . . . . .	. . . . .do	1,982	137.6	530	41.3	556	39.8	329	21.3	567	35.2
Other underwear, including camisoles, teddies, undershirts, and union suits . . . . .	. . . . .do	468	11.7	144	3.6	161	3.9	96	2.4	67	1.8
Panties . . . . .	. . . . .do	12,889	110.5	2,576	24.1	3,639	30.1	3,702	32.7	2,972	23.6
Robes and dressing gowns . . . . .	. . . . .do	29	2.9	(D)	(D)	(D)	(D)	(D)	(D)	4	0.4
Slips . . . . .	. . . . .do	146	5.8	26	1.0	25	1.0	25	0.9	70	2.9
Other garments:											
Bodysuits and bodyshirts	1,000 dozens	161	23.8	38	5.9	39	4.8	(D)	(D)	(D)	(D)
Jogging and warm-up suits . . . . .	. . . . .do	1,049	81.7	298	24.0	295	25.7	202	15.4	254	16.6
Overalls, coveralls, and jumpsuits . . . . .	. . . . .do	785	55.8	190	13.1	241	16.7	154	11.1	200	14.9
Playsuits, rompers, halters, etc. . . . .	. . . . .do	1,109	50.3	298	13.3	325	13.3	225	10.1	261	13.6
Ski apparel . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear . . . . .	. . . . .do	1,090	92.2	379	21.5	137	6.8	197	22.4	377	41.5
Washable service apparel . . . . .	. . . . .do	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

Table 47. Quantity of Production and Value of Shipments of Little Girls' Apparel: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	Unit of measure	Total		Fourth quarter		Third quarter		Second quarter		First quarter	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993											
Dresses	1,000 units	41,327	536.8	9,660	128.3	10,123	133.5	9,505	107.6	12,039	167.4
Coats, jackets, and vests:											
Coats and capes	1,000 units	(D)	(D)	(D)	(D)	(D)	(D)	53	2.0	36	1.8
Down and feather filled coats, jackets, and vests . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nontailored jackets . . . . .	. . . . .do	1,372	15.0	245	2.8	614	6.8	266	2.9	247	2.5
Raincoats . . . . .	. . . . .do	-	-	-	-	-	-	-	-	-	-
Separate vests . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tailored suit-type jackets . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Tops:											
Woven blouses and shirts	1,000 dozens	1,971	172.4	412	40.9	554	51.1	569	43.6	436	36.8
Knit T-shirts and tank tops made for outerwear . . . . .	. . . . .do	4,185	187.0	892	43.1	871	45.1	1,112	48.5	1,310	50.3
Sweatshirts . . . . .	. . . . .do	869	43.8	224	10.7	292	15.5	203	9.5	150	8.1
Other knit blouses and shirts . . . . .	. . . . .do	3,398	185.8	759	40.4	1,323	65.3	652	37.3	664	42.8
Sweaters, including coat, cardigan, pullover, and vest sweaters . . . . .	. . . . .do	338	32.5	95	10.4	118	11.3	87	7.1	38	3.7
Bottoms:											
Shorts	1,000 units	22,907	127.1	4,668	29.0	3,257	23.9	5,766	27.5	9,216	46.7
Skirts and divided skirts . . . . .	. . . . .do	6,433	51.7	1,764	13.9	1,410	12.6	1,531	11.0	1,728	14.2
Slacks, pants, and jeans, including jean-cut casual slacks . . . . .	. . . . .do	37,380	258.8	8,286	51.9	13,036	84.4	9,623	68.8	6,435	53.7
Sweatpants	1,000 dozens	(D)	(D)	197	7.7	322	13.9	235	8.5	(D)	(D)
Underwear and nightwear:											
Brassieres, bra-lettes, and bandeaux	1,000 dozens	-	-	-	-	-	-	-	-	-	-
Girdles, corsets, and other foundation garments . . . . .	. . . . .do	-	-	-	-	-	-	-	-	-	-
Nightgowns, pajamas, and other nightwear . . . . .	. . . . .do	2,393	181.2	507	43.3	627	53.0	441	31.2	818	53.7
Other underwear, including camisoles, teddies, undershirts, and union suits . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Panties . . . . .	. . . . .do	9,902	84.9	1,779	15.0	2,832	26.5	3,241	25.4	2,050	18.0
Robes and dressing gowns . . . . .	. . . . .do	36	8.9	7	0.8	15	3.7	9	3.5	5	0.9
Slips . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other garments:											
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jogging and warm-up suits . . . . .	. . . . .do	810	64.1	219	17.6	187	17.6	190	13.8	214	15.1
Overalls, coveralls, and jumpsuits . . . . .	. . . . .do	330	35.7	103	9.9	72	9.4	66	6.7	89	9.7
Playsuits, rompers, halter, etc. . . . .	. . . . .do	881	53.0	223	11.9	178	16.1	236	8.7	244	16.3
Ski apparel . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Suits, including pant suits . . . . .	. . . . .do	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Swimwear . . . . .	. . . . .do	1,105	87.6	328	19.9	245	10.2	233	20.0	299	37.5
Washable service apparel . . . . .	. . . . .do	-	-	-	-	-	-	-	-	-	-

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 48. Quantity of Production of Apparel by Type of Fabric: 1994

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
				Total	Wool blends			
TOTAL								
Men's and boys' garments:								
Suits	1,000 units	11,828	566	6,111	1,604	3,227	137	1,787
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do	(D)	(D)	259	(NA)	11	-	127
Dress and sport coats (tailored)	.do	13,864	592	8,373	2,843	3,485	569	845
Heavy nontailored coats and jackets	.do	15,629	3,258	9,649	(NA)	967	207	1,548
Lightweight nontailored coats and jackets	.do	24,915	2,308	17,897	(NA)	220	-	4,490
Overcoats and top coats	.do	1,015	(D)	274	(NA)	306	(D)	78
Raincoats	.do	(D)	(D)	976	(NA)	(NA)	(D)	258
Separate vests	.do	(D)	73	718	(NA)	52	(D)	534
Work jackets	1,000 dozens	428	(D)	(D)	(NA)	(NA)	(D)	13
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	3,851	2,422	(NA)	(NA)	(D)	(D)
Woven sport shirts	.do	2,571	1,931	367	(NA)	(D)	(D)	207
Work shirts	.do	4,588	605	3,338	(NA)	(NA)	-	645
Knit T-shirts and tank tops made for outerwear	.do	69,353	51,154	9,583	(NA)	-	-	8,616
Sweatshirts	.do	18,399	10,686	7,113	(NA)	-	-	600
Other knit shirts	.do	10,186	5,328	3,933	(NA)	(D)	(D)	(D)
Sweaters	.do	1,780	707	685	(NA)	73	(D)	(D)
Bottoms:								
Dress and sport trousers	1,000 units	112,319	39,430	59,184	12,951	4,706	(D)	(D)
Jeans and jean-cut casual slacks	.do	325,814	297,956	6,301	(NA)	(NA)	-	21,557
Shorts	.do	112,392	76,120	18,781	(NA)	(D)	(D)	17,389
Sweatpants	1,000 dozens	4,965	(D)	2,965	(NA)	(NA)	-	(D)
Workpants	.do	3,740	185	3,089	(NA)	(NA)	-	466
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	2,488	658	1,312	(NA)	(NA)	(D)	(D)
Robes	.do	(D)	160	228	(NA)	(NA)	-	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do	99,544	90,039	7,371	(NA)	(NA)	4	2,130
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	514	1,449	(NA)	-	-	(D)
Jogging and warm-up suits	.do	1,124	(D)	865	(NA)	(NA)	-	(D)
Playsuits	.do	(D)	48	60	(NA)	-	(D)	(D)
Ski apparel	.do	(D)	-	342	(NA)	(NA)	-	(D)
Swimwear	.do	347	133	165	(NA)	(NA)	-	49
Team sports uniforms	.do	(D)	(D)	1,040	(NA)	-	-	821
Washable service apparel	.do	2,489	103	1,718	(NA)	(NA)	-	668
Women's and girls' garments:								
Dresses	1,000 units	197,096	29,122	114,704	(NA)	2,195	5,180	45,895
Coats, jackets, and vests:								
Coats and capes	1,000 units	7,927	(D)	3,383	2,517	2,989	77	(D)
Down and feather filled coats, jackets, and vests	.do	161	(D)	(D)	(NA)	-	(D)	135
Heavy nontailored coats and jackets	.do	9,881	2,208	3,734	(NA)	410	593	2,936
Raincoats	.do	(D)	(D)	297	(NA)	(NA)	(D)	127
Separate vests	.do	2,034	174	1,044	(NA)	1	15	800
Tailored suit-type jackets	.do	(D)	2,047	19,560	1,651	5,085	818	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	20,164	6,731	10,294	(NA)	26	554	2,559
Knit T-shirts and tank tops made for outerwear	.do	16,329	6,588	4,277	(NA)	(NA)	(D)	(D)
Sweatshirts	.do	4,284	1,063	2,597	(NA)	(NA)	-	624
Other knit blouses and shirts	.do	11,007	3,064	5,226	(NA)	(D)	323	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do	4,170	1,937	1,184	(NA)	(D)	11	(D)
Bottoms:								
Shorts	1,000 units	89,320	44,732	28,885	(NA)	(NA)	667	15,036
Skirts and divided skirts	.do	96,123	21,275	41,112	5,116	10,508	1,929	21,299
Slacks, pants, and jeans, including jean-cut casual slacks	.do	358,381	187,996	105,603	9,831	7,514	1,534	55,734
Sweatpants	1,000 dozens	4,147	(D)	2,438	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	21,597	968	20,403	(NA)	(NA)	-	226
Girdles, corsets, and other foundation garments	.do	7,504	458	6,747	(NA)	(NA)	-	299
Nightgowns, pajamas, and other nightwear	.do	8,137	1,057	6,083	(NA)	(NA)	154	843
Panties	.do	63,306	45,193	17,070	(NA)	(NA)	-	1,043
Robes and dressing gowns	.do	2,032	589	1,324	(NA)	(NA)	-	119
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do	5,640	1,290	3,754	(NA)	(NA)	-	596
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	1,905	(D)	514	(NA)	(NA)	(D)	885
Jogging and warm-up suits	.do	1,249	(D)	1,130	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	.do	1,054	362	585	(NA)	(D)	(D)	(D)
Playsuits, rompers, halters, etc.	.do	1,493	296	908	(NA)	-	62	227
Ski apparel	.do	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Suits, including pant suits	.do	(D)	(D)	436	96	221	31	(D)
Swimwear	.do	4,220	67	3,802	(NA)	(NA)	(D)	(D)
Washable service apparel	.do	1,765	(D)	1,245	(NA)	(NA)	-	(D)
Infants' apparel	.do	12,957	7,666	4,330	(NA)	(NA)	460	501

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabric: 1994—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
				Total	Wool blends			
FOURTH QUARTER								
Men's and boys' garments:								
Suits	1,000 units	3,143	163	1,719	333	743	38	480
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	49	(NA)	-	-	29
Dress and sport coats (tailored)	.do.	(D)	198	2,040	713	763	127	(D)
Heavy nontailored coats and jackets	.do.	4,054	762	2,556	(NA)	278	(D)	(D)
Lightweight nontailored coats and jackets	.do.	7,113	610	4,823	(NA)	19	-	1,661
Overcoats and top coats	.do.	273	(D)	76	(NA)	91	(D)	23
Raincoats	.do.	(D)	(D)	225	(NA)	(NA)	(D)	(D)
Separate vests	.do.	(D)	23	246	(NA)	6	(D)	(D)
Work jackets	1,000 dozens	111	(D)	65	(NA)	(NA)	(D)	4
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	1,123	619	(NA)	(NA)	(D)	49
Woven sport shirts	.do.	603	431	105	(NA)	(D)	(D)	55
Work shirts	.do.	1,211	158	884	(NA)	(NA)	-	169
Knit T-shirts and tank tops made for outerwear	.do.	16,313	12,127	2,095	(NA)	-	-	2,091
Sweatshirts	.do.	5,046	2,856	2,030	(NA)	-	-	160
Other knit shirts	.do.	2,227	1,160	850	(NA)	(D)	(D)	216
Sweaters	.do.	545	266	174	(NA)	9	(D)	(D)
Bottoms:								
Dress and sport trousers	1,000 units	26,686	9,244	14,185	3,212	1,092	(D)	(D)
Jeans and jean-cut casual slacks	.do.	84,774	77,437	1,652	(NA)	(NA)	-	5,685
Shorts	.do.	25,510	17,655	4,282	(NA)	(D)	(D)	3,572
Sweatpants	1,000 dozens	1,212	439	716	(NA)	(NA)	-	57
Workpants	.do.	949	43	788	(NA)	(NA)	-	118
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	697	193	338	(NA)	(NA)	(D)	(D)
Robes	.do.	185	66	88	(NA)	(NA)	-	31
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	24,084	21,937	1,609	(NA)	(NA)	1	537
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	131	326	(NA)	-	-	(D)
Jogging and warm-up suits	.do.	293	(D)	226	(NA)	(NA)	-	(D)
Playsuits	.do.	24	(D)	11	(NA)	-	(D)	4
Ski apparel	.do.	127	-	101	(NA)	(NA)	-	26
Swimwear	.do.	46	16	18	(NA)	(NA)	-	12
Team sports uniforms	.do.	(D)	(D)	288	(NA)	-	-	242
Washable service apparel	.do.	603	25	416	(NA)	(NA)	-	162
Women's and girls' garments:								
Dresses	1,000 units	44,198	6,224	26,014	(NA)	557	1,286	10,117
Coats, jackets, and vests:								
Coats and capes	1,000 units	1,577	(D)	683	438	538	18	(D)
Down and feather filled coats, jackets, and vests	.do.	42	(D)	6	(NA)	-	(D)	35
Heavy nontailored coats and jackets	.do.	2,363	749	639	(NA)	17	186	772
Raincoats	.do.	(D)	(D)	68	(NA)	(NA)	(D)	29
Separate vests	.do.	(D)	38	278	(NA)	-	(D)	165
Tailored suit-type jackets	.do.	(D)	306	4,119	465	1,120	165	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	5,109	1,457	3,011	(NA)	8	100	533
Knit T-shirts and tank tops made for outerwear	.do.	4,193	1,651	1,220	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	989	258	588	(NA)	(NA)	-	143
Other knit blouses and shirts	.do.	3,122	684	1,688	(NA)	(D)	(D)	652
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	1,035	485	291	(NA)	28	(D)	(D)
Bottoms:								
Shorts	1,000 units	21,132	10,058	7,192	(NA)	(NA)	149	3,733
Skirts and divided skirts	.do.	18,715	3,788	8,216	1,299	1,550	518	4,643
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	86,132	46,792	24,325	3,080	1,243	425	13,347
Sweatpants	1,000 dozens	1,054	(D)	637	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	(D)	314	5,308	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	.do.	2,009	130	1,800	(NA)	(NA)	-	79
Nightgowns, pajamas, and other nightwear	.do.	2,174	291	1,610	(NA)	(NA)	36	237
Panties	.do.	15,937	11,394	4,273	(NA)	(NA)	-	270
Robes and dressing gowns	.do.	(D)	194	347	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,573	386	1,030	(NA)	(NA)	-	157
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	397	(D)	106	(NA)	(NA)	(D)	184
Jogging and warm-up suits	.do.	342	(D)	314	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	.do.	310	132	148	(NA)	(D)	(D)	30
Playsuits, rompers, halters, etc.	.do.	396	95	229	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	(D)	34	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	(D)	109	22	56	18	94
Swimwear	.do.	1,278	(D)	1,173	(NA)	(NA)	-	(D)
Washable service apparel	.do.	426	(D)	292	(NA)	(NA)	-	(D)
Infants' apparel	.do.	3,345	1,954	1,116	(NA)	(NA)	132	143

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabric: 1994—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
				Total	Wool blends			
THIRD QUARTER								
Men's and boys' garments:								
Suits	1,000 units	3,176	139	1,642	422	866	39	490
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	46	(NA)	(D)	-	27
Dress and sport coats (tailored)	.do.	(D)	197	2,051	721	932	126	(D)
Heavy nontailored coats and jackets	.do.	4,074	1,124	2,261	(NA)	223	58	408
Lightweight nontailored coats and jackets	.do.	6,806	647	4,711	(NA)	49	-	1,399
Overcoats and top coats	.do.	326	(D)	70	(NA)	94	(D)	21
Raincoats	.do.	(D)	(D)	231	(NA)	(NA)	(D)	68
Separate vests	.do.	(D)	24	158	(NA)	17	(D)	118
Work jackets	1,000 dozens	107	(D)	59	(NA)	(NA)	(D)	3
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	1,090	585	(NA)	(NA)	(D)	45
Woven sport shirts	.do.	683	527	92	(NA)	(D)	-	(D)
Work shirts	.do.	1,176	165	847	(NA)	(NA)	-	164
Knit T-shirts and tank tops made for outerwear	.do.	16,436	11,974	2,322	(NA)	-	-	2,140
Sweatshirts	.do.	5,697	3,109	2,409	(NA)	-	-	179
Other knit shirts	.do.	2,672	1,346	1,103	(NA)	(D)	(D)	222
Sweaters	.do.	565	185	270	(NA)	(D)	-	(D)
Bottoms:								
Dress and sport trousers	1,000 units	29,392	10,140	15,762	3,237	1,262	(D)	(D)
Jeans and jean-cut casual slacks	.do.	88,330	80,864	1,538	(NA)	(NA)	-	5,928
Shorts	.do.	19,866	12,007	4,704	(NA)	(D)	(D)	3,057
Sweatpants	1,000 dozens	1,388	379	949	(NA)	(NA)	-	60
Workpants	.do.	932	50	768	(NA)	(NA)	-	114
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	696	191	341	(NA)	(NA)	(D)	(D)
Robes	.do.	173	57	89	(NA)	(NA)	-	27
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	26,390	23,816	2,010	(NA)	(NA)	2	562
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	135	373	(NA)	-	-	(D)
Jogging and warm-up suits	.do.	367	(D)	294	(NA)	(NA)	-	(D)
Playsuits	.do.	30	(D)	16	(NA)	-	(D)	6
Ski apparel	.do.	202	-	161	(NA)	(NA)	-	41
Swimwear	.do.	32	11	13	(NA)	(NA)	-	8
Team sports uniforms	.do.	(D)	(D)	219	(NA)	-	-	178
Washable service apparel	.do.	657	27	453	(NA)	(NA)	-	177
Women's and girls' garments:								
Dresses	1,000 units	47,695	6,369	28,352	(NA)	683	1,140	11,151
Coats, jackets, and vests:								
Coats and capes	1,000 units	2,769	(D)	1,248	977	1,027	31	(D)
Down and feather filled coats, jackets, and vests	.do.	39	(D)	4	(NA)	-	(D)	33
Heavy nontailored coats and jackets	.do.	2,832	572	1,144	(NA)	111	(D)	(D)
Raincoats	.do.	(D)	(D)	91	(NA)	(NA)	(D)	39
Separate vests	.do.	(D)	50	259	(NA)	(D)	(D)	223
Tailored suit-type jackets	.do.	(D)	542	4,179	461	2,345	268	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	4,766	1,738	2,229	(NA)	7	163	629
Knit T-shirts and tank tops made for outerwear	.do.	3,549	1,383	1,022	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	1,159	233	760	(NA)	(NA)	-	166
Other knit blouses and shirts	.do.	3,072	833	1,524	(NA)	(D)	(D)	629
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	1,274	564	397	(NA)	(D)	(D)	275
Bottoms:								
Shorts	1,000 units	14,638	5,589	5,560	(NA)	(NA)	191	3,298
Skirts and divided skirts	.do.	25,975	6,256	10,199	1,387	3,468	429	5,623
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	101,324	54,381	28,648	2,536	2,671	277	15,347
Sweatpants	1,000 dozens	1,358	(D)	813	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	(D)	293	5,367	(NA)	(NA)	-	(D)
Girdles, corsets, and other foundation garments	.do.	1,985	123	1,785	(NA)	(NA)	-	77
Nightgowns, pajamas, and other nightwear	.do.	2,242	270	1,701	(NA)	(NA)	37	234
Panties	.do.	17,115	12,257	4,582	(NA)	(NA)	-	276
Robes and dressing gowns	.do.	(D)	160	306	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,604	355	1,087	(NA)	(NA)	-	162
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	526	(D)	140	(NA)	(NA)	-	(D)
Jogging and warm-up suits	.do.	350	(D)	320	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	.do.	324	91	197	(NA)	(D)	(D)	32
Playsuits, rompers, halters, etc.	.do.	417	102	240	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	(D)	52	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	(D)	102	24	51	2	91
Swimwear	.do.	551	3	497	(NA)	(NA)	-	51
Washable service apparel	.do.	455	(D)	317	(NA)	(NA)	-	(D)
Infants' apparel	.do.	3,858	2,219	1,410	(NA)	(NA)	91	138

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabric: 1994—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
				Total	Wool blends			
SECOND QUARTER								
Men's and boys' garments:								
Suits	1,000 units	2,707	128	1,326	385	822	29	402
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	86	(NA)	(D)	-	39
Dress and sport coats (tailored)	.do.	(D)	87	2,101	700	948	134	(D)
Heavy nontailored coats and jackets	.do.	3,772	779	2,347	(NA)	241	(D)	(D)
Lightweight nontailored coats and jackets	.do.	5,056	475	4,024	(NA)	74	-	483
Overcoats and top coats	.do.	232	(D)	(D)	(NA)	84	(D)	20
Raincoats	.do.	(D)	(D)	264	(NA)	(NA)	(D)	67
Separate vests	.do.	(D)	14	95	(NA)	13	(D)	120
Work jackets	1,000 dozens	105	(D)	(D)	(NA)	(NA)	(D)	3
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	797	588	(NA)	(NA)	(D)	45
Woven sport shirts	.do.	612	450	100	(NA)	(D)	-	(D)
Work shirts	.do.	1,152	145	843	(NA)	(NA)	-	164
Knit T-shirts and tank tops made for outerwear	.do.	19,427	14,462	2,489	(NA)	-	-	2,476
Sweatshirts	.do.	4,180	2,612	1,430	(NA)	-	-	138
Other knit shirts	.do.	2,617	1,409	971	(NA)	(D)	-	(D)
Sweaters	.do.	353	137	137	(NA)	(D)	-	(D)
Bottoms:								
Dress and sport trousers	1,000 units	28,802	10,179	15,234	3,322	1,174	(D)	(D)
Jeans and jean-cut casual slacks	.do.	84,954	77,763	1,586	(NA)	(NA)	-	5,605
Shorts	.do.	29,649	20,344	4,578	(NA)	(D)	(D)	4,727
Sweatpants	1,000 dozens	1,281	453	782	(NA)	(NA)	-	46
Workpants	.do.	997	42	833	(NA)	(NA)	-	122
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	566	141	316	(NA)	(NA)	(D)	(D)
Robes	.do.	78	19	22	(NA)	(NA)	-	37
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	24,900	22,310	2,039	(NA)	(NA)	1	550
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	117	365	(NA)	-	-	(D)
Jogging and warm-up suits	.do.	214	(D)	148	(NA)	(NA)	-	(D)
Playsuits	.do.	20	6	(D)	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Swimwear	.do.	100	54	35	(NA)	(NA)	-	11
Team sports uniforms	.do.	(D)	(D)	213	(NA)	-	-	178
Washable service apparel	.do.	638	36	431	(NA)	(NA)	-	171
Women's and girls' garments:								
Dresses	1,000 units	50,308	6,953	29,944	(NA)	527	1,221	11,663
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	(D)	819	629	876	17	(D)
Down and feather filled coats, jackets, and vests	.do.	37	(D)	(D)	(NA)	-	(D)	34
Heavy nontailored coats and jackets	.do.	2,384	468	974	(NA)	(D)	(D)	687
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	(D)	37
Separate vests	.do.	(D)	52	261	(NA)	(D)	(D)	217
Tailored suit-type jackets	.do.	(D)	515	4,831	271	795	77	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	5,195	1,745	2,607	(NA)	(D)	138	(D)
Knit T-shirts and tank tops made for outerwear	.do.	4,385	1,852	1,117	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	1,178	(D)	(D)	(NA)	(NA)	-	169
Other knit blouses and shirts	.do.	2,705	731	1,296	(NA)	(D)	(D)	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	1,034	481	289	(NA)	21	(D)	(D)
Bottoms:								
Shorts	1,000 units	24,063	12,141	8,173	(NA)	(NA)	140	3,609
Skirts and divided skirts	.do.	25,298	5,975	10,509	992	2,894	419	5,501
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	89,457	48,462	24,824	1,636	(D)	363	(D)
Sweatpants	1,000 dozens	998	(D)	(D)	(NA)	(NA)	-	118
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	5,499	226	5,217	(NA)	(NA)	-	56
Girdles, corsets, and other foundation garments	.do.	1,880	(D)	1,695	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	.do.	1,737	259	1,269	(NA)	(NA)	34	175
Panties	.do.	16,570	11,788	4,519	(NA)	(NA)	-	263
Robes and dressing gowns	.do.	(D)	118	299	(NA)	(NA)	-	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,255	267	845	(NA)	(NA)	-	143
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	124	(NA)	(NA)	(D)	223
Jogging and warm-up suits	.do.	250	(D)	223	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	.do.	193	67	(D)	(NA)	-	(D)	(D)
Playsuits, rompers, halters, etc.	.do.	321	49	205	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	-	114	22	42	6	(D)
Swimwear	.do.	978	(D)	881	(NA)	(NA)	-	(D)
Washable service apparel	.do.	473	(D)	327	(NA)	(NA)	-	(D)
Infants' apparel	.do.	2,776	1,726	853	(NA)	(NA)	92	105

See footnotes at end of table.

Table 48. Quantity of Production of Apparel by Type of Fabric: 1994—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k)
				Total	Wool blends			
FIRST QUARTER								
Men's and boys' garments:								
Suits	1,000 units	2,802	136	1,425	464	796	31	414
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	78	(NA)	(D)	-	32
Dress and sport coats (tailored)	.do.	3,530	110	2,180	709	842	182	216
Heavy nontailored coats and jackets	.do.	3,729	593	2,486	(NA)	225	(D)	(D)
Lightweight nontailored coats and jackets	.do.	5,940	576	4,339	(NA)	(D)	-	(D)
Overcoats and top coats	.do.	184	29	64	(NA)	37	40	14
Raincoats	.do.	(D)	(D)	256	(NA)	(NA)	(D)	62
Separate vests	.do.	(D)	(D)	219	(NA)	16	(D)	137
Work jackets	1,000 dozens	105	42	57	(NA)	(NA)	(D)	(D)
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	841	630	(NA)	(NA)	-	(D)
Woven sport shirts	.do.	673	523	90	(NA)	(D)	-	(D)
Work shirts	.do.	1,049	137	764	(NA)	(NA)	-	148
Knit T-shirts and tank tops made for outerwear	.do.	17,177	12,591	2,677	(NA)	-	-	1,909
Sweatshirts	.do.	3,476	2,109	1,244	(NA)	-	-	123
Other knit shirts	.do.	2,670	1,413	1,009	(NA)	(D)	12	(D)
Sweaters	.do.	317	119	103	(NA)	(D)	-	(D)
Bottoms:								
Dress and sport trousers	1,000 units	27,439	9,867	14,003	3,180	1,178	(D)	(D)
Jeans and jean-cut casual slacks	.do.	67,756	61,892	1,526	(NA)	(NA)	-	4,338
Shorts	.do.	37,367	26,114	5,217	(NA)	(D)	(D)	6,033
Sweatpants	1,000 dozens	1,084	(D)	517	(NA)	(NA)	-	(D)
Workpants	.do.	862	50	699	(NA)	(NA)	-	113
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	529	133	317	(NA)	(NA)	(D)	(D)
Robes	.do.	(D)	18	29	(NA)	(NA)	-	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	24,170	21,976	1,713	(NA)	(NA)	-	481
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	(D)	131	385	(NA)	-	-	(D)
Jogging and warm-up suits	.do.	250	(D)	197	(NA)	(NA)	-	(D)
Playsuits	.do.	(D)	25	(D)	(NA)	-	(D)	8
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Swimwear	.do.	169	52	99	(NA)	(NA)	-	18
Team sports uniforms	.do.	(D)	(D)	320	(NA)	-	-	223
Washable service apparel	.do.	591	15	418	(NA)	(NA)	-	158
Women's and girls' garments:								
Dresses	1,000 units	54,895	9,576	30,395	(NA)	428	1,533	12,963
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	87	633	473	548	11	(D)
Down and feather filled coats, jackets, and vests	.do.	43	(D)	7	(NA)	-	(D)	33
Heavy nontailored coats and jackets	.do.	2,302	419	977	(NA)	(D)	102	(D)
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	(D)	(D)
Separate vests	.do.	483	34	247	(NA)	-	8	194
Tailored suit-type jackets	.do.	(D)	684	6,430	454	825	308	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	5,094	1,791	2,447	(NA)	(D)	153	(D)
Knit T-shirts and tank tops made for outerwear	.do.	4,202	1,702	918	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	958	(D)	(D)	(NA)	(NA)	-	146
Other knit blouses and shirts	.do.	2,108	816	717	(NA)	(D)	73	(D)
Sweaters, including coat, cardigan, pullover and vest sweaters	.do.	827	407	207	(NA)	16	(D)	(D)
Bottoms:								
Shorts	1,000 units	29,487	16,944	7,960	(NA)	(NA)	187	4,396
Skirts and divided skirts	.do.	26,135	5,256	12,188	1,438	2,596	563	5,532
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	81,468	38,361	27,806	2,579	(D)	469	(D)
Sweatpants	1,000 dozens	737	(D)	(D)	(NA)	(NA)	-	94
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	4,700	135	4,511	(NA)	(NA)	-	54
Girdles, corsets, and other foundation garments	.do.	1,630	(D)	1,468	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	.do.	1,984	237	1,503	(NA)	(NA)	47	197
Panties	.do.	13,684	9,754	3,697	(NA)	(NA)	-	233
Robes and dressing gowns	.do.	514	117	373	(NA)	(NA)	-	24
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,208	282	792	(NA)	(NA)	-	134
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	144	(NA)	(NA)	-	(D)
Jogging and warm-up suits	.do.	307	(D)	274	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	.do.	227	72	(D)	(NA)	-	-	(D)
Playsuits, rompers, halter, etc.	.do.	359	50	233	(NA)	-	18	58
Ski apparel	.do.	(D)	-	11	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	(D)	112	28	72	5	113
Swimwear	.do.	1,413	37	1,252	(NA)	(NA)	(D)	(D)
Washable service apparel	.do.	411	(D)	309	(NA)	(NA)	-	(D)
Infants' apparel	.do.	2,978	1,767	951	(NA)	(NA)	145	115

- Represents zero.

D Data withheld to avoid disclosing figures for individual companies.

NA Not available.

Table 49. Quantity of Production of Apparel by Type of Fabric: 1993

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
				Total	Wool blends			
TOTAL								
Men's and boys' garments:								
Suits	1,000 units	9,722	251	4,756	2,281	3,055	241	1,419
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do	(D)	(D)	391	(NA)	(D)	-	180
Dress and sport coats (tailored)	.do	13,104	517	8,261	2,858	3,226	541	559
Heavy nontailored coats and jackets	.do	18,095	3,946	10,724	(NA)	1,111	(D)	(D)
Lightweight nontailored coats and jackets	.do	17,603	2,784	10,191	(NA)	(D)	(D)	(D)
Overcoats and top coats	.do	871	(D)	(D)	(NA)	(D)	(D)	(D)
Raincoats	.do	(D)	(D)	1,374	(NA)	(NA)	336	231
Separate vests	.do	(D)	(D)	(D)	(NA)	(D)	(D)	(D)
Work jackets	1,000 dozens	406	(D)	(D)	(NA)	(NA)	(D)	42
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	3,766	2,443	(NA)	(NA)	-	(D)
Woven sport shirts	.do	2,671	1,867	472	(NA)	(D)	(D)	(D)
Work shirts	.do	4,206	715	3,085	(NA)	(NA)	-	406
Knit T-shirts and tank tops made for outerwear	.do	65,869	47,150	9,595	(NA)	-	-	9,124
Sweatshirts	.do	19,968	10,544	7,956	(NA)	-	-	1,468
Other knit shirts	.do	9,946	4,744	4,446	(NA)	12	(D)	(D)
Sweaters	.do	2,083	1,060	666	(NA)	111	-	246
Bottoms:								
Dress and sport trousers	1,000 units	108,680	31,711	58,922	12,428	4,299	(D)	(D)
Jeans and jean-cut casual slacks	.do	307,158	271,130	4,300	(NA)	(NA)	2	31,726
Shorts	.do	99,257	67,452	20,066	(NA)	(D)	(D)	(D)
Sweatpants	1,000 dozens	6,223	2,101	3,684	(NA)	(NA)	-	438
Workpants	.do	3,487	168	3,153	(NA)	(NA)	-	166
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	2,309	729	1,247	(NA)	(NA)	(D)	(D)
Robes	.do	566	228	281	(NA)	(NA)	-	57
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do	108,613	98,485	8,217	(NA)	(NA)	3	1,908
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	1,689	559	1,039	(NA)	-	-	91
Jogging and warm-up suits	.do	799	43	665	(NA)	(NA)	-	91
Playsuits	.do	(D)	(D)	(D)	(NA)	(D)	(D)	(D)
Ski apparel	.do	(D)	-	(D)	(NA)	(NA)	-	(D)
Swimwear	.do	479	122	222	(NA)	(NA)	-	135
Team sports uniforms	.do	(D)	(D)	1,097	(NA)	-	-	595
Washable service apparel	.do	2,645	157	1,539	(NA)	(NA)	-	949
Women's and girls' garments:								
Dresses	1,000 units	177,374	32,441	101,136	(NA)	1,767	4,869	37,161
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	544	3,301	2,421	3,409	83	(D)
Down and feather filled coats, jackets, and vests	.do	(D)	(D)	(D)	(NA)	-	(D)	(D)
Heavy nontailored coats and jackets	.do	11,919	2,243	4,563	(NA)	(D)	(D)	(D)
Raincoats	.do	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Separate vests	.do	(D)	173	768	(NA)	17	1	(D)
Tailored suit-type jackets	.do	(D)	3,647	20,690	3,342	4,867	821	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	17,680	5,885	8,871	(NA)	29	673	2,223
Knit T-shirts and tank tops made for outerwear	.do	15,890	6,176	4,749	(NA)	(NA)	(D)	(D)
Sweatshirts	.do	5,613	(D)	3,361	(NA)	(NA)	-	(D)
Other knit blouses and shirts	.do	10,593	3,779	4,046	(NA)	(D)	(D)	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do	4,034	1,853	1,265	(NA)	80	13	823
Bottoms:								
Shorts	1,000 units	90,617	42,072	26,036	(NA)	(NA)	(D)	(D)
Skirts and divided skirts	.do	95,313	22,801	44,447	4,954	8,937	1,723	17,405
Slacks, pants, and jeans, including jean-cut casual slacks	.do	348,468	184,833	105,415	8,374	4,716	1,569	51,935
Sweatpants	1,000 dozens	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	19,939	664	18,935	(NA)	(NA)	-	340
Girdles, corsets, and other foundation garments	.do	6,246	(D)	5,609	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	.do	8,061	1,268	5,826	(NA)	(NA)	161	806
Panties	.do	55,439	39,297	15,326	(NA)	(NA)	-	816
Robes and dressing gowns	.do	2,288	545	1,449	(NA)	(NA)	4	290
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do	5,350	1,271	3,444	(NA)	(NA)	-	635
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	600	(NA)	(NA)	-	747
Jogging and warm-up suits	.do	1,042	(D)	888	(NA)	(NA)	(D)	(D)
Overalls, coveralls, and jumpsuits	.do	557	278	109	(NA)	-	-	170
Playsuits, rompers, halters, etc.	.do	1,283	211	809	(NA)	-	59	204
Ski apparel	.do	(D)	-	(D)	(NA)	(NA)	-	(D)
Suits, including pant suits	.do	(D)	16	436	118	286	20	(D)
Swimwear	.do	4,517	108	3,908	(NA)	(NA)	-	501
Washable service apparel	.do	2,045	241	1,264	(NA)	(NA)	-	540
Infants' apparel	.do	13,259	7,644	4,374	(NA)	(NA)	396	845

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabric: 1993—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
				Total	Wool blends			
FOURTH QUARTER								
Men's and boys' garments:								
Suits	1,000 units	2,469	75	1,205	448	791	59	339
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	95	(NA)	(D)	-	54
Dress and sport coats (tailored)	.do.	(D)	148	1,882	652	783	110	(D)
Heavy nontailored coats and jackets	.do.	4,785	801	3,044	(NA)	278	(D)	(D)
Lightweight nontailored coats and jackets	.do.	4,732	811	2,619	(NA)	(D)	-	(D)
Overcoats and top coats	.do.	199	(D)	(D)	(NA)	50	38	12
Raincoats	.do.	(D)	(D)	315	(NA)	(NA)	84	50
Separate vests	.do.	(D)	(D)	220	(NA)	(D)	(D)	(D)
Work jackets	1,000 dozens	106	(D)	(D)	(NA)	(NA)	(D)	(D)
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	908	566	(NA)	(NA)	-	(D)
Woven sport shirts	.do.	658	462	116	(NA)	(D)	-	(D)
Work shirts	.do.	1,131	221	801	(NA)	(NA)	-	109
Knit T-shirts and tank tops made for outerwear	.do.	14,700	10,545	2,140	(NA)	-	-	2,015
Sweatshirts	.do.	4,947	2,651	1,939	(NA)	-	-	357
Other knit shirts	.do.	2,215	1,178	850	(NA)	(D)	(D)	(D)
Sweaters	.do.	689	455	123	(NA)	(D)	-	(D)
Bottoms:								
Dress and sport trousers	1,000 units	27,225	9,505	12,955	3,011	1,148	(D)	(D)
Jeans and jean-cut casual slacks	.do.	73,270	63,946	1,262	(NA)	(NA)	(D)	(D)
Shorts	.do.	23,626	16,281	4,537	(NA)	(D)	(D)	(D)
Sweatpants	1,000 dozens	1,667	693	840	(NA)	(NA)	-	134
Workpants	.do.	865	38	785	(NA)	(NA)	-	42
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	675	239	335	(NA)	(NA)	(D)	(D)
Robes	.do.	193	91	83	(NA)	(NA)	-	19
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	23,909	21,245	2,170	(NA)	(NA)	1	493
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	437	124	290	(NA)	-	-	23
Jogging and warm-up suits	.do.	206	7	173	(NA)	(NA)	-	26
Playsuits	.do.	(D)	27	(D)	(NA)	(D)	-	3
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	34
Swimwear	.do.	104	23	42	(NA)	(NA)	-	39
Team sports uniforms	.do.	(D)	(D)	300	(NA)	-	-	174
Washable service apparel	.do.	646	38	378	(NA)	(NA)	-	230
Women's and girls' garments:								
Dresses	1,000 units	38,881	7,707	21,643	(NA)	397	1,229	7,905
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	(D)	824	588	870	29	236
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	(D)	(NA)	-	1	(D)
Heavy nontailored coats and jackets	.do.	2,609	404	958	(NA)	139	20	1,088
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Separate vests	.do.	(D)	48	242	(NA)	(D)	1	349
Tailored suit-type jackets	.do.	(D)	842	4,417	814	983	152	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	3,895	1,345	1,932	(NA)	4	123	491
Knit T-shirts and tank tops made for outerwear	.do.	3,859	1,543	1,058	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	1,501	444	(D)	(NA)	(NA)	-	(D)
Other knit blouses and shirts	.do.	2,468	922	889	(NA)	(D)	(D)	573
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	1,081	481	366	(NA)	14	(D)	(D)
Bottoms:								
Shorts	1,000 units	19,587	8,201	5,451	(NA)	(NA)	91	5,844
Skirts and divided skirts	.do.	19,328	3,807	9,066	1,293	2,114	468	3,873
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	82,379	44,429	23,961	2,330	1,323	325	12,341
Sweatpants	1,000 dozens	1,254	(D)	679	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	4,620	145	4,404	(NA)	(NA)	-	71
Girdles, corsets, and other foundation garments	.do.	1,556	(D)	1,392	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	.do.	2,049	285	1,483	(NA)	(NA)	60	221
Panties	.do.	12,030	8,190	3,662	(NA)	(NA)	-	178
Robes and dressing gowns	.do.	659	161	405	(NA)	(NA)	-	93
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,351	328	868	(NA)	(NA)	-	155
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	140	(NA)	(NA)	-	174
Jogging and warm-up suits	.do.	280	(D)	243	(NA)	(NA)	-	(D)
Overalls, coveralls, and jumpsuits	.do.	143	(D)	53	(NA)	-	-	(D)
Playsuits, rompers, halters, etc.	.do.	309	40	206	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	2	131	36	70	3	(D)
Swimwear	.do.	1,161	(D)	989	(NA)	(NA)	-	(D)
Washable service apparel	.do.	497	(D)	308	(NA)	(NA)	-	(D)
Infants' apparel	.do.	3,392	1,843	1,200	(NA)	(NA)	108	241

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabric: 1993—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
				Total	Wool blends			
THIRD QUARTER								
Men's and boys' garments:								
Suits	1,000 units	2,239	49	1,034	465	779	43	334
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	128	(NA)	(D)	-	(D)
Dress and sport coats (tailored)	.do.	(D)	118	1,944	607	913	126	(D)
Heavy nontailored coats and jackets	.do.	4,373	1,175	2,417	(NA)	222	36	523
Lightweight nontailored coats and jackets	.do.	4,630	705	2,788	(NA)	(D)	-	(D)
Overcoats and top coats	.do.	174	(D)	(D)	(NA)	54	41	7
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	(D)	58
Separate vests	.do.	(D)	(D)	(D)	(NA)	(D)	(D)	(D)
Work jackets	1,000 dozens	100	(D)	(D)	(NA)	(NA)	(D)	10
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	936	559	(NA)	(NA)	-	(D)
Woven sport shirts	.do.	743	528	127	(NA)	(D)	-	(D)
Work shirts	.do.	1,058	202	755	(NA)	(NA)	-	101
Knit T-shirts and tank tops made for outerwear	.do.	14,086	10,057	2,054	(NA)	-	-	1,975
Sweatshirts	.do.	5,828	3,152	2,258	(NA)	-	-	418
Other knit shirts	.do.	2,471	1,091	1,204	(NA)	(D)	(D)	(D)
Sweaters	.do.	581	277	210	(NA)	31	-	63
Bottoms:								
Dress and sport trousers	1,000 units	28,588	8,485	15,369	2,991	1,250	(D)	(D)
Jeans and jean-cut casual slacks	.do.	81,102	72,035	1,171	(NA)	(NA)	-	7,896
Shorts	.do.	14,959	9,380	3,450	(NA)	(D)	(D)	2,127
Sweatpants	1,000 dozens	1,821	651	1,040	(NA)	(NA)	-	130
Workpants	.do.	859	52	766	(NA)	(NA)	-	41
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	667	200	371	(NA)	(NA)	(D)	(D)
Robes	.do.	(D)	87	102	(NA)	(NA)	-	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	26,950	24,331	2,156	(NA)	(NA)	(D)	(D)
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	407	153	231	(NA)	-	-	23
Jogging and warm-up suits	.do.	227	(D)	181	(NA)	(NA)	-	(D)
Playsuits	.do.	(D)	28	(D)	(NA)	-	(D)	5
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Swimwear	.do.	78	17	30	(NA)	(NA)	-	31
Team sports uniforms	.do.	(D)	(D)	254	(NA)	-	-	141
Washable service apparel	.do.	648	39	378	(NA)	(NA)	-	231
Women's and girls' garments:								
Dresses	1,000 units	42,976	7,765	24,621	(NA)	598	1,286	8,706
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	(D)	1,013	800	1,191	32	280
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	4	(NA)	-	(D)	(D)
Heavy nontailored coats and jackets	.do.	3,417	792	1,184	(NA)	182	(D)	(D)
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Separate vests	.do.	(D)	52	242	(NA)	-	-	(D)
Tailored suit-type jackets	.do.	(D)	784	4,322	916	2,075	235	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	4,562	1,523	2,237	(NA)	8	220	574
Knit T-shirts and tank tops made for outerwear	.do.	3,587	1,376	1,056	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	1,691	589	(D)	(NA)	(NA)	-	(D)
Other knit blouses and shirts	.do.	3,300	1,184	1,378	(NA)	(D)	(D)	652
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	1,422	628	495	(NA)	28	5	266
Bottoms:								
Shorts	1,000 units	14,813	5,070	4,584	(NA)	(NA)	117	5,042
Skirts and divided skirts	.do.	24,339	4,904	10,320	1,581	4,334	362	4,419
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	96,799	50,626	29,541	3,245	2,322	341	13,969
Sweatpants	1,000 dozens	1,410	(D)	774	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	5,327	160	5,072	(NA)	(NA)	-	95
Girdles, corsets, and other foundation garments	.do.	1,632	(D)	1,463	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	.do.	2,020	259	1,509	(NA)	(NA)	38	214
Panties	.do.	13,983	9,673	4,108	(NA)	(NA)	-	202
Robes and dressing gowns	.do.	581	143	362	(NA)	(NA)	(D)	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,462	369	926	(NA)	(NA)	-	167
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	133	(NA)	(NA)	-	149
Jogging and warm-up suits	.do.	251	(D)	215	(NA)	(NA)	(D)	27
Overalls, coveralls, and jumpsuits	.do.	125	(D)	8	(NA)	-	-	(D)
Playsuits, rompers, halters, etc.	.do.	297	41	181	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	3	100	28	70	6	(D)
Swimwear	.do.	755	3	657	(NA)	(NA)	-	95
Washable service apparel	.do.	509	(D)	315	(NA)	(NA)	-	(D)
Infants' apparel	.do.	3,303	1,866	1,135	(NA)	(NA)	84	218

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabric: 1993—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
				Total	Wool blends			
SECOND QUARTER								
Men's and boys' garments:								
Suits	1,000 units	2,338	45	1,192	659	690	65	346
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	89	(NA)	(D)	-	46
Dress and sport coats (tailored)	.do.	(D)	96	1,970	779	781	138	(D)
Heavy nontailored coats and jackets	.do.	4,536	1,260	2,446	(NA)	306	52	472
Lightweight nontailored coats and jackets	.do.	3,897	881	1,988	(NA)	29	(D)	(D)
Overcoats and top coats	.do.	245	(D)	(D)	(NA)	73	102	8
Raincoats	.do.	(D)	(D)	362	(NA)	(NA)	(D)	65
Separate vests	.do.	(D)	18	135	(NA)	9	(D)	225
Work jackets	1,000 dozens	104	32	61	(NA)	(NA)	(D)	(D)
Tops:								
Woven dress and business shirts	1,000 dozens	1,610	934	618	(NA)	(NA)	-	58
Woven sport shirts	.do.	577	400	102	(NA)	10	(D)	(D)
Work shirts	.do.	1,046	154	790	(NA)	(NA)	-	102
Knit T-shirts and tank tops made for outerwear	.do.	17,403	12,363	2,610	(NA)	-	-	2,430
Sweatshirts	.do.	4,573	2,492	1,738	(NA)	-	-	343
Other knit shirts	.do.	2,752	1,247	1,308	(NA)	-	(D)	(D)
Sweaters	.do.	439	171	184	(NA)	26	-	58
Bottoms:								
Dress and sport trousers	1,000 units	26,873	7,551	15,041	3,103	990	(D)	(D)
Jeans and jean-cut casual slacks	.do.	83,326	74,256	930	(NA)	(NA)	-	8,140
Shorts	.do.	25,151	16,840	5,268	(NA)	-	(D)	(D)
Sweatpants	1,000 dozens	1,530	557	876	(NA)	(NA)	-	97
Workpants	.do.	884	44	798	(NA)	(NA)	-	42
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	476	136	276	(NA)	(NA)	(D)	(D)
Robes	.do.	(D)	25	62	(NA)	(NA)	-	(D)
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	28,179	25,859	1,857	(NA)	(NA)	1	462
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	414	124	267	(NA)	-	-	23
Jogging and warm-up suits	.do.	176	7	149	(NA)	(NA)	-	20
Playsuits	.do.	(D)	29	12	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	23
Swimwear	.do.	158	51	77	(NA)	(NA)	-	30
Team sports uniforms	.do.	(D)	(D)	254	(NA)	-	-	133
Washable service apparel	.do.	677	42	391	(NA)	(NA)	-	244
Women's and girls' garments:								
Dresses	1,000 units	45,464	8,059	26,073	(NA)	400	795	10,137
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	(D)	756	524	864	8	248
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	(D)	(NA)	-	(D)	(D)
Heavy nontailored coats and jackets	.do.	2,959	665	1,097	(NA)	64	33	1,100
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Separate vests	.do.	(D)	34	154	(NA)	(D)	-	243
Tailored suit-type jackets	.do.	(D)	1,139	5,181	590	1,135	184	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	4,622	1,519	2,343	(NA)	9	167	584
Knit T-shirts and tank tops made for outerwear	.do.	4,058	1,445	1,398	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	1,319	(D)	(D)	(NA)	(NA)	-	169
Other knit blouses and shirts	.do.	2,352	801	902	(NA)	(D)	(D)	583
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	847	386	244	(NA)	23	3	191
Bottoms:								
Shorts	1,000 units	24,111	11,396	7,460	(NA)	(NA)	(D)	(D)
Skirts and divided skirts	.do.	25,713	7,068	12,261	977	1,566	398	4,420
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	87,276	48,268	24,923	1,296	824	406	12,855
Sweatpants	1,000 dozens	1,143	(D)	619	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	5,038	178	4,771	(NA)	(NA)	-	89
Girdles, corsets, and other foundation garments	.do.	1,576	(D)	1,421	(NA)	(NA)	-	(D)
Nightgowns, pajamas, and other nightwear	.do.	1,768	248	1,316	(NA)	(NA)	30	174
Panties	.do.	14,851	10,733	3,907	(NA)	(NA)	-	211
Robes and dressing gowns	.do.	491	99	335	(NA)	(NA)	-	57
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,366	320	886	(NA)	(NA)	-	160
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	159	(NA)	(NA)	-	208
Jogging and warm-up suits	.do.	243	(D)	206	(NA)	(NA)	(D)	23
Overalls, coveralls, and jumpsuits	.do.	128	57	23	(NA)	-	-	48
Playsuits, rompers, halters, etc.	.do.	329	52	214	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	27	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	6	101	27	73	4	(D)
Swimwear	.do.	1,128	(D)	1,009	(NA)	(NA)	-	(D)
Washable service apparel	.do.	501	(D)	300	(NA)	(NA)	-	(D)
Infants' apparel	.do.	3,190	1,938	969	(NA)	(NA)	86	197

See footnotes at end of table.

Table 49. Quantity of Production of Apparel by Type of Fabric: 1993—Con.

Product description	Unit of measure	Total	Cotton	Manmade		Wool	Other	Not specified by kind (n.s.k.)
				Total	Wool blends			
FIRST QUARTER								
Men's and boys' garments:								
Suits	1,000 units	2,676	82	1,326	709	795	74	399
Coats, jackets, and vests:								
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	79	(NA)	(D)	-	35
Dress and sport coats (tailored)	.do.	3,705	155	2,466	820	749	167	168
Heavy nontailored coats and jackets	.do.	4,401	710	2,817	(NA)	305	64	505
Lightweight nontailored coats and jackets	.do.	4,344	387	2,796	(NA)	71	(D)	(D)
Overcoats and top coats	.do.	253	(D)	(D)	(NA)	(D)	(D)	9
Raincoats	.do.	(D)	(D)	360	(NA)	(NA)	(D)	58
Separate vests	.do.	(D)	(D)	(D)	(NA)	(D)	(D)	(D)
Work jackets	1,000 dozens	96	(D)	(D)	(NA)	(NA)	(D)	10
Tops:								
Woven dress and business shirts	1,000 dozens	(D)	988	701	(NA)	(NA)	-	(D)
Woven sport shirts	.do.	693	477	128	(NA)	(D)	(D)	74
Work shirts	.do.	971	138	739	(NA)	(NA)	-	94
Knit T-shirts and tank tops made for outerwear	.do.	19,680	14,185	2,790	(NA)	-	-	2,705
Sweatshirts	.do.	4,620	2,249	2,021	(NA)	-	-	350
Other knit shirts	.do.	2,508	1,228	1,085	(NA)	-	(D)	(D)
Sweaters	.do.	374	157	149	(NA)	(D)	-	(D)
Bottoms:								
Dress and sport trousers	1,000 units	25,994	6,170	15,557	3,323	911	(D)	(D)
Jeans and jean-cut casual slacks	.do.	69,460	60,893	936	(NA)	(NA)	(D)	(D)
Shorts	.do.	35,521	24,951	6,811	(NA)	(D)	(D)	(D)
Sweatpants	1,000 dozens	1,205	200	928	(NA)	(NA)	-	77
Workpants	.do.	879	34	803	(NA)	(NA)	-	42
Underwear and nightwear:								
Pajamas and nightwear	1,000 dozens	491	154	265	(NA)	(NA)	(D)	(D)
Robes	.do.	67	25	34	(NA)	(NA)	-	8
All other underwear, including thermal underwear, undershirts, knit undershorts, and woven boxer shorts	.do.	29,575	27,050	2,034	(NA)	(NA)	-	491
Other garments:								
Coveralls, overalls, and jumpsuits	1,000 dozens	431	158	251	(NA)	-	-	22
Jogging and warm-up suits	.do.	190	7	162	(NA)	(NA)	-	21
Playsuits	.do.	(D)	(D)	(D)	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	23
Swimwear	.do.	139	31	73	(NA)	(NA)	-	35
Team sports uniforms	.do.	(D)	(D)	289	(NA)	-	-	147
Washable service apparel	.do.	674	38	392	(NA)	(NA)	-	244
Women's and girls' garments:								
Dresses	1,000 units	50,053	8,910	28,799	(NA)	372	1,559	10,413
Coats, jackets, and vests:								
Coats and capes	1,000 units	(D)	99	707	509	484	(D)	(D)
Down and feather filled coats, jackets, and vests	.do.	(D)	(D)	(D)	(NA)	-	(D)	(D)
Heavy nontailored coats and jackets	.do.	2,934	382	1,323	(NA)	(D)	47	(D)
Raincoats	.do.	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Separate vests	.do.	(D)	39	129	(NA)	(D)	-	226
Tailored suit-type jackets	.do.	(D)	882	6,769	1,022	674	250	(D)
Tops:								
Woven blouses and shirts	1,000 dozens	4,601	1,498	2,359	(NA)	8	163	573
Knit T-shirts and tank tops made for outerwear	.do.	4,386	1,812	1,237	(NA)	(NA)	(D)	(D)
Sweatshirts	.do.	1,102	86	(D)	(NA)	(NA)	-	(D)
Other knit blouses and shirts	.do.	2,473	872	877	(NA)	-	(D)	(D)
Sweaters, including coat, cardigan, pullover, and vest sweaters	.do.	684	358	160	(NA)	15	(D)	(D)
Bottoms:								
Shorts	1,000 units	32,106	17,405	8,541	(NA)	(NA)	142	6,018
Skirts and divided skirts	.do.	25,933	7,022	12,801	1,103	923	495	4,692
Slacks, pants, and jeans, including jean-cut casual slacks	.do.	82,014	41,510	26,990	1,503	247	497	12,770
Sweatpants	1,000 dozens	(D)	(D)	(D)	(NA)	(NA)	-	(D)
Underwear and nightwear:								
Brassieres, bra-lettes, and bandeaux	1,000 dozens	4,954	181	4,688	(NA)	(NA)	-	85
Girdles, corsets, and other foundation garments	.do.	1,482	84	1,333	(NA)	(NA)	-	65
Nightgowns, pajamas, and other nightwear	.do.	2,224	476	1,518	(NA)	(NA)	33	197
Panties	.do.	14,575	10,701	3,650	(NA)	(NA)	-	224
Robes and dressing gowns	.do.	557	142	347	(NA)	(NA)	(D)	(D)
All other underwear, including slips, camisoles, teddies, undershirts, and union suits	.do.	1,171	254	763	(NA)	(NA)	-	154
Other garments:								
Bodysuits and bodyshirts	1,000 dozens	(D)	(D)	168	(NA)	(NA)	-	216
Jogging and warm-up suits	.do.	268	(D)	224	(NA)	(NA)	(D)	27
Overalls, coveralls, and jumpsuits	.do.	161	90	24	(NA)	-	-	47
Playsuits, rompers, halters, etc.	.do.	348	78	208	(NA)	-	(D)	(D)
Ski apparel	.do.	(D)	-	(D)	(NA)	(NA)	-	(D)
Suits, including pant suits	.do.	(D)	5	105	27	73	7	(D)
Swimwear	.do.	1,473	(D)	1,253	(NA)	(NA)	-	(D)
Washable service apparel	.do.	538	56	341	(NA)	(NA)	-	141
Infants' apparel	.do.	3,374	1,997	1,070	(NA)	(NA)	118	189

- Represents zero.

D Data withheld to avoid disclosing figures for individual companies.

NA Not available.

Table 50. Percent of Value of Shipments from New Establishments: 1994 and 1993

[Value in millions of dollars]

Product description	1994		1993	
	Total value of shipments	Percent from added establishments	Total value of shipments	Percent from added establishments
MEN'S AND JUNIOR BOYS'				
Suits.....	1,075.7	-	1,023.0	13.9
Coats, jackets, and vests:				
Down and feather filled coats, jackets, and vests	25.6	-	36.9	25.2
Dress and sport coats (tailored).....	831.2	-	824.1	9.4
Heavy nontailored coats and jackets	495.6	-	590.4	5.3
Lightweight nontailored coats and jackets	415.6	2.4	331.6	16.9
Overcoats and top coats	75.0	-	65.0	1.3
Raincoats	58.7	0.1	82.1	2.2
Separate vests.....	14.4	-	16.0	42.3
Work jackets.....	132.4	0.1	113.1	9.9
Tops:				
Woven dress and business shirts	735.8	-	789.8	3.3
Woven sport shirts	277.3	0.2	326.5	4.1
Work shirts	533.7	0.2	473.3	6.6
Knit T-shirts and tank tops made for outerwear	3,354.1	0.6	2,987.4	7.6
Sweatshirts.....	1,113.9	0.2	1,205.6	6.2
Other knit shirts.....	784.0	-	729.1	4.4
Sweaters.....	239.2	16.9	211.1	7.4
Bottoms:				
Dress and sport trousers	2,002.4	-	1,571.9	6.6
Jean and jean-cut casual slacks	4,260.5	0.5	4,085.3	3.3
Shorts	868.3	-	611.6	9.4
Sweatpants.....	353.5	-	313.1	8.0
Workpants.....	427.1	0.1	427.1	3.4
Underwear and nightwear:				
Pajamas and nightwear	152.9	12.0	155.7	5.0
Robes	86.3	-	80.6	6.2
Underwear	1,405.9	2.5	1,376.8	2.6
Thermal underwear.....	199.6	-	172.9	7.7
Undershirts (1/4 sleeves and athletic types)	473.1	1.3	483.1	0.2
Knit undershorts and briefs.....	506.1	1.2	513.3	1.1
Woven boxer shorts	227.1	-	207.5	7.6
Other garments:				
Coveralls, overalls, jumpsuits	353.1	0.9	307.7	6.6
Jogging and warm-up suits.....	48.5	2.2	40.8	25.9
Playsuits	(D)	(D)	(D)	(D)
Ski apparel	(D)	(D)	(D)	(D)
Swimwear.....	28.3	0.2	34.4	11.3
Team sports uniforms.....	235.6	2.2	221.7	12.5
Washable service apparel	245.1	-	264.1	27.7
LITTLE BOYS'				
Suits.....	19.8	-	7.9	-
Coats, jackets, and vests:				
Down and feather filled coats, jackets, and vests	(D)	(D)	(D)	(D)
Dress and sport coats (tailored).....	9.8	-	5.4	-
Heavy nontailored coats and jackets	18.7	11.2	23.7	8.9
Lightweight nontailored coats and jackets	12.9	7.8	12.5	8.0
Overcoats and top coats	-	-	-	-
Raincoats	(D)	(D)	(D)	(D)
Separate vests.....	(D)	(D)	(D)	(D)
Work jackets.....	-	-	-	-
Tops:				
Woven dress and business shirts	(D)	(D)	(D)	(D)
Woven sport shirts	25.9	3.9	25.0	4.0
Work shirts	-	-	-	-
Knit T-shirts and tank tops made for outerwear	88.6	13.3	86.6	13.6
Sweatshirts.....	20.2	-	31.7	-
Other knit shirts.....	108.7	0.1	111.7	0.1
Sweaters.....	18.2	5.5	13.2	7.6

See footnotes at end of table.

Table 50. Percent of Value of Shipments from New Establishments: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	1994		1993	
	Total value of shipments	Percent from added establishments	Total value of shipments	Percent from added establishments
Bottoms:				
Dress and sport trousers	99.4	15.6	91.8	16.9
Jean and jean-cut casual slacks	235.7	0.6	234.7	0.6
Shorts	112.3	2.8	118.6	2.7
Sweatpants	21.8	4.1	34.1	2.6
Workpants	3.3	-	-	-
Underwear and nightwear:				
Pajamas and nightwear	45.0	23.1	37.3	27.9
Robes	(D)	(D)	2.4	16.7
Underwear	124.4	2.5	189.5	1.6
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	(D)	(D)	39.9	-
Jogging and warm-up suits	66.1	1.1	52.2	1.3
Playsuits	11.1	3.6	19.0	2.1
Ski apparel	0.4	-	(D)	(D)
Swimwear	5.7	3.5	6.3	3.2
Team sports uniforms	(D)	(D)	(D)	(D)
Washable service apparel	-	-	-	-
WOMEN'S, MISSES, AND JUNIORS				
Dresses	4,313.8	2.8	4,096.1	10.3
Coats, jackets, and vests:				
Coats and capes	620.0	1.8	(D)	(D)
Down and feather filled coats, jackets, and vests	8.1	-	16.8	76.9
Nontailored jackets	250.8	0.3	241.4	20.3
Raincoats	(D)	(D)	(D)	(D)
Separate vests	45.2	0.2	46.1	38.0
Tailored suit-type jackets	958.1	1.3	1,080.5	6.6
Tops:				
Woven blouses and shirts	2,231.8	0.7	2,152.3	4.3
Knit T-shirts and tank tops made for outerwear	815.3	21.4	817.3	21.4
Sweatshirts	246.7	9.5	263.5	8.9
Other knit blouses and shirts	759.5	12.2	743.8	12.5
Sweaters, including coat, cardigan, pullover, and vest sweaters	599.7	11.5	637.7	10.9
Bottoms:				
Shorts	588.0	14.3	590.5	14.2
Skirts and divided skirts	1,277.4	11.3	1,531.1	9.4
Slacks, pants, and jeans, including jean-cut casual slacks.	3,885.9	10.0	3,948.2	9.9
Sweatpants	174.4	10.4	182.2	10.0
Underwear and nightwear:				
Brassieres, bra-lettes, and bandeaux	1,404.5	0.6	1,265.3	0.6
Girdles, corsets, and other foundation garments	390.3	0.7	322.2	0.8
Nightgowns, pajamas, and other nightwear	584.7	4.3	561.2	4.4
Other underwear, including camisoles, teddies, undershirts, and union suits	241.4	5.7	200.1	6.8
Panties	749.2	0.9	680.7	1.0
Robes and dressing gowns	235.6	4.6	290.3	3.8
Slips	51.4	0.2	44.3	0.2
Other garments:				
Bodysuits and bodyshirts	158.3	16.1	151.6	16.8
Jogging and warm-up suits	32.5	36.9	43.2	27.8
Overalls, coveralls, and jumpsuits	37.0	18.4	41.5	16.4
Playsuits, rompers, halters, etc.	40.0	12.8	43.9	11.6
Ski apparel	75.7	16.4	79.1	15.7
Suits, including pant suits	358.5	24.2	440.6	19.7
Swimwear	591.0	16.9	613.1	16.3
Washable service apparel	191.6	9.3	239.2	7.5

See footnotes at end of table.

Table 50. Percent of Value of Shipments from New Establishments: 1994 and 1993—Con.

[Value in millions of dollars]

Product description	1994		1993	
	Total value of shipments	Percent from added establishments	Total value of shipments	Percent from added establishments
GIRLS'				
Dresses.....	468.6	13.6	536.8	11.9
Coats, jackets, and vests:				
Coats and capes.....	17.5	8.0	(D)	(D)
Down and feather filled coats, jackets, and vests.....	0.4	-	(D)	(D)
Nontailored jackets.....	7.5	41.3	15.0	20.7
Raincoats.....	(D)	(D)	-	-
Separate vests.....	3.2	15.6	(D)	(D)
Tailored suit-type jackets.....	(D)	(D)	(D)	(D)
Tops:				
Woven blouses and shirts.....	222.9	3.7	172.4	4.8
Knit T-shirts and tank tops made for outerwear.....	181.0	10.0	187.0	9.7
Sweatshirts.....	35.3	-	43.8	-
Other knit blouses and shirts.....	164.7	1.4	185.8	1.2
Sweaters, including coat, cardigan, pullover, and vest sweaters.....	38.6	3.6	32.5	4.3
Bottoms:				
Shorts.....	140.3	10.8	127.1	11.9
Skirts and divided skirts.....	63.5	7.4	51.7	9.1
Slacks, pants, and jeans, including jean-cut casual slacks.....	279.8	2.9	258.8	3.2
Sweatpants.....	30.7	2.9	(D)	(D)
Underwear and nightwear:				
Brassieres, bra-lettes, and bandeaux.....	-	-	-	-
Girdles, corsets, and other foundation garments.....	-	-	-	-
Nightgowns, pajamas, and other nightwear.....	137.6	15.1	181.2	11.5
Other underwear, including camisoles, teddies, undershirts, and union suits.....	11.7	12.0	(D)	(D)
Panties.....	110.5	1.8	84.9	2.4
Robes and dressing gowns.....	2.9	41.4	8.9	13.5
Slips.....	5.8	-	(D)	(D)
Other garments:				
Bodysuits and bodyshirts.....	23.8	14.7	(D)	(D)
Jogging and warm-up suits.....	81.7	0.9	64.1	1.1
Overalls, coveralls, and jumpsuits.....	55.8	0.4	35.7	0.6
Playsuits, rompers, halters, etc.....	50.3	5.2	53.0	4.9
Ski apparel.....	(D)	(D)	(D)	(D)
Suits, including pant suits.....	(D)	(D)	(D)	(D)
Swimwear.....	92.2	2.6	87.6	2.7
Washable service apparel.....	-	-	-	-
INFANTS'				
Coats and jackets.....	9.2	47.8	10.4	42.3
Dresses.....	65.2	10.3	69.9	9.6
Knit shirts.....	71.3	8.7	67.4	9.2d
Woven shirts.....	(D)	(D)	(D)	(D)
Sweaters.....	(D)	(D)	(D)	(D)
Sets.....	83.2	7.0	76.1	7.6
Pants and shorts.....	45.3	5.7	51.2	5.1
Play clothing.....	165.9	9.3	203.8	7.6
Underwear.....	54.4	2.6	56.5	2.5
Nightwear.....	199.5	1.2	184.3	1.2

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Note: Based on 1994 value of shipments, percentage represents value attributed to added establishments from the 1993 Annual Survey of Manufactures. Based on 1993 value of shipments, percentage represents value attributed to added establishments from the 1992 Census of Manufactures.

Table 51. Shipments, Exports, Imports, and Apparent Consumption of Selected Apparel Items: 1994 and 1993

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

Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		"9802" imports ²			Imports for consumption ⁵		Apparent consumption ⁷		Percent imports to apparent consumption	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value U.S. content ³	Total value ⁴	Quantity	Value ⁶	Quantity	Value	Quantity	Value
1994													
Men's and boys' apparel:													
Sweaters	1,780	257.4	3,593	84.8	2	-	1.1	3,706	564.6	1,893	737.2	195.8	76.6
Tops (except sweaters)	(D)	(D)	25,508	786.7	9,773	243.8	406.8	81,237	5,891.4	(D)	(D)	(D)	(D)
Bottoms	54,582	8,384.3	19,477	893.8	12,811	560.9	907.5	35,424	3,246.1	70,529	10,736.6	50.2	30.2
Coats:													
Suit type, dress and sport ..	1,155	841.0	753	71.9	419	66.6	111.9	952	379.4	1,354	1,148.5	70.3	33.0
Other coats	4,191	1,251.1	1,443	107.8	274	21.8	45.4	9,711	1,884.2	12,459	3,027.5	77.9	62.2
Suits	986	1,095.5	379	54.1	51	7.4	19.6	496	422.3	1,103	1,463.7	45.0	28.9
Swimwear	347	34.0	111	5.2	103	2.5	4.6	3,745	161.0	3,981	189.8	94.1	84.8
Women's and girls' apparel:													
Sweaters	4,170	638.3	170	12.2	33	0.4	9.4	12,031	1,657.2	16,031	2,283.3	75.0	72.6
Dresses	16,425	4,782.4	1,524	103.4	1,034	42.0	102.8	10,060	1,494.7	24,961	6,173.7	40.3	24.2
Tops (except sweaters)	51,784	4,657.2	8,853	281.1	6,686	158.2	284.6	85,179	6,002.0	128,110	10,378.1	66.5	57.8
Skirts	8,010	1,340.9	872	47.0	1,067	43.0	93.2	9,485	948.9	16,623	2,242.8	57.1	42.3
Coats and jackets	4,362	1,956.6	1,185	113.5	1,372	146.8	310.8	10,662	2,283.2	13,839	4,126.3	77.0	55.3
Bottoms (except skirts)	41,455	5,099.1	8,122	346.5	7,872	254.2	490.1	48,730	3,775.9	82,063	8,528.5	59.4	44.3
Suits	(D)	(D)	465	60.0	102	28.8	51.8	4,964	318.8	(D)	(D)	(D)	(D)
Swimwear	4,220	683.2	392	24.4	611	21.5	31.0	1,936	143.5	5,764	802.3	33.6	17.9
Other apparel (men's/women's):													
Playsuits	(D)	(D)	-	-	329	5.0	9.3	3,850	217.4	(D)	(D)	(D)	(D)
Coveralls, etc.	(D)	(D)	645	39.6	234	11.9	20.5	3,115	296.1	(D)	(D)	(D)	(D)
Robes and dressing gowns ...	(D)	(D)	2,033	36.0	665	21.9	41.5	2,864	325.4	(D)	(D)	(D)	(D)
Pajamas and other nightwear ..	10,625	920.2	2,343	67.9	2,527	55.4	115.7	11,680	827.0	19,962	1,679.3	58.5	49.2
Underwear (except foundation garments)	168,490	2,700.3	38,874	464.9	48,728	348.4	488.3	99,560	1,217.8	229,176	3,453.2	43.4	35.3
Foundation garments	29,101	1,794.8	22,642	298.5	17,175	296.6	446.4	27,784	771.7	34,243	2,268.0	81.1	34.0
Infants' apparel	12,957	701.0	6,121	93.7	3,803	57.8	93.3	29,375	877.6	36,211	1,484.9	81.1	59.1
1993													
Men's and boys' apparel:													
Sweaters	2,083	224.3	3,546	76.3	25	0.3	3.3	3,590	563.0	2,127	711.0	168.8	79.2
Tops (except sweaters)	(D)	(D)	21,150	653.1	9,977	309.3	506.4	73,668	5,974.2	(D)	(D)	(D)	(D)
Bottoms	52,635	7,488.2	17,278	835.4	15,626	716.5	1,076.1	37,816	3,088.8	73,173	9,741.6	51.7	31.7
Coats:													
Suit type, dress and sport ..	1,092	829.5	639	55.9	304	45.5	81.8	766	331.5	1,219	1,105.1	62.8	30.0
Other coats	3,838	1,273.6	1,220	79.4	318	25.0	54.5	9,073	1,738.8	11,691	2,933.0	77.6	59.3
Suits	810	1,030.9	563	56.6	75	8.9	19.6	506	470.7	753	1,445.0	67.2	32.6
Swimwear	479	40.7	69	4.5	113	3.2	5.3	3,892	172.6	4,302	208.8	90.5	82.7
Women's and girls' apparel:													
Sweaters	4,034	670.2	203	14.4	79	3.4	13.3	11,468	1,780.7	15,299	2,436.5	75.0	73.1
Dresses	14,781	4,632.9	1,613	105.3	897	42.5	91.1	7,569	1,335.2	20,737	5,862.8	36.5	22.8
Tops (except sweaters)	49,776	4,565.9	8,120	251.2	6,788	172.6	302.0	78,844	6,314.8	120,500	10,629.5	65.4	59.4
Skirts	7,943	1,582.8	884	51.1	1,136	55.0	109.0	8,859	1,015.7	15,918	2,547.4	55.7	39.9
Coats and jackets	4,843	2,058.5	1,938	144.5	1,707	189.5	354.0	10,586	2,441.2	13,491	4,355.2	78.5	56.1
Bottoms (except skirts)	41,341	5,143.3	6,536	283.6	9,549	343.7	626.3	45,130	3,877.3	79,935	8,737.0	56.5	44.4
Suits	(D)	(D)	366	56.2	127	30.5	50.4	818	336.3	(D)	(D)	(D)	(D)
Swimwear	4,517	700.7	287	17.3	442	14.9	21.3	1,525	116.0	5,755	799.4	26.5	14.5

See footnotes at end of table.

Table 51. Shipments, Exports, Imports, and Apparent Consumption of Selected Apparel Items: 1994 and 1993—Con.

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

Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		"9802" imports ²			Imports for consumption ⁵		Apparent consumption ⁷		Percent imports to apparent consumption	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value U.S. content ³	Total value ⁴	Quantity	Value ⁶	Quantity	Value	Quantity	Value
1993—Con.													
Other apparel (men's/women's):													
Playsuits	(D)	(D)	-	-	313	5.5	8.6	2,956	172.1	(D)	(D)	(D)	(D)
Coveralls, etc.	2,246	424.8	710	38.9	275	20.2	29.9	2,512	226.1	4,048	612.0	62.1	36.9
Robes and dressing gowns ...	2,854	382.2	2,064	30.6	612	22.1	40.2	2,569	314.9	3,359	666.5	76.5	47.2
Pajamas and other nightwear.	10,370	935.4	2,207	66.5	2,940	72.1	128.1	11,161	833.1	19,324	1,702.0	57.8	48.9
Underwear (except foundation garments)	169,402	2,598.4	32,253	414.6	42,067	321.3	438.4	81,769	1,020.9	218,918	3,204.7	37.4	31.9
Foundation garments	26,185	1,587.5	20,426	280.2	19,942	317.3	475.4	26,381	691.2	32,140	1,998.5	82.1	34.6
Infants' apparel	13,259	723.2	5,048	73.9	3,832	57.6	91.8	26,894	810.5	35,105	1,459.8	76.6	55.5

¹Source: Bureau of the Census report EM545, U.S. Exports.

²Represents 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.

³Represents the value of the U.S. fabricated components.

⁴Represents 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.

⁵Source: Bureau of the Census report IM145, U.S. Imports for Consumption.

⁶This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus U.S. import duties.

⁷Apparent consumption represents new domestic supply and is derived by subtracting exports from the sum of manufacturers' shipments plus imports.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Note: For comparison of SIC-based codes with Schedule B export numbers and HTSUSA import numbers, see "Contact for Data Users" at the end of subsection 2.7, Gloves and Mittens, page 2-81.

2.7 GLOVES AND MITTENS

Table 52. Quantity and Value of Shipments of Gloves and Mittens: 1994 and 1993

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

Product description	1994		1993	
	Quantity	Value	Quantity	Value
Gloves and mittens	263,536	869.8	¹ 254,334	¹ 869.7
All fabric gloves and mittens	35,819	353.8	32,161	297.5
All leather and leather and fabric combination gloves and mittens	1,759	135.3	¹ 1,816	141.4
All plastic gloves	31,757	35.8	31,142	35.6
All rubber gloves	194,201	344.9	¹ 189,215	¹ 395.2
Of total:				
Dress/casual gloves and mittens	486	31.8	¹ 409	27.2
Work/chore gloves and mittens	263,050	838.0	¹ 253,925	¹ 842.5

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

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 7 percent of the total value of shipments of gloves and mittens.

Table 53. Quantity and Value of Shipments of Gloves and Mittens: 1994 and 1993

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

Product description	1994		1993	
	Quantity	Value	Quantity	Value
All fabric gloves and mittens	35,819	353.8	32,161	297.5
Woven fabric gloves and mittens	4,282	60.6	3,773	53.2
Impregnated with rubber or plastic	648	10.1	467	6.2
Greater than 50 percent plastics or rubber	(D)	(D)	(D)	(D)
Cotton	367	4.8	397	4.4
Manmade	(D)	(D)	(D)	(D)
Other	-	-	-	-
Non-impregnated	3,634	50.5	3,306	47.0
Cotton	3,608	48.6	3,271	43.4
Manmade	12	1.6	11	2.8
Wool	(D)	(D)	(D)	(D)
Other	(D)	(D)	(D)	(D)
Knit fabric gloves and mittens	31,537	293.2	28,388	244.3
Impregnated with rubber or plastic	9,675	118.0	8,083	108.3
Greater than 50 percent plastics or rubber	4,321	75.9	3,606	71.3
Cotton	3,756	20.7	3,010	19.0
Manmade	(D)	(D)	(D)	(D)
Other	(D)	(D)	(D)	(D)
Non-impregnated	21,862	175.2	20,305	136.0
Cotton	20,294	157.0	19,245	125.4
Terry/looped pile	802	8.9	953	8.3
Jersey, brushed, napped	4,903	77.9	¹ 4,484	¹ 53.2
Lisle (no nap or brush)	(D)	(D)	(D)	(D)
Other	(D)	(D)	(D)	(D)
Manmade	(D)	(D)	(D)	(D)
Wool	(D)	(D)	(D)	(D)
Other	(D)	(D)	(D)	(D)
Leather and fabric combination gloves	430	25.1	¹ 431	¹ 24.8
All leather gloves and mittens	1,329	110.2	¹ 1,385	116.6
All grain leather	943	86.2	¹ 922	89.6
All split leather	289	15.7	¹ 377	18.7
All other leather gloves	97	8.3	86	8.3
All plastic gloves	31,757	35.8	31,142	35.6
Medical and surgical	(D)	(D)	(D)	(D)
All other	(D)	(D)	(D)	(D)
All rubber gloves	194,201	344.9	¹ 189,215	¹ 395.2
Medical and surgical	179,608	247.9	¹ 172,990	¹ 295.2
All other	14,593	97.0	¹ 16,225	100.0

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ¹Revised by 5 percent or more from previously published figures.

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 7 percent of the total value of shipments of gloves and mittens.

Table 54. Shipments, Exports, Imports, and Apparent Consumption of Gloves and Mittens: 1994 and 1993

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

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Apparent consumption ⁴		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³	Quantity	Value	Quantity	Value
1994													
23813	Knitted, not coated or impregnated gloves and mittens	21,862	175.2	1,052	12.2	4.8	7.0	31,014	181.6	51,824	344.6	59.8	52.7
3069D	Knitted, plastic or rubber, coated or impregnated gloves and mittens	9,675	118.0	2,285	24.4	23.6	20.7	5,728	56.3	13,118	149.9	43.7	37.6
23813	Woven, non-impregnated gloves and mittens	3,634	50.5	1,040	8.4	28.6	16.6	9,068	59.0	11,662	101.1	77.8	58.4
3069D	Woven impregnated gloves and mittens	648	10.1	137	1.7	21.1	16.8	1,202	10.3	1,713	18.7	70.2	55.1
23814, 31510	All leather and leather and fabric combination gloves and mittens	1,759	135.3	381	13.8	21.7	10.2	15,006	305.8	16,384	427.3	91.6	71.6
30698	Rubber, surgical and medical gloves	179,608	247.9	25,467	45.6	14.2	18.4	620,380	515.7	774,521	718.0	80.1	71.8
3069D	Rubber, other gloves	14,593	97.0	1,793	16.2	12.3	16.7	84,830	112.0	97,630	192.8	86.9	58.1
30896	Plastic, surgical and medical gloves AND Plastic, other gloves	31,757	35.8	9,848	37.7	31.0	105.3	196,194	82.7	218,103	80.8	90.0	102.4
1993													
23813	Knitted, not coated or impregnated gloves and mittens	20,305	136.0	1,106	11.5	5.4	8.5	24,932	140.3	44,131	264.8	56.5	53.0
3069D	Knitted, plastic or rubber, coated or impregnated gloves and mittens	8,083	108.3	1,709	21.3	21.1	19.7	4,391	37.0	10,765	124.0	40.8	29.8
23813	Woven, non-impregnated gloves and mittens	3,306	47.0	640	6.0	19.4	12.8	8,872	40.2	11,538	81.2	76.9	49.5
3069D	Woven impregnated gloves and mittens	467	6.2	273	2.3	58.5	37.1	1,070	7.6	1,264	11.5	84.7	66.1
23814, 31510	All leather and leather and fabric combination gloves and mittens	1,816	141.4	419	14.0	23.1	9.9	12,015	250.7	13,412	378.1	89.6	66.3
30698	Rubber, surgical and medical gloves	172,990	295.2	18,263	38.6	10.6	13.1	605,190	468.1	759,917	724.7	79.6	64.6
3069D	Rubber, other gloves	16,225	100.0	1,621	14.2	10.0	14.2	82,462	106.9	97,066	192.7	85.0	55.5
30896	Plastic, surgical and medical gloves AND Plastic, other gloves	31,142	35.6	8,814	40.5	28.3	113.8	179,946	79.9	202,274	75.0	89.0	106.5

¹Source: Bureau of the Census report EM545, *U.S. Exports*.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

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

⁴Apparent consumption represents new domestic supply and is derived by subtracting exports from the total of manufacturers' shipments plus imports.

^{*}Revised by 5 percent or more from previously published figures.

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.

2.8 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 fabric 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: 1984 to 1994**

[Thousands of dozens]

Year	Sheets			Pillowcases	Terry towels
	Crib	Flat	Fitted		
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
1984	653	10,149	6,324	15,147	46,954

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 2.0 percent of the total value of shipments for sheets, pillowcases, and towels.

Table 56. Inventories and Unfilled Orders of Sheets, Pillowcases, and Terry Towels: 1993 and 1994

[Thousands of dozens]

Year and quarter	Inventories			Unfilled orders		
	Sheets, flat and fitted ¹	Pillowcases	Terry towels	Sheets, flat and fitted ¹	Pillowcases	Terry towels
1994						
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)
1993						
Fourth quarter	2,662	2,285	10,688	110,229	36,286	(D)
Third quarter	2,591	2,346	10,923	133,651	43,132	(D)
Second quarter	2,929	2,638	10,769	123,432	40,333	(D)
First quarter	3,177	2,592	11,395	121,077	40,683	(D)

¹Excludes crib sheets.

D Data withheld to avoid disclosing figures for individual companies.

Table 57. Summary of Quantity and Value of Shipments of Sheets, Pillowcases, and Terry Towels: 1994 and 1993

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

Year and quarter	Sheets, flat and fitted ¹		Pillowcases		Terry towels	
	Quantity	Value	Quantity	Value	Quantity	Value
1994						
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
1993						
Fourth quarter	4,125	306,514	3,763	93,039	12,308	282,872
Third quarter	4,375	331,443	3,864	98,669	11,839	267,951
Second quarter	3,985	292,200	3,550	88,324	12,534	279,532
First quarter	3,846	266,938	3,287	90,588	10,480	241,482

¹Excludes crib sheets.

Table 58. 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
All cotton and chiefly cotton	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All other	(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 size	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 fabric:															
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 fabric	(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: 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 towels	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 ¹ . Pot holders, aprons, dishcloths, etc.	(X)	6,582	16,893	(X)	1,881	4,592	(X)	1,372	3,757	(X)	1,772	4,568	(X)	1,557	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 59.

Table 59. Production and Shipments of Sheets, Pillowcases, and Terry Towels: 1993

[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	30,186	31,763	1,600,718	7,813	8,155	407,637	7,625	8,490	438,223	7,534	7,763	388,540	7,214	7,355	366,318
Crib size sheets and pillowcases	1,056	968	33,003	300	267	8,084	274	251	8,111	270	228	8,016	212	222	8,792
Sheets, excluding crib	16,826	16,331	1,197,095	4,319	4,125	306,514	4,294	4,375	331,443	4,201	3,985	292,200	4,012	3,846	266,938
By type:															
Flat sheets	9,117	8,773	650,391	2,301	2,217	167,386	2,311	2,329	179,027	2,297	2,158	159,769	2,208	2,069	144,209
Fitted sheets	6,952	6,686	497,593	1,821	1,685	126,804	1,800	1,834	140,435	1,722	1,615	120,456	1,609	1,552	109,898
Not specified by kind (n.s.k.)	757	872	49,111	197	223	12,324	183	212	11,981	182	212	11,975	195	225	12,831
By thread count:															
195 and over	2,039	1,773	201,197	528	450	53,224	536	472	57,083	477	418	48,298	498	433	42,592
180 to 194	9,290	8,807	646,141	2,409	2,198	161,716	2,349	2,320	172,822	2,346	2,292	167,131	2,186	1,997	144,472
135 to 179	679	637	43,239	169	159	10,892	166	172	11,979	165	152	10,265	179	154	10,103
125 to 134	1,697	2,050	128,728	436	487	31,073	394	533	34,928	417	491	30,942	450	539	31,785
Under 125	2,364	2,192	128,679	580	608	37,285	666	666	42,650	614	420	23,589	504	498	25,155
Not specified by kind (n.s.k.)	757	872	49,111	197	223	12,324	183	212	11,981	182	212	11,975	195	225	12,831
By fabric:															
Chiefly polyester blends with cotton	11,108	11,433	794,753	2,947	2,853	197,918	2,753	3,001	213,902	2,767	2,807	198,155	2,641	2,772	184,778
Cotton	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
All other	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
By size:															
King	(X)	1,899	206,180	(X)	478	52,627	(X)	491	55,345	(X)	466	50,859	(X)	464	47,349
Queen	(X)	3,569	339,338	(X)	920	88,958	(X)	966	94,287	(X)	866	82,601	(X)	817	73,492
Full	(X)	4,475	306,225	(X)	1,118	78,279	(X)	1,199	85,511	(X)	1,099	74,501	(X)	1,059	67,934
Twin	(X)	5,197	279,183	(X)	1,305	69,937	(X)	1,433	80,240	(X)	1,258	67,933	(X)	1,201	61,073
Single and smaller	(X)	319	17,058	(X)	81	4,389	(X)	74	4,079	(X)	84	4,331	(X)	80	4,259
Not specified by kind (n.s.k.)	(X)	872	49,111	(X)	223	12,324	(X)	212	11,981	(X)	212	11,975	(X)	225	12,831
Flannel sheets	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pillowcases, excluding crib	12,304	14,464	370,620	3,194	3,763	93,039	3,057	3,864	98,669	3,063	3,550	88,324	2,990	3,287	90,588
By thread count:															
195 and over	1,645	1,731	85,566	435	454	22,088	429	471	20,566	389	424	18,728	392	382	24,184
180 to 194	6,498	8,016	195,621	1,727	2,046	47,736	1,625	2,143	52,861	1,608	2,065	49,939	1,538	1,762	45,085
135 to 179	436	470	6,498	106	114	1,734	104	118	1,678	114	116	1,562	112	122	1,524
125 to 134	1,152	1,478	25,142	267	367	5,584	239	353	6,216	288	333	5,887	358	425	7,455
Under 125	1,625	1,821	32,846	430	553	9,740	430	549	11,189	433	381	6,045	332	338	5,872
Not specified by kind (n.s.k.)	948	948	24,947	229	229	6,157	230	230	6,159	231	231	6,163	258	258	6,468
By fabric:															
Chiefly polyester blends with cotton	9,157	10,056	221,727	2,406	2,534	54,724	2,232	2,626	58,474	2,265	2,541	55,886	2,254	2,355	52,643
All cotton and chiefly 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)
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: 1993—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)	20,251	1,069,379	(X)	5,354	279,932	(X)	5,469	295,152	(X)	4,789	253,600	(X)	4,639	240,695
Upstairs brand	(X)	9,203	569,339	(X)	2,342	143,242	(X)	2,451	155,556	(X)	2,268	139,738	(X)	2,142	130,803
Open brand	(X)	11,048	500,040	(X)	3,012	136,690	(X)	3,018	139,596	(X)	2,521	113,862	(X)	2,497	109,892
Sheet sets, excluding waterbed sheet sets	(X)	3,150	578,884	(X)	813	153,176	(X)	843	159,286	(X)	720	130,978	(X)	774	135,444
Waterbed sheet sets	(X)	62	12,648	(X)	16	3,119	(X)	14	2,884	(X)	13	2,512	(X)	19	4,133
Finished terry towels ¹	48,529	47,161	1,071,837	12,158	12,308	282,872	12,487	11,839	267,951	12,079	12,534	279,532	11,805	10,480	241,482
By type:															
Sheared	7,227	6,951	101,199	1,787	1,705	24,929	1,983	1,714	25,247	1,975	2,048	28,651	1,482	1,484	22,372
Nonsheared	33,423	32,365	878,293	8,366	8,609	234,716	8,525	8,156	219,001	8,139	8,540	227,883	8,393	7,060	196,693
Not specified by kind (n.s.k.)	7,879	7,845	92,345	2,005	1,994	23,227	1,979	1,969	23,703	1,965	1,946	22,998	1,930	1,936	22,417
By end use:															
Kitchen	4,774	5,334	40,793	1,200	1,403	10,606	1,228	1,279	9,716	1,201	1,392	10,778	1,145	1,260	9,693
Bath	22,042	22,101	667,568	5,713	5,814	177,527	5,649	5,681	167,361	5,212	5,771	172,685	5,468	4,835	149,995
Hand, face, guest, and fingertip	18,299	16,348	256,785	4,408	4,246	68,314	4,781	4,030	64,433	4,844	4,506	67,029	4,266	3,566	57,009
Bath/tub mats	642	643	22,484	152	154	5,629	168	178	5,770	140	164	5,838	182	147	5,247
All other types, including larger than bath (queen/king size bath towels, bath sheets, beach towels, and bath mats)	2,772	2,735	84,207	685	691	20,796	661	671	20,671	682	701	23,202	744	672	19,538
Not specified by kind (n.s.k.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terry towels sold for further processing	(X)	3,440	27,487	(X)	898	6,363	(X)	682	6,323	(X)	1,120	8,666	(X)	740	6,135
Washcloths	27,742	27,220	174,370	7,170	6,860	47,093	7,163	6,982	43,327	6,767	7,118	43,751	6,642	6,260	40,199
Branded shipments of towels and washcloths	(X)	42,195	751,584	(X)	10,963	200,094	(X)	10,191	182,590	(X)	11,332	193,375	(X)	9,709	175,525
Upstairs brand	(X)	6,088	197,187	(X)	1,655	53,909	(X)	1,492	47,655	(X)	1,493	46,775	(X)	1,448	48,848
Open brand	(X)	36,107	554,397	(X)	9,308	146,185	(X)	8,699	134,935	(X)	9,839	146,600	(X)	8,261	126,677
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 ¹ .	5,896	6,074	13,270	1,437	1,494	2,547	1,503	1,428	3,276	1,328	1,560	3,959	1,628	1,592	3,488
Pot holders, aprons, dishcloths, etc.	(X)	1,465	8,596	(X)	429	2,536	(X)	321	1,821	(X)	406	2,230	(X)	309	2,009

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

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

Table 60. Quantity and Value of Shipments of Sheets, Pillowcases, and Terry Towels, by Distribution Channel: 1994

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

Product description	Total shipments		Branded retail		Private ticket retail		Export		Institutional and other		Total n.s.k. shipments	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
TOTAL												
Sheets, flat and fitted (except crib)	16,190	1,230,863	10,287	829,034	1,765	155,879	591	42,697	2,617	152,171	930	51,082
Less than 180 count	4,986	326,279	3,133	210,876	330	30,674	305	19,085	1,218	65,644	-	-
180 count and greater	10,274	853,502	7,154	618,158	1,435	125,205	286	23,612	1,399	86,527	-	-
Not specified by kind (n.s.k.) ..	930	51,082	-	-	-	-	-	-	-	-	930	51,082
Pillowcases (except crib)	14,622	372,227	9,563	258,568	1,688	45,519	546	11,143	1,934	32,619	891	24,378
Less than 180 count	4,045	71,858	2,880	50,564	306	6,038	317	5,640	542	9,616	-	-
180 count and greater	9,686	275,991	6,683	208,004	1,382	39,481	229	5,503	1,392	23,003	-	-
Not specified by kind (n.s.k.) ..	891	24,378	-	-	-	-	-	-	-	-	891	24,378
Terry towels	48,348	1,130,082	26,547	679,043	4,573	151,540	623	21,632	8,229	174,142	8,376	103,725
Washcloths, terry	26,755	184,775	15,481	122,501	2,711	18,528	246	2,512	5,438	26,580	2,879	14,654
FOURTH QUARTER												
Sheets, flat and fitted (except crib)	3,999	308,880	2,575	211,522	464	39,748	146	11,473	565	32,158	249	13,979
Less than 180 count	1,248	85,949	816	58,921	106	8,719	54	4,314	272	13,995	-	-
180 count and greater	2,502	208,952	1,759	152,601	358	31,029	92	7,159	293	18,163	-	-
Not specified by kind (n.s.k.) ..	249	13,979	-	-	-	-	-	-	-	-	249	13,979
Pillowcases (except crib)	3,606	92,410	2,387	64,397	433	11,624	128	2,855	456	7,445	202	6,089
Less than 180 count	1,026	19,640	764	14,561	89	1,929	59	956	114	2,194	-	-
180 count and greater	2,378	66,681	1,623	49,836	344	9,695	69	1,899	342	5,251	-	-
Not specified by kind (n.s.k.) ..	202	6,089	-	-	-	-	-	-	-	-	202	6,089
Terry towels	12,457	302,345	6,933	180,850	1,263	44,451	153	5,565	1,902	43,868	2,206	27,611
Washcloths, terry	7,028	49,528	4,314	33,172	719	5,628	70	721	1,226	6,590	699	3,417
THIRD QUARTER												
Sheets, flat and fitted (except crib)	4,397	344,047	2,897	239,148	469	41,677	146	10,457	659	40,450	226	12,315
Less than 180 count	1,465	103,489	949	68,125	100	10,126	86	5,006	330	20,232	-	-
180 count and greater	2,706	228,243	1,948	171,023	369	31,551	60	5,451	329	20,218	-	-
Not specified by kind (n.s.k.) ..	226	12,315	-	-	-	-	-	-	-	-	226	12,315
Pillowcases (except crib)	4,027	105,011	2,744	75,858	458	12,501	126	2,423	469	8,131	230	6,098
Less than 180 count	1,215	23,350	878	16,900	90	1,911	75	1,187	172	3,352	-	-
180 count and greater	2,582	75,563	1,866	58,958	368	10,590	51	1,236	297	4,779	-	-
Not specified by kind (n.s.k.) ..	230	6,098	-	-	-	-	-	-	-	-	230	6,098
Terry towels	12,190	284,011	6,590	166,244	1,239	40,340	182	6,129	2,082	45,146	2,097	26,152
Washcloths, terry	6,731	48,468	3,901	32,441	708	4,880	66	664	1,344	6,776	712	3,707
SECOND QUARTER												
Sheets, flat and fitted (except crib)	4,055	301,144	2,497	197,973	387	34,859	157	11,425	784	44,344	230	12,543
Less than 180 count	1,198	72,115	698	43,239	65	6,624	83	5,165	352	17,087	-	-
180 count and greater	2,627	216,486	1,799	154,734	322	28,235	74	6,260	432	27,257	-	-
Not specified by kind (n.s.k.) ..	230	12,543	-	-	-	-	-	-	-	-	230	12,543
Pillowcases (except crib)	3,719	91,126	2,364	62,309	375	9,941	143	2,443	606	10,321	231	6,112
Less than 180 count	961	15,399	636	9,928	65	1,176	78	1,240	182	3,055	-	-
180 count and greater	2,527	69,615	1,728	52,381	310	8,765	65	1,203	424	7,266	-	-
Not specified by kind (n.s.k.) ..	231	6,112	-	-	-	-	-	-	-	-	231	6,112
Terry towels	12,527	285,346	6,781	173,242	1,086	34,275	148	5,336	2,461	46,810	2,051	25,683
Washcloths, terry	6,951	44,101	3,913	28,613	688	4,076	49	518	1,573	7,078	728	3,816
FIRST QUARTER												
Sheets, flat and fitted (except crib)	3,739	276,792	2,318	180,391	445	39,595	142	9,342	609	35,219	225	12,245
Less than 180 count	1,075	64,726	670	40,591	59	5,205	82	4,600	264	14,330	-	-
180 count and greater	2,439	199,821	1,648	139,800	386	34,390	60	4,742	345	20,889	-	-
Not specified by kind (n.s.k.) ..	225	12,245	-	-	-	-	-	-	-	-	225	12,245
Pillowcases (except crib)	3,270	83,680	2,068	56,004	422	11,453	149	3,422	403	6,722	228	6,079
Less than 180 count	843	13,469	602	9,175	62	1,022	105	2,257	74	1,015	-	-
180 count and greater	2,199	64,132	1,466	46,829	360	10,431	44	1,165	329	5,707	-	-
Not specified by kind (n.s.k.) ..	228	6,079	-	-	-	-	-	-	-	-	228	6,079
Terry towels	11,174	258,380	6,243	158,707	985	32,474	140	4,602	1,784	38,318	2,022	24,279
Washcloths, terry	6,045	42,678	3,353	28,275	596	3,944	61	609	1,295	6,136	740	3,714

See footnotes at end of table 63.

Table 61. Quantity and Value of Shipments of Sheets, Pillowcases, and Terry Towels, by Distribution Channel: 1993

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

Product description	Total shipments		Branded retail		Private ticket retail		Export		Institutional and other		Total n.s.k. shipments	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
TOTAL												
Sheets, flat and fitted (except crib)	16,331	1,197,095	10,707	814,072	2,040	166,079	560	39,946	2,152	127,887	872	49,111
Less than 180 count	4,879	300,646	3,247	202,752	361	26,573	315	19,052	956	52,269	-	-
180 count and greater	10,580	847,338	7,460	611,320	1,679	139,506	245	20,894	1,196	75,618	-	-
Not specified by kind (n.s.k.)	872	49,111	-	-	-	-	-	-	-	-	872	49,111
Pillowcases (except crib)	14,464	370,620	9,544	255,307	1,827	48,911	480	11,125	1,665	30,330	948	24,947
Less than 180 count	3,769	64,486	2,761	46,346	311	4,931	268	4,935	429	8,274	-	-
180 count and greater	9,747	281,187	6,783	208,961	1,516	43,980	212	6,190	1,236	22,056	-	-
Not specified by kind (n.s.k.)	948	24,947	-	-	-	-	-	-	-	-	948	24,947
Terry towels	47,161	1,071,837	25,739	635,333	4,610	147,772	693	22,183	8,274	174,204	7,845	92,345
Washcloths, terry	27,220	174,370	16,456	116,251	2,804	17,769	331	2,778	5,243	26,375	2,386	11,197
FOURTH QUARTER												
Sheets, flat and fitted (except crib)	4,125	306,514	2,813	215,190	497	40,796	141	10,370	451	27,834	223	12,324
Less than 180 count	1,254	79,250	919	58,190	95	6,838	78	4,893	162	9,329	-	-
180 count and greater	2,648	214,940	1,894	157,000	402	33,958	63	5,477	289	18,505	-	-
Not specified by kind (n.s.k.)	223	12,324	-	-	-	-	-	-	-	-	223	12,324
Pillowcases (except crib)	3,763	93,039	2,541	64,742	456	12,288	146	3,045	391	6,807	229	6,157
Less than 180 count	1,034	17,058	778	12,750	84	1,246	87	1,400	85	1,662	-	-
180 count and greater	2,500	69,824	1,763	51,992	372	11,042	59	1,645	306	5,145	-	-
Not specified by kind (n.s.k.)	229	6,157	-	-	-	-	-	-	-	-	229	6,157
Terry towels	12,308	282,872	6,858	168,365	1,272	40,971	170	5,890	2,014	44,419	1,994	23,227
Washcloths, terry	6,860	47,093	4,105	31,729	754	5,335	79	712	1,293	6,472	629	2,845
THIRD QUARTER												
Sheets, flat and fitted (except crib)	4,375	331,443	2,902	226,958	586	51,009	119	9,012	556	32,483	212	11,981
Less than 180 count	1,371	89,557	949	62,442	109	9,384	58	3,607	255	14,124	-	-
180 count and greater	2,792	229,905	1,953	164,516	477	41,625	61	5,405	301	18,359	-	-
Not specified by kind (n.s.k.)	212	11,981	-	-	-	-	-	-	-	-	212	11,981
Pillowcases (except crib)	3,864	98,669	2,567	68,194	530	14,521	120	2,520	417	7,275	230	6,159
Less than 180 count	1,020	19,083	759	14,251	94	1,928	61	906	106	1,998	-	-
180 count and greater	2,614	73,427	1,808	53,943	436	12,593	59	1,614	311	5,277	-	-
Not specified by kind (n.s.k.)	230	6,159	-	-	-	-	-	-	-	-	230	6,159
Terry towels	11,839	267,951	6,195	154,705	1,270	38,899	206	5,545	2,199	45,099	1,969	23,703
Washcloths, terry	6,982	43,327	3,996	27,885	786	4,543	102	791	1,460	7,120	638	2,988
SECOND QUARTER												
Sheets, flat and fitted (except crib)	3,985	292,200	2,525	193,995	468	37,730	153	10,405	627	38,095	212	11,975
Less than 180 count	1,063	64,796	601	38,292	79	5,666	100	5,570	283	15,268	-	-
180 count and greater	2,710	215,429	1,924	155,703	389	32,064	53	4,835	344	22,827	-	-
Not specified by kind (n.s.k.)	212	11,975	-	-	-	-	-	-	-	-	212	11,975
Pillowcases (except crib)	3,550	88,324	2,264	59,605	438	10,978	130	2,935	487	8,643	231	6,163
Less than 180 count	830	13,494	541	8,453	69	984	78	1,465	142	2,592	-	-
180 count and greater	2,489	68,667	1,723	51,152	369	9,994	52	1,470	345	6,051	-	-
Not specified by kind (n.s.k.)	231	6,163	-	-	-	-	-	-	-	-	231	6,163
Terry towels	12,534	279,532	6,901	164,270	1,105	37,114	188	5,982	2,394	49,168	1,946	22,998
Washcloths, terry	7,118	43,751	4,431	29,105	689	4,180	98	738	1,339	7,036	561	2,692
FIRST QUARTER												
Sheets, flat and fitted (except crib)	3,846	266,938	2,467	177,929	489	36,544	147	10,159	518	29,475	225	12,831
Less than 180 count	1,191	67,043	778	43,828	78	4,685	79	4,982	256	13,548	-	-
180 count and greater	2,430	187,064	1,689	134,101	411	31,859	68	5,177	262	15,927	-	-
Not specified by kind (n.s.k.)	225	12,831	-	-	-	-	-	-	-	-	225	12,831
Pillowcases (except crib)	3,287	90,588	2,172	62,766	403	11,124	84	2,625	370	7,605	258	6,468
Less than 180 count	885	14,851	683	10,892	64	773	42	1,164	96	2,022	-	-
180 count and greater	2,144	69,269	1,489	51,874	339	10,351	42	1,461	274	5,583	-	-
Not specified by kind (n.s.k.)	258	6,468	-	-	-	-	-	-	-	-	258	6,468
Terry towels	10,480	241,482	5,785	147,993	963	30,788	129	4,766	1,667	35,518	1,936	22,417
Washcloths, terry	6,260	40,199	3,924	27,532	575	3,711	52	537	1,151	5,747	558	2,672

See footnotes at end of table 63.

Table 62. Quantity and Value of Shipments of Sheets, Pillowcases, and Terry Towels, by Type and Finish: 1994

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

Product description	Total shipments		White		Solid colors		Fancies		Total n.s.k. shipments	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
TOTAL										
Sheets, flat and fitted (except crib)	16,190	1,230,863	2,146	147,484	4,747	364,988	8,367	667,309	930	51,082
Less than 180 count	4,986	326,279	545	33,401	1,114	72,473	3,327	220,405	-	-
180 count and greater	10,274	853,502	1,601	114,083	3,633	292,515	5,040	446,904	-	-
Not specified by kind (n.s.k.)	930	51,082	-	-	-	-	-	-	930	51,082
Pillowcases (except crib)	14,622	372,227	2,065	39,044	4,233	116,416	7,433	192,389	891	24,378
Less than 180 count	4,045	71,858	449	7,818	932	20,107	2,664	43,933	-	-
180 count and greater	9,686	275,991	1,616	31,226	3,301	96,309	4,769	148,456	-	-
Not specified by kind (n.s.k.)	891	24,378	-	-	-	-	-	-	891	24,378
Terry towels	48,348	1,130,082	10,994	201,832	19,857	597,950	9,121	226,575	8,376	103,725
Washcloths, terry	26,755	184,775	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
FOURTH QUARTER										
Sheets, flat and fitted (except crib)	3,999	308,880	500	35,032	1,172	91,567	2,078	168,302	249	13,979
Less than 180 count	1,248	85,949	136	8,489	302	20,886	810	56,574	-	-
180 count and greater	2,502	208,952	364	26,543	870	70,681	1,268	111,728	-	-
Not specified by kind (n.s.k.)	249	13,979	-	-	-	-	-	-	249	13,979
Pillowcases (except crib)	3,606	92,410	500	9,500	1,027	28,503	1,877	48,318	202	6,089
Less than 180 count	1,026	19,640	119	2,163	248	5,821	659	11,656	-	-
180 count and greater	2,378	66,681	381	7,337	779	22,682	1,218	36,662	-	-
Not specified by kind (n.s.k.)	202	6,089	-	-	-	-	-	-	202	6,089
Terry towels	12,457	302,345	2,759	50,677	5,150	163,271	2,342	60,786	2,206	27,611
Washcloths, terry	7,028	49,528	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
THIRD QUARTER										
Sheets, flat and fitted (except crib)	4,397	344,047	538	37,954	1,319	100,959	2,314	192,819	226	12,315
Less than 180 count	1,465	103,489	151	9,958	330	22,844	984	70,687	-	-
180 count and greater	2,706	228,243	387	27,996	989	78,115	1,330	122,132	-	-
Not specified by kind (n.s.k.)	226	12,315	-	-	-	-	-	-	226	12,315
Pillowcases (except crib)	4,027	105,011	529	10,281	1,217	33,301	2,051	55,331	230	6,098
Less than 180 count	1,215	23,350	124	2,294	297	6,455	794	14,601	-	-
180 count and greater	2,582	75,563	405	7,987	920	26,846	1,257	40,730	-	-
Not specified by kind (n.s.k.)	230	6,098	-	-	-	-	-	-	230	6,098
Terry towels	12,190	284,011	2,871	51,636	5,039	151,006	2,183	55,217	2,097	26,152
Washcloths, terry	6,731	48,468	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
SECOND QUARTER										
Sheets, flat and fitted (except crib)	4,055	301,144	584	40,323	1,181	89,191	2,060	159,087	230	12,543
Less than 180 count	1,198	72,115	133	7,779	285	16,914	780	47,422	-	-
180 count and greater	2,627	216,486	451	32,544	896	72,277	1,280	111,665	-	-
Not specified by kind (n.s.k.)	230	12,543	-	-	-	-	-	-	230	12,543
Pillowcases (except crib)	3,719	91,126	590	10,825	1,064	28,200	1,834	45,989	231	6,112
Less than 180 count	961	15,399	109	1,784	232	4,513	620	9,102	-	-
180 count and greater	2,527	69,615	481	9,041	832	23,687	1,214	36,887	-	-
Not specified by kind (n.s.k.)	231	6,112	-	-	-	-	-	-	231	6,112
Terry towels	12,527	285,346	2,870	51,105	5,047	148,520	2,559	60,038	2,051	25,683
Washcloths, terry	6,951	44,101	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
FIRST QUARTER										
Sheets, flat and fitted (except crib)	3,739	276,792	524	34,175	1,075	83,271	1,915	147,101	225	12,245
Less than 180 count	1,075	64,726	125	7,175	197	11,829	753	45,722	-	-
180 count and greater	2,439	199,821	399	27,000	878	71,442	1,162	101,379	-	-
Not specified by kind (n.s.k.)	225	12,245	-	-	-	-	-	-	225	12,245
Pillowcases (except crib)	3,270	83,680	446	8,438	925	26,412	1,671	42,751	228	6,079
Less than 180 count	843	13,469	97	1,577	155	3,318	591	8,574	-	-
180 count and greater	2,199	64,132	349	6,861	770	23,094	1,080	34,177	-	-
Not specified by kind (n.s.k.)	228	6,079	-	-	-	-	-	-	228	6,079
Terry towels	11,174	258,380	2,494	48,414	4,621	135,153	2,037	50,534	2,022	24,279
Washcloths, terry	6,045	42,678	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

See footnotes at end of table 63.

Table 63. Quantity and Value of Shipments of Sheets, Pillowcases, and Terry Towels, by Type and Finish: 1993

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

Product description	Total shipments		White		Solid colors		Fancies		Total n.s.k. shipments	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
TOTAL										
Sheets, flat and fitted (except crib)	16,331	1,197,095	2,458	164,164	4,404	329,171	8,597	654,649	872	49,111
Less than 180 count	4,879	300,646	554	31,114	889	56,048	3,436	213,484	-	-
180 count and greater	10,580	847,338	1,904	133,050	3,515	273,123	5,161	441,165	-	-
Not specified by kind (n.s.k.)	872	49,111	-	-	-	-	-	-	872	49,111
Pillowcases (except crib)	14,464	370,620	2,206	46,642	3,836	105,690	7,474	193,341	948	24,947
Less than 180 count	3,769	64,486	440	7,766	714	15,196	2,615	41,524	-	-
180 count and greater	9,747	281,187	1,766	38,876	3,122	90,494	4,859	151,817	-	-
Not specified by kind (n.s.k.)	948	24,947	-	-	-	-	-	-	948	24,947
Terry towels	47,161	1,071,837	10,020	174,016	19,209	569,615	10,087	235,861	7,845	92,345
Washcloths, terry	27,220	174,370	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
FOURTH QUARTER										
Sheets, flat and fitted (except crib)	4,125	306,514	494	33,470	1,170	89,293	2,238	171,427	223	12,324
Less than 180 count	1,254	79,250	115	6,557	260	16,250	879	56,443	-	-
180 count and greater	2,648	214,940	379	26,913	910	73,043	1,359	114,984	-	-
Not specified by kind (n.s.k.)	223	12,324	-	-	-	-	-	-	223	12,324
Pillowcases (except crib)	3,763	93,039	489	9,359	1,037	28,010	2,008	49,513	229	6,157
Less than 180 count	1,034	17,058	95	1,617	214	4,388	725	11,053	-	-
180 count and greater	2,500	69,824	394	7,742	823	23,622	1,283	38,460	-	-
Not specified by kind (n.s.k.)	229	6,157	-	-	-	-	-	-	229	6,157
Terry towels	12,308	282,872	2,641	46,283	4,998	150,074	2,675	63,288	1,994	23,227
Washcloths, terry	6,860	47,093	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
THIRD QUARTER										
Sheets, flat and fitted (except crib)	4,375	331,443	719	49,653	1,203	91,893	2,241	177,916	212	11,981
Less than 180 count	1,371	89,557	145	8,440	298	18,818	928	62,299	-	-
180 count and greater	2,792	229,905	574	41,213	905	73,075	1,313	115,617	-	-
Not specified by kind (n.s.k.)	212	11,981	-	-	-	-	-	-	212	11,981
Pillowcases (except crib)	3,864	98,669	649	12,990	1,044	29,037	1,941	50,483	230	6,159
Less than 180 count	1,020	19,083	126	2,164	206	4,622	688	12,297	-	-
180 count and greater	2,614	73,427	523	10,826	838	24,415	1,253	38,186	-	-
Not specified by kind (n.s.k.)	230	6,159	-	-	-	-	-	-	230	6,159
Terry towels	11,839	267,951	2,587	45,928	4,775	142,250	2,508	56,070	1,969	23,703
Washcloths, terry	6,982	43,327	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
SECOND QUARTER										
Sheets, flat and fitted (except crib)	3,985	292,200	572	38,559	1,165	85,962	2,036	155,704	212	11,975
Less than 180 count	1,063	64,796	139	7,814	152	10,332	772	46,650	-	-
180 count and greater	2,710	215,429	433	30,745	1,013	75,630	1,264	109,054	-	-
Not specified by kind (n.s.k.)	212	11,975	-	-	-	-	-	-	212	11,975
Pillowcases (except crib)	3,550	88,324	526	10,137	986	26,769	1,807	45,255	231	6,163
Less than 180 count	830	13,494	116	1,892	110	2,461	604	9,141	-	-
180 count and greater	2,489	68,667	410	8,245	876	24,308	1,203	36,114	-	-
Not specified by kind (n.s.k.)	231	6,163	-	-	-	-	-	-	231	6,163
Terry towels	12,534	279,532	2,466	40,187	5,233	152,980	2,889	63,367	1,946	22,998
Washcloths, terry	7,118	43,751	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
FIRST QUARTER										
Sheets, flat and fitted (except crib)	3,846	266,938	673	42,482	866	62,023	2,082	149,602	225	12,831
Less than 180 count	1,191	67,043	155	8,303	179	10,648	857	48,092	-	-
180 count and greater	2,430	187,064	518	34,179	687	51,375	1,225	101,510	-	-
Not specified by kind (n.s.k.)	225	12,831	-	-	-	-	-	-	225	12,831
Pillowcases (except crib)	3,287	90,588	542	14,156	769	21,874	1,718	48,090	258	6,468
Less than 180 count	885	14,851	103	2,093	184	3,725	598	9,033	-	-
180 count and greater	2,144	69,269	439	12,063	585	18,149	1,120	39,057	-	-
Not specified by kind (n.s.k.)	258	6,468	-	-	-	-	-	-	258	6,468
Terry towels	10,480	241,482	2,326	41,618	4,203	124,311	2,015	53,136	1,936	22,417
Washcloths, terry	6,260	40,199	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)

- Represents zero. X Not applicable.

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.

2.9 CARPET AND RUGS

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 dying 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: 1984 to 1994

[Millions of dollars]

Year	Rugs, carpet, and carpeting	Woven carpet and rugs	Tufted carpet and rugs	Other carpet and rugs
1994.....	9,895.4	321.5	9,193.1	380.8
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
1984.....	6,461.5	215.6	6,088.2	157.7

[†]Revised by 5 percent or more from previously published figures.

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 3.5 percent of total woven, tufted, and other carpet and rugs.

Table 65. Shipments, Exports, Imports, and Apparent Consumption of Carpet and Rugs: 1994 and 1993

[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 ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Apparent consumption ⁴		Percent imports to apparent consumption	
		Quantity	Value	Quantity	Value at port	Quantity	Value	Quantity	Value ³	Quantity	Value	Quantity	Value
1994													
	Carpet and rugs	1,370.1	9,895.4	104.4	713.1	7.6	7.2	74.6	832.4	1,340.3	10,014.7	5.6	8.3
22731	Woven carpet and rugs .	20.6	321.5	7.6	57.9	36.9	18.0	44.1	292.1	57.1	555.7	77.3	52.6
22732	Tufted carpet and rugs .	1,252.7	9,193.1	77.0	509.6	6.1	5.5	20.3	228.9	1,196.0	8,912.4	1.7	2.6
22733	Other carpet and rugs . .	96.8	380.8	19.8	145.6	20.5	38.2	10.2	311.4	87.2	546.6	11.7	57.0
1993													
	Carpet and rugs	1,239.0	9,282.5	124.0	729.6	10.0	7.9	68.2	748.8	1,183.2	9,301.7	5.8	8.1
22731	Woven carpet and rugs .	15.8	281.6	4.9	45.7	31.0	16.2	44.0	273.1	54.9	509.0	80.1	53.7
22732	Tufted carpet and rugs .	1,138.3	8,653.2	100.6	541.4	8.8	6.3	13.3	168.9	1,051.0	8,280.7	1.3	2.0
22733	Other carpet and rugs . .	84.8	347.8	18.5	142.5	21.8	41.0	10.9	306.8	77.2	512.1	14.1	59.9

¹Source: Bureau of the Census report EM545, *U.S. Exports*.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

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

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

[†]Revised by 5 percent or more from previously published figures.

Note: 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.

Table 66. Shipments of Carpet and Rugs: 1994 and 1993

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

Product code	Product description	1994		1993	
		Quantity	Value	Quantity	Value
	Total	1,638,881	9,895,444	1,482,022	9,282,524
22731 00	Woven carpet and rugs	24,610	321,522	'18,897	'281,554
	By fiber of face yarn:				
22731 01	Cotton	-	-	-	-
22731 03	Manmade	21,104	239,362	15,497	199,844
22731 05	Wool	(D)	(D)	(D)	(D)
22731 07	Other	(D)	(D)	(D)	(D)
22732 20	Tufted carpet and rugs	1,498,484	9,193,106	1,361,636	8,653,196
	By type:				
22732 01	Scatter rugs, bathmats, and sets (rugs 6' x 9' and smaller)	82,299	628,691	'70,830	'528,946
22732 03	Roll goods and rugs larger than 6' x 9', excluding artificial grass	1,316,886	7,927,510	1,216,142	7,605,503
22732 05	Tufted artificial grass for nonathletic surface	9,575	25,496	9,140	25,668
22732 07	Automobile and aircraft carpeting	89,724	611,409	65,524	493,079
	By fiber of face yarn:				
22732 11	Nylon	976,558	6,633,699	940,323	6,570,031
22732 13	Polyester	82,680	475,273	85,626	530,591
22732 17	Polypropylene	283,052	1,303,087	196,245	856,593
22732 19	All other	156,194	781,047	139,442	695,981
	Other carpet and rugs	115,787	380,816	101,489	347,774
22733 10	Knitted	(D)	(D)	(D)	(D)
22733 20	Needle punched	104,538	251,776	91,007	228,102
22733 30	Felt	-	-	-	-
22733 90	Braided, hooked, and other carpet and rugs, n.e.c.	(D)	(D)	(D)	(D)

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

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.

2.10 FOOTWEAR

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 1994 totaled 161.7 million pairs, a 5.8-percent decrease from the 1993 production of 171.7 million pairs. Of the total 1994 production, 45.4 million pairs were men's, 1.1 million pairs were youth's and boys', 49.8 million were women's, 0.8 million were misses', and 4.8 million were children's shoes.

In 1994, 43.6 million pairs of slippers were produced, a 15.7-percent decrease from the 1993 production of 51.7 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 Plastic Soles/Fabric 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.

Fabric 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 Fabric Shoes. This includes all fabric shoes with rubber or plastic soles vulcanized or molded to a fabric 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 Plastic Soles/Fabric 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 Fabric 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: 1980 to 1994

[Million pairs]

Year	Total	Nonrubber footwear	Rubber or plastic soles/fabric uppers	Rubber and plastic footwear
1994.....	238.6	161.7	56.7	20.2
1993 ¹	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
1980.....	498.3	386.3	97.5	14.5

¹For 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, the information shown for years prior to 1992 may not be directly comparable. These changes represent approximately 2.7 percent of the total rubber and plastic 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 the 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 the total footwear production.

Table 68. Quantity and Value of Shipments of Nonrubber Footwear: 1994 and 1993

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

Product description	1994			1993		
	Production	Quantity	Value	Production	Quantity	Value
Footwear (except rubber).....	161,711	158,819	3,788,798	171,733	173,688	3,753,261
Shoes (except slippers).....	118,086	116,114	3,568,425	120,047	121,045	3,499,172
Men's (except athletic).....	45,363	44,710	2,114,686	45,357	46,167	2,045,872
Dress and casual.....	22,610	22,198	775,326	23,214	23,267	809,039
Boots, dress and casual (except western style).....	2,122	1,903	83,295	1,408	1,420	62,795
Western style boots.....	5,975	5,909	483,956	7,468	7,284	515,247
Work oxfords.....	1,954	2,078	90,092	2,179	2,322	95,727
Workboots, ankle height or higher.....	12,702	12,622	682,017	11,088	11,874	563,064
Youth's and boys' (except athletic).....	1,060	937	19,872	774	832	17,746
Women's (except athletic).....	49,849	49,099	1,185,731	51,473	51,416	1,183,021
Sandals.....	3,598	2,998	55,270	2,514	2,313	41,391
Dress and casual (except sandals).....	43,437	43,312	969,071	46,062	46,213	973,264
Uniform duty shoes.....	342	328	9,013	233	225	6,997
Boots, ankle height or higher.....	2,472	2,461	152,377	2,664	2,665	161,369
Misses' shoes and boots (except athletic).....	827	818	13,660	1,154	1,159	13,094
Children's shoes and boots (except athletic).....	4,828	4,682	58,414	4,404	4,669	57,096
Infants' and babies'.....	7,259	7,067	46,645	7,666	7,680	50,369
Athletic.....	6,146	6,086	103,018	6,233	6,051	103,132
Men's.....	427	380	36,779	458	463	40,726
Women's.....	240	223	29,960	202	201	28,984
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.).....	2,754	2,715	26,399	2,986	3,071	28,842
Slippers.....	43,625	42,705	220,373	51,686	52,643	254,089
Men's.....	6,276	6,292	53,887	7,146	7,116	50,811
Women's.....	34,793	33,593	153,034	37,093	38,307	172,273
All other.....	2,556	2,820	13,452	7,447	7,220	31,005

D Data withheld to avoid disclosing figures for individual companies.

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

Table 69. Production of Shoes and Slippers: 1994 and 1993

[Thousands of pairs]

Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter	
1994						
Shoes and slippers	As published	156,726	40,033	39,174	38,170	39,349
	As revised	161,711	42,157	40,504	39,816	39,234
Shoes, including athletics	As published	115,146	30,842	30,286	26,954	27,064
	As revised	118,086	31,987	30,461	27,591	28,047
Men's shoes (except athletic)	As published	41,131	11,132	10,790	9,410	9,799
	As revised	45,363	12,570	11,731	10,356	10,706
Work shoes.	As published	13,583	3,460	3,548	3,207	3,368
	As revised	14,656	3,681	3,832	3,491	3,652
Shoes and boots (except work and athletic)	As published	27,548	7,672	7,242	6,203	6,431
	As revised	30,707	8,889	7,899	6,865	7,054
Youth's and boys'	As published	1,529	408	411	349	361
	As revised	1,060	262	277	218	303
Women's	As published	53,352	14,487	14,229	12,449	12,187
	As revised	49,849	13,583	12,972	11,626	11,668
Misses'	As published	836	195	209	220	212
	As revised	827	(NC)	(NC)	218	205
Children's	As published	4,085	1,010	979	1,029	1,067
	As revised	4,828	1,195	1,165	1,215	1,253
Infants' and babies'	As published	7,629	2,083	1,875	1,711	1,960
	As revised	7,259	1,983	1,775	1,611	1,890
Athletic shoes.	As published	4,933	1,060	1,332	1,413	1,128
	As revised	6,146	1,454	1,596	1,699	1,397
All other footwear	As published	1,651	467	461	373	350
	As revised	2,754	745	736	648	625
Slippers	As published	41,580	9,191	8,888	11,216	12,285
	As revised	43,625	10,170	10,043	12,225	11,187
1993						
Shoes and slippers	As published	164,018	41,624	42,457	40,726	39,211
	As revised	171,733	43,292	44,643	42,828	40,970
Shoes, including athletics	As published	124,828	32,356	31,793	30,476	30,203
	As revised	120,047	31,074	30,579	29,317	29,082
Men's shoes (except athletic)	As published	46,404	11,586	12,032	11,044	11,742
	As revised	45,357	11,312	11,764	10,808	11,473
Work shoes.	As published	13,896	3,510	3,586	3,243	3,557
	As revised	11,088	2,800	2,861	2,587	2,840
Shoes and boots (except work and athletic)	As published	32,508	8,076	8,446	7,801	8,185
	As revised	34,269	8,512	8,903	8,221	8,633
Youth's and boys'	As published	1,292	404	349	313	226
	As revised	774	242	209	187	136
Women's	As published	56,081	14,399	14,015	14,094	13,573
	As revised	51,473	13,213	12,863	12,935	12,462
Misses'	As published	1,085	261	273	253	298
	As revised	1,154	279	290	269	316
Children's	As published	3,993	957	933	1,038	1,065
	As revised	4,404	1,055	1,029	1,145	1,175
Infants' and babies'	As published	8,191	2,470	2,121	1,826	1,774
	As revised	7,666	2,311	1,985	1,709	1,661
Athletic shoes.	As published	5,866	1,825	(D)	(D)	1,075
	As revised	6,233	1,939	(D)	(D)	1,142
All other footwear	As published	1,916	454	(D)	(D)	450
	As revised	2,986	723	(D)	(D)	717
Slippers	As published	39,190	9,268	10,664	10,250	9,008
	As revised	51,686	12,218	14,064	13,516	11,888

D Data withheld to avoid disclosing figures for individual companies. NC No change.

Note: Detailed figures may not add to total due to independent rounding.

Table 70. Production for Nonrubber Footwear, by State: 1994 and 1993

[Thousands of pairs]

State	Production	
	1994	1993
United States	161,711	171,733
Arkansas	8,726	8,651
California	3,798	3,841
Georgia	(D)	(D)
Illinois	1,168	1,712
Maine	30,664	23,329
Missouri	10,794	14,017
New Hampshire	5,306	4,982
New York	5,506	4,749
North Carolina	4,405	3,380
Ohio	(D)	(D)
Pennsylvania	9,447	12,810
Tennessee	7,617	12,547
Texas	29,594	29,571
Wisconsin	3,570	2,733
All other States	31,423	38,895

D Data withheld to avoid disclosing figures for individual companies.

Note: Data for each State not shown separately have been withheld to avoid disclosing figures for individual companies.

Table 71. Quantity and Value of Shipments of Shoes and Slippers: 1994 and 1993

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

Item	Total	First quarter	Second quarter	Third quarter	Fourth quarter
1994					
Quantity					
As published	174,650	38,650	37,017	47,367	51,616
As revised	158,819	36,731	36,344	42,709	43,035
Value					
As published	3,896,693	950,124	901,509	991,004	1,054,056
As revised	3,788,798	972,432	881,430	942,846	992,090
1993					
Quantity					
As published	173,688	40,903	40,695	47,417	44,673
As revised	(NC)	(NC)	(NC)	(NC)	(NC)
Value					
As published	3,753,261	884,268	882,016	1,013,380	973,597
As revised	(NC)	(NC)	(NC)	(NC)	(NC)

NC No change.

Table 72. **Production and Shipments of Shoes With Rubber or Plastic Soles/Fabric Uppers and Rubber and Plastic Footwear: 1994 and 1993**

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

Product description	1994			1993		
	Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value
Shoes With Rubber or Plastic Soles/ Fabric Uppers						
Total	56,718	56,243	526,980	62,538	61,790	'515,625
Athletic.....	23,276	23,490	287,888	'24,737	'23,937	'289,647
Men's.....	18,749	19,083	229,710	'20,129	'19,370	'238,382
Women's.....	2,290	2,232	46,506	1,412	1,395	34,390
Other	2,237	2,175	11,672	3,196	3,172	16,875
Non-Athletic	33,442	32,753	239,092	'37,801	'37,853	'225,978
Men's.....	11,792	11,351	68,918	'11,740	'11,762	'74,339
Women's.....	11,004	10,994	59,761	15,333	15,399	66,612
Other	10,646	10,408	110,413	10,728	10,692	85,027
Rubber and Plastic Footwear						
Total	20,245	18,796	276,956	17,783	16,911	249,877
Rubber upper protective footwear	8,467	7,392	138,495	8,099	7,946	130,081
Boots, lumberman, and PACS	4,609	4,348	106,731	4,066	3,646	88,538
Arctics and gaiters, light and heavy rubbers ...	3,858	3,044	31,764	4,033	4,300	41,543
Plastic or fabric protective footwear.....	11,778	11,404	138,461	9,684	8,965	119,796
Slush molded	(D)	(D)	(D)	(D)	(D)	(D)
Injection molded.....	5,402	5,210	46,429	5,029	4,368	41,705
Other	(D)	(D)	(D)	(D)	(D)	(D)

D Data withheld to avoid disclosing figures for individual companies.

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

Table 73. **Production of Shoes with Rubber or Plastic Soles/Fabric Uppers and Rubber and Plastic Protective Footwear, by Quarter: 1994 and 1993**

[Thousand of pairs]

Product description	Total	First quarter	Second quarter	Third quarter	Fourth quarter
1994					
Shoes with rubber or plastic soles/fabric uppersAs published	60,148	18,141	16,314	11,761	13,932
As revised	56,718	17,195	15,366	11,173	12,984
Rubber and plastic protective footwearAs published	17,903	4,730	4,847	4,175	4,151
As revised	20,245	5,305	5,822	4,391	4,727
1993					
Shoes with rubber or plastic soles/fabric uppersAs published	62,538	21,163	17,067	11,457	12,851
As revised	(NC)	(NC)	(NC)	(NC)	(NC)
Rubber and plastic protective footwearAs published	17,783	4,033	4,853	4,227	4,670
As revised	(NC)	(NC)	(NC)	(NC)	(NC)

NC No change.

Table 74. **Production of Footwear, by Type of Upper and Type of Sole: 1994 and 1993**

[Thousands of pairs]

Product description	1994	1993
Total	238,674	252,054
Rubber or plastic uppers and rubber or plastic soles, including rubber or plastic coated fabric uppers	38,405	40,224
Waterproof	15,090	14,989
Made with steel safety toes	(D)	(D)
Boots (except with steel safety toes)	9,974	10,355
All other	(D)	(D)
Not waterproof	23,315	25,235
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)	1,604	1,208
All other	13,803	14,923
Leather uppers	98,185	93,228
Athletic	7,585	7,319
Made with cleats, spikes, sprigs, stops, etc.	421	460
Other	7,164	6,859
Leather soles	23,282	26,802
Made with steel safety toes	970	788
Boots (except with steel safety toes)	6,783	7,282
Shoes (except with steel safety toes)	15,529	18,732
Other soles	67,318	59,107
Made with steel safety toes	4,196	3,872
Boots (except with steel safety toes)	11,730	12,362
Shoes (except with steel safety toes)	51,392	42,873
Fabric uppers	93,340	109,363
Rubber or plastic soles	81,101	102,044
Athletic	23,965	26,092
All other	57,136	75,952
With all other soles	12,239	7,319
Footwear not specified by type of material	8,744	9,239

D Data withheld to avoid disclosing figures for individual companies.

Table 75. Production, Exports, Imports, and Apparent Consumption of Footwear: 1994 and 1993

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

Product description	Manufacturers' shipments ¹ (quantity)	Exports of domestic merchandise ²		Percent exports to domestic production	Imports for consumption ³		Apparent consumption ⁵	Percent imports to apparent consumption
		Quantity	Value		Quantity	Value ⁴		
1994								
Total	238,674	25,031	445,509	10.5	1,440,863	12,843,540	1,654,506	87.1
Rubber or plastic uppers and rubber or plastic soles, including rubber or plastic coated fabric uppers	38,405	5,582	56,460	14.5	488,516	2,799,568	521,339	93.7
Waterproof	15,090	530	6,010	3.5	40,766	22,277	55,326	73.7
Made with steel safety toes	(D)	157	2,435	(D)	37,695	569	(D)	(D)
All other	(D)	373	3,575	(D)	3,071	21,708	(D)	(D)
Not waterproof	23,315	5,052	50,450	21.7	447,750	2,777,291	466,013	96.1
Athletic	(D)	1,981	30,946	(D)	50,887	424,358	48,906	(S)
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	35,973	(S)
Made with steel safety toes	(D)	397	1,925	(D)	761	8,103	(D)	(D)
Boots (except with steel safety toes)	1,604	723	4,808	45.1	90,621	941,880	91,502	99.0
All other	13,803	1,951	12,771	14.1	305,481	1,402,950	317,333	96.3
Leather uppers	98,185	9,000	290,668	12.9	597,045	8,228,406	686,230	87.0
Athletic	7,585	3,476	142,855	94.3	411,762	4,848,861	415,871	99.0
Made with cleats, spikes, sprigs, stops, etc.	421	3,673	67,762	(S)	7,438	170,499	7,859	94.6
Other	7,164	⁶ 3,476	⁶ 75,093	48.5	⁶ 404,324	⁶ 4,678,362	408,012	99.1
Leather soles	23,282	3,845	102,931	16.5	48,891	1,163,020	68,328	71.6
Made with steel safety toes	970	⁷ 210	⁷ 11,162	21.6	⁷ 5,787	⁷ 114,620	6,547	88.4
Boots (except with steel safety toes)	6,783	614	18,185	9.1	5,278	127,175	11,447	46.1
Shoes (except with steel safety toes)	15,529	3,021	73,584	19.5	37,826	921,225	50,334	75.1
Other soles	67,318	1,679	44,882	2.5	136,392	2,216,525	202,031	67.5
Made with steel safety toes	4,196	-	-	(NA)	-	-	4,196	(NA)
Boots (except with steel safety toes)	11,730	1,679	44,882	14.3	136,392	2,216,525	146,443	93.1
Shoes (except with steel safety toes)	51,392	-	-	(NA)	-	-	51,392	(NA)
Fabric uppers	93,340	10,449	98,381	11.2	355,302	1,815,566	438,193	81.1
Rubber or plastic soles	81,101	7,265	82,530	9.0	297,707	1,538,466	371,543	80.1
Athletic	23,965	5,379	66,877	22.4	67,942	696,213	86,528	78.5
All other	57,136	1,886	15,653	3.3	229,765	842,253	285,015	80.6
With all other soles	12,239	3,184	15,851	26.0	57,595	277,100	66,650	86.4
Footwear not specified by type of material	8,744	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1993								
Total	252,054	28,357	413,007	11.3	1,349,850	12,167,988	1,573,547	85.8
Rubber or plastic uppers and rubber or plastic soles, including rubber or plastic coated fabric uppers	40,224	5,327	33,586	13.2	490,274	2,882,513	525,171	93.4
Waterproof	14,989	450	4,421	3.0	28,703	18,419	43,242	66.4
Made with steel safety toes	(D)	105	1,751	(D)	26,595	569	(D)	(D)
All other	(D)	345	2,670	(D)	2,108	17,850	(D)	(D)
Not waterproof	25,235	4,877	29,165	19.3	461,571	2,864,094	481,929	95.8
Athletic	(D)	924	14,444	(D)	48,256	423,305	47,332	102.0
Made with cleats, spikes, sprigs, stops, etc.	(D)	488	5,036	(D)	12,464	215,987	(D)	(D)
Other	(D)	436	9,408	(D)	35,792	207,318	35,356	101.2
Made with steel safety toes	(D)	167	924	(D)	636	7,252	(D)	(D)
Boots (except with steel safety toes)	1,208	399	3,478	33.0	81,135	887,178	81,944	99.0
All other	14,923	3,387	10,319	22.7	331,544	1,546,359	343,080	96.6

See footnotes at end of table.

Table 75. **Production, Exports, Imports, and Apparent Consumption of Footwear: 1994 and 1993—Con.**

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

Product description	Manufacturers' shipments ¹ (quantity)	Exports of domestic merchandise ²		Percent exports to domestic production	Imports for consumption ³		Apparent consumption ⁵	Percent imports to apparent consumption
		Quantity	Value		Quantity	Value ⁴		
1993—Con.								
Leather uppers	93,228	11,336	265,518	12.2	546,338	7,728,122	628,230	87.0
Athletic	7,319	3,771	92,807	51.5	378,935	4,660,097	382,483	99.1
Made with cleats, spikes, sprigs, stops, etc.	460	2,167	45,587	471.1	7,828	167,734	6,121	127.9
Other	6,859	⁶ 1,604	⁶ 47,220	23.4	⁶ 371,107	⁶ 4,492,363	376,362	98.6
Leather soles	26,802	4,539	112,795	16.9	44,896	1,054,479	67,159	66.9
Made with steel safety toes	788	⁷ 284	⁷ 13,376	36.0	⁷ 4,763	⁷ 97,028	5,267	90.4
Boots (except with steel safety toes)	7,282	731	18,604	10.0	5,557	121,995	12,108	45.9
Shoes (except with steel safety toes)	18,732	3,524	80,815	18.8	34,576	835,456	49,784	69.5
Other soles	59,107	3,026	59,916	5.1	122,507	2,013,546	178,588	68.6
Made with steel safety toes	3,872	-	-	(NA)	-	-	3,872	(NA)
Boots (except with steel safety toes)	12,362	3,026	59,916	24.5	122,507	2,013,546	131,843	92.9
Shoes (except with steel safety toes)	42,873	-	-	(NA)	-	-	42,873	(NA)
Fabric uppers	109,363	11,694	113,903	10.7	313,238	1,557,353	410,907	76.2
Rubber or plastic soles	102,044	8,741	98,343	8.6	261,247	1,355,518	354,550	73.7
Athletic	26,092	7,166	86,225	27.5	65,537	680,967	84,463	77.6
All other	75,952	1,575	12,118	2.1	195,710	674,551	270,087	72.5
With all other soles	7,319	2,953	15,560	40.3	51,991	201,835	56,357	92.3
Footwear not specified by type of material	9,239	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

¹Represents production.²Source: Bureau of the Census report EM545, *U.S. Exports*.³Source: Bureau of the Census report EM145, *U.S. Imports for Consumption*.⁴This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.⁵Apparent consumption is derived by subtracting exports from total production plus imports.⁶Includes "Leather uppers, other soles, shoes (except with steel safety toes)."⁷Includes "Leather uppers, other soles, made with steel safety toes."

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available. S Suppressed. Data did not meet publication standards of the Bureau of the Census.

Note: 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 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 McConkey, 301-457-1165.

Chapter 3. Building Materials

3.1 LUMBER PRODUCTION AND MILL STOCKS

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 46.7 billion board feet in 1994, 2.9 percent above the 1993 level of 45.4 billion board feet.

Eastern lumber production was 28.8 billion board feet in 1994, 3.5 percent above the 1993 level of 27.8 billion board feet. Southern yellow pine production amounted to 15.2

billion board feet in 1994, a 3.7-percent increase over the 14.7 billion board feet in 1993. Production of Eastern hardwoods, at 10.6 billion board feet in 1994, was 3.7 percent above the 1993 level of 10.2 billion board feet.

Western lumber was 17.9 billion board feet in 1994, an increase of 2.0 percent, from the 1993 production level of 17.6 billion board feet. Production of Western softwoods increased in 1994 by 1.9 percent to 17.5 billion board feet. Total Western hardwood production increased by 2.5 percent in 1994.

EXPLANATION OF TERMS

Lumber. Timber sawed into beams, planks, boards, pallets, 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 11 counties of California: Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, Monterey, San Francisco, San Mateo, Santa Cruz, and Sonoma.

Alaska and Hawaii:

All softwoods and hardwoods in Alaska and Hawaii.

Table 1. **Production and Mill Stocks of Lumber: 1981 to 1994**

[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				
1994.....	46,665	35,647	15,252	20,395	11,018	4,772	3,324	1,448
1993.....	¹ 45,356	¹ 34,725	¹ 14,698	20,027	¹ 10,361	¹ 4,420	¹ 3,069	¹ 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
1984.....	37,065	30,801	10,648	20,153	6,264	4,327	3,403	924
1983.....	34,553	28,926	10,180	18,746	5,627	4,335	3,417	918
1982.....	30,010	24,949	8,754	16,195	5,061	3,833	2,981	852
1981.....	31,672	25,420	8,415	17,005	6,252	3,938	3,041	897

NA Not available. ¹Revised by 5 percent or more from previously published figures.

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

Table 2. **Production of Softwoods and Hardwoods, by State: 1994 and 1993**

[Millions of board feet, lumber tally]

Geographic area	Total		Softwoods		Hardwoods	
	1994	1993	1994	1993	1994	1993
United States	46,665	'45,356	35,647	'34,725	11,018	'10,631
Eastern United States.....	28,762	'27,797	18,193	'17,604	10,569	'10,193
Alabama	2,625	'2,505	2,222	'2,126	403	'379
Arkansas	2,203	'2,111	1,720	1,624	483	'487
Connecticut.....	49	'49	4	'4	45	'45
Delaware.....	16	'15	(Z)	(Z)	16	'15
Florida	747	'736	736	'728	11	8
Georgia	3,104	'3,062	2,740	'2,720	364	'342
Illinois.....	85	'85	-	'-	85	'85
Indiana.....	374	'351	(Z)	(Z)	374	'351
Iowa	65	'61	(Z)	(Z)	65	'61
Kansas.....	10	'10	-	'-	10	'10
Kentucky.....	772	761	17	'17	755	'744
Louisiana.....	1,485	'1,389	1,287	'1,189	198	'200
Maine.....	1,060	'1,058	910	'922	150	'136
Maryland.....	243	'242	80	'73	163	'169
Massachusetts.....	99	'99	(D)	'(D)	(D)	'(D)
Michigan.....	657	'627	112	'115	545	'512
Minnesota.....	312	'303	159	'158	153	'145
Mississippi.....	2,816	'2,709	2,267	'2,167	549	'542
Missouri.....	533	'518	27	'24	506	'494
Nebraska.....	30	'28	8	'7	22	'21
New Hampshire.....	273	'270	232	'226	41	'44
New Jersey.....	8	'8	1	'1	7	'7
New York.....	503	'480	98	'96	405	'384
North Carolina.....	2,167	'2,038	1,567	'1,474	600	'564
North Dakota.....	4	'4	(Z)	'(Z)	4	'4
Ohio.....	409	'392	3	'3	406	'389
Oklahoma.....	204	'204	(D)	'(D)	(D)	'(D)
Pennsylvania.....	1,065	'1,046	38	'41	1,027	'1,005
Rhode Island.....	9	'9	3	'3	6	'6
South Carolina.....	1,383	1,383	1,280	1,281	103	102
Tennessee.....	920	'879	127	'131	793	'748
Texas.....	1,663	'1,575	1,485	'1,421	178	'154
Vermont.....	232	'225	135	'125	97	'100
Virginia.....	1,305	1,242	596	'579	709	'663
West Virginia.....	697	'684	5	'5	692	'679
Wisconsin.....	635	'639	94	'104	541	'535
Western United States.....	17,903	17,559	17,454	17,121	449	438
Alaska.....	(D)	(D)	(D)	(D)	-	-
Arizona.....	199	194	199	194	(Z)	'(Z)
California.....	3,667	3,587	3,667	3,587	(Z)	'(Z)
Colorado.....	128	'129	128	'129	(Z)	(Z)
Hawaii.....	(Z)	(Z)	-	'-	(Z)	(Z)
Idaho.....	1,895	'1,951	1,895	'1,951	-	-
Montana.....	1,392	'1,371	1,392	'1,371	-	-
Nevada.....	(Z)	(Z)	(Z)	(Z)	-	-
New Mexico.....	151	'146	151	'146	-	-
Oregon.....	5,715	5,631	5,595	5,512	120	'119
South Dakota.....	(D)	(D)	(D)	(D)	(Z)	(Z)
Utah.....	39	40	39	40	-	-
Washington.....	4,261	'4,053	3,932	3,734	329	'319
Wyoming.....	238	'225	238	'225	-	-

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

Table 3. Lumber Production, by Species: 1994 and 1993

[Millions of board feet, lumber talley]

Product description	1994	1993
	United States	46,665	'45,356
All Eastern species	28,762	'27,797
Eastern softwoods	18,193	'17,604
Pine, southern yellow	15,242	'14,698
Pine, eastern white	476	'460
Pine, other ¹	231	'241
Spruce or fir ²	586	'613
Other eastern softwood ³	166	'149
Eastern softwoods, n.s.k.	1,492	'1,443
Eastern hardwoods	10,569	'10,193
Ash	195	'196
Beech	76	75
Birch	64	62
Cherry	179	'184
Cottonwood	93	'83
Aspen	163	'155
Gum, black, tupelo, and sweet	252	'249
Hickory and pecan	101	103
Hard maple	352	345
Soft maple	236	224
Oak, red	1,908	'1,831
Oak, white	889	'886
Black walnut	37	36
Yellow poplar	864	'805
Other eastern hardwoods ⁴	348	'339
Mixed hardwoods ⁵	1,527	'1,473
Eastern hardwoods, n.s.k.	3,285	'3,147
All Western species	17,903	17,559
Western softwoods	17,454	17,121
Cedar, western red	675	'612
Cedar, other ⁶	177	'170
Douglas fir	6,974	7,059
Fir, white, hemfir, and other ⁷	3,344	'3,122
Pine, ponderosa (western yellow)	2,857	2,906
Pine, western white	73	'58
Pine, lodgepole	819	'715
Pine, sugar	166	'169
Redwood	808	'714
Spruce ⁸	368	'370
Other western softwoods ⁹	840	'883
Western softwoods, n.s.k.	353	'343
Western hardwoods ¹⁰	449	438

¹Includes jack and Norway (red) pines.²Includes balsam fir and eastern spruce.³Includes eastern red cedar, northern white cedar, southern white cedar, cypress, eastern hemlock, tamarack, and mixed woods.⁴Includes basswood, boxwood, butternut, elm, hackberry, and sycamore.⁵"Mixed hardwoods" includes mixed, ungraded hardwoods sawn for ties, timbers, blocking cants, and pallet stock.⁶Includes Alaska, incense, and Port Orford cedars.⁷Prior 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.⁸Includes Sitka and western/Engelmann spruce.⁹Includes western hemlock, western larch, and mixed woods.¹⁰Includes alder, aspen, birch, cottonwood, maple, oak, mixed woods, and western hardwoods not specified.

n.s.k. Not specified by kind. 'Revised by 5 percent or more from previously published figures.

Table 4. Production of Softwoods and Hardwoods, by Lumber Industry Regions: 1994 and 1993

[Millions of board feet, lumber talley]

Lumber industry region	Total		Softwoods		Hardwoods	
	1994	1993	1994	1993	1994	1993
United States	46,665	'45,356	35,647	'34,725	11,018	'10,631
Eastern lumber regions	28,762	'27,797	18,193	'17,604	10,569	'10,193
Southern pine	15,252	'14,698	15,252	'14,698	-	-
Southern hardwood	4,578	'4,415	-	-	4,578	'4,415
Appalachian	2,216	'2,137	(D)	'(D)	(D)	'(D)
Northern hemlock and hardwood	1,292	'1,266	206	'219	1,086	'1,047
Northeastern	3,290	'3,236	(D)	'(D)	(D)	'(D)
Other	2,134	'2,045	1,008	'972	1,126	'1,073
Western lumber regions	17,903	17,559	17,454	17,121	449	438
Douglas fir	7,449	7,190	7,002	6,754	447	436
Western pine	9,201	'9,225	9,199	'9,223	2	'2
California redwood	(D)	(D)	(D)	(D)	(Z)	(Z)
Alaska and Hawaii	(D)	(D)	(D)	(D)	(Z)	(Z)

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

Table 5. Production, Exports, Imports, and Apparent Consumption of Softwoods and Hardwoods: 1994 and 1993

[Thousands of cubic meters]

Product code	Product description	Production ¹	Exports of domestic merchandise ²	Percent exports to production	Imports for consumption ²	Apparent consumption ³	Percent imports to apparent consumption
1994							
	Softwoods ⁴	84,127	4,905	5.8	38,149	117,371	32.5
	Pine.....	46,880	1,574	3.4	1,111	46,417	2.4
24212 74	Lodgepole pine.....	1,933	57	2.9	53	1,929	2.7
24212 71	Ponderosa pine (western yellow pine).....	6,743	216	3.2	90	6,617	1.4
24212 14, 16, 17, 72, 76	Other pine, including southern yellow and eastern white pine.....	38,204	1,301	3.4	968	37,871	2.6
24212 63	Douglas fir.....	16,459	1,397	8.5	793	15,855	5.0
24212 60	Western red cedar.....	1,593	52	3.3	1,580	3,121	50.6
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.....	14,842	1,882	12.7	34,665	47,625	72.8
24212 00	Softwoods, n.s.k.....	4,353	(NA)	(NA)	(NA)	(NA)	(NA)
	Hardwoods ⁴	26,002	2,342	9.0	646	24,306	2.7
24211 51	Ash.....	460	157	34.1	14	317	4.4
24211 53	Beech.....	179	27	15.1	6	158	3.8
24211 55	Birch.....	151	21	13.9	62	192	32.3
24211 57	Cherry.....	422	75	17.8	7	354	2.0
24211 65	Hickory and pecan.....	238	9	3.8	1	230	-
24211 67, 69	Maple.....	1,388	259	18.7	133	1,262	10.5
24211 71	Red oak.....	4,503	662	14.7	13	3,854	0.3
24211 73	White oak.....	2,098	548	26.1	5	1,555	0.3
24211 75	Black walnut.....	87	22	25.3	(Z)	65	-
24211 77	Yellow poplar.....	2,039	150	7.4	9	1,898	0.5
24211 59, 61, 63, 79, 83, 99	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods.....	6,639	412	6.2	396	6,623	6.0
24211 00	Hardwoods, n.s.k.....	7,798	(NA)	(NA)	(NA)	(NA)	(NA)
1993							
	Softwoods ⁴	'81,951	4,914	6.0	35,530	112,567	31.6
	Pine.....	45,422	1,717	3.8	855	44,560	1.9
24212 74	Lodgepole pine.....	'1,687	56	3.3	73	'1,704	4.3
24212 71	Ponderosa pine (western yellow pine).....	6,858	448	6.5	47	6,457	0.7
24212 14, 16, 17, 72, 76	Other pine, including southern yellow and eastern white pine.....	36,877	1,213	3.3	735	'36,399	2.0
24212 63	Douglas fir.....	16,659	1,569	9.4	773	15,863	4.9
24212 60	Western red cedar.....	1,444	50	3.5	1,378	'2,772	49.7
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.....	14,210	1,578	11.1	32,524	45,156	72.0
24212 00	Softwoods, n.s.k.....	4,216	(NA)	(NA)	(NA)	(NA)	(NA)
	Hardwoods ⁴	25,089	2,245	8.9	558	'23,402	2.4
24211 51	Ash.....	463	156	33.7	11	'318	3.5
24211 53	Beech.....	177	15	8.5	4	166	2.4
24211 55	Birch.....	146	19	13.0	48	175	27.4
24211 57	Cherry.....	434	66	15.2	4	'372	1.1
24211 65	Hickory and pecan.....	243	8	3.3	(Z)	235	-
24211 67, 69	Maple.....	1,343	210	15.6	139	1,272	10.9
24211 71	Red oak.....	'4,321	656	15.2	10	'3,675	0.3
24211 73	White oak.....	'2,091	539	25.8	5	'1,557	0.3
24211 75	Black walnut.....	85	18	21.2	1	68	1.5
24211 77	Yellow poplar.....	'1,900	146	7.7	6	'1,760	0.3
24211 59, 61, 63, 79, 83, 99	Other hardwoods, including cottonwood, aspen, gum, and mixed hardwoods.....	'6,414	412	6.4	330	'6,332	5.2
24211 00	Hardwoods, n.s.k.....	'7,472	(NA)	(NA)	(NA)	(NA)	(NA)

¹The harmonized import and export figures for 1994 and 1993 were collected in cubic meters. A conversion factor of 0.423729 was used to convert from thousand board feet to thousands of cubic meters.

²Import and export numbers do not include tropical woods (e.g. meranti and mahogany).

³"Apparent consumption" is equal to "Production" plus "Imports" minus "Exports."

⁴The 1994 and 1993 totals for "Hardwoods and Softwoods" include the n.s.k. production figures.

- Represents zero. NA Not available. n.s.k. Not specified by kind. 'Revised by 5 percent or more from previously published figures. Z Represents less than 500,000 cubic meters.

Note: 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 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.

3.2 REFRACTORIES

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 132 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 1994, total manufacturers' shipments of refractories amounted to \$1,997 million, an increase of 3.5 percent, from \$1,930 million in 1993.

Shipments of clay refractories increased 10.1 percent to \$851 million in 1994, from \$773 million in 1993. Clay refractories shipments accounted for 43 percent of total refractories shipments in 1994, up from 40 percent in 1993.

Shipments of nonclay refractories decreased 1.0 percent to \$1,146 million in 1994, from \$1,157 million in 1993. Nonclay refractories shipments accounted for 57 percent of total refractories shipments in 1994, down from 60 percent in 1993.

Bricks and shapes continue to be the dominate form of refractories, showing an increase of 4.7 percent to \$1,147 million in 1994, from \$1,096 million in 1993. Unshaped clay refractories increased 12.0 percent to \$317 million in 1994, from \$283 million in 1993. Mortars decreased 17.4 percent to \$19 million in 1994, from \$23 million in 1993. Plastic refractories and ramming mixes decreased 6.4 percent to \$102 million in 1994, from \$109 million in 1993.

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 bricks 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 $A_{12}O_3$). Bricks 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 $A_{12}O_3$.

High Alumina Ladle Brick. Ladle brick containing 50 percent or more $A_{12}O_3$.

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 $A_{12}O_3$, 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 $A_{12}O_3$.

High Alumina Plastic Refractories and Ramming Mixes. Plastics refractories and ramming mixes containing 50 percent to 87.5 percent $A_{12}O_3$.

Clay Castable Refractories (Hydraulic Setting). Hydraulic setting castables containing up to 50 percent $A_{12}O_3$ 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 $A_{12}O_3$ 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 $A_{12}O_3$, 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 $A1_2O_3$). 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.

Table 6. **Value of Shipments of Refractories: 1987 to 1994**

[Thousands of dollars]

Year	Total	Clay	Nonclay
1994	1,996,711	851,162	1,145,549
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
1987	1,682,338	739,770	942,568

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 $A1_2O_3$.

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 7. Quantity and Value of Shipments of Refractories, by Type: 1994 and 1993

[Value in thousands of dollars]

Product code	Product description	Number of companies	1994				1993			
			Quantity shipped (unit of measure)			Value of shipments	Quantity shipped (unit of measure)			Value of shipments
			Short tons	Metric tons	M bricks (thousand 9-inch equivalent)		Short tons	Metric tons	M bricks (thousand 9-inch equivalent)	
	Clay and nonclay refractories.	(X)	(X)	(X)	(X)	1,996,711	(X)	(X)	(X)	1,930,233
3255- —	Clay refractories.	(X)	(X)	(X)	(X)	851,162	(X)	(X)	(X)	772,986
	Brick and shapes.	(X)	906,947	822,254	300,807	508,793	917,402	831,734	304,297	451,455
32550 11	Fireclay, including semi-silica, 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.	32	446,777	405,056	145,033	195,237	427,183	387,292	156,254	170,747
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. Include high alumina pouring pit refractories (containing 50 percent alumina and over), sleeves, nozzles, runners, and ladle gate parts ¹	34	413,579	374,958	117,730	266,334	439,330	398,305	112,680	238,526
32550 35	Insulating brick and shapes.	15	46,591	42,240	38,044	47,222	50,889	46,137	35,363	42,182
32550 55	Unshaped clay refractories.	(X)	732,455	664,057	(X)	317,049	671,135	608,464	(X)	282,647
32550 55	Refractory bonding mortars, wet and dry, including clay and high alumina.	33	56,126	50,885	(X)	25,266	59,062	53,547	(X)	24,706
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 and ramming mixes, 50 percent alumina and over ²	25	177,045	160,512	(X)	75,152	176,770	160,263	(X)	74,067
32550 65	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 ³	39	326,972	296,439	(X)	166,220	290,786	263,632	(X)	141,716
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).	28	172,312	156,221	(X)	50,411	144,517	131,022	(X)	42,158
	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)	218,134	197,765	(X)	18,626	241,291	218,759	(X)	19,574
32550 85	Clay and high alumina refractory raw materials ⁴	16	204,852	185,723	(X)	16,487	208,386	188,927	(X)	15,492
32550 95	Clay and high alumina refractory materials ⁵	10	13,282	12,042	(X)	2,139	32,905	29,832	(X)	4,082
32550 00	Clay refractories, n.s.k. ⁶	(X)	(X)	(X)	(X)	6,694	(X)	(X)	(X)	19,310
3297- —	Nonclay refractories.	(X)	(X)	(X)	(X)	1,145,549	(X)	(X)	(X)	1,157,247
	Brick and shapes.	(X)	468,193	424,472	110,073	638,414	482,303	437,264	107,724	644,671
32970 12	All silica brick and shapes, excluding semi-silica.	16	42,406	38,446	20,836	25,399	29,674	26,903	15,964	22,931
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	99,866	90,540	18,982	111,394	120,298	109,064	21,763	122,191
32970 15	Magnesite brick and shapes, burned and unburned.	9	24,331	22,059	4,636	19,536	18,627	16,888	4,307	16,661
32970 19	Magnesite-chrome, chrome-magnesite, including high fires, burned and unburned brick, and chrome brick.	8	57,684	52,297	9,692	54,172	60,140	54,524	9,990	54,281
32970 48	Silicon-carbide brick and shapes (made predominantly of silicon carbide), including kiln furniture.	11	7,863	7,129	906	47,663	9,240	8,377	1,157	45,702
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.	31	32,375	29,352	13,569	115,219	37,129	33,662	13,359	126,753

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refractories, by Type: 1994 and 1993—Con.

[Value in thousands of dollars]

Product code	Product description	Number of companies	1994				1993			
			Quantity shipped (unit of measure)			Value of shipments	Quantity shipped (unit of measure)			Value of shipments
			Short tons	Metric tons	M bricks (thousand 9-inch equivalent)		Short tons	Metric tons	M bricks (thousand 9-inch equivalent)	
32970 55	Nonclay refractories—Con. Brick and shapes—Con. Zircon and zirconia brick and shapes (made predominantly of either of these materials, including electrocast)	19	6,089	5,520	1,719	36,590	6,571	5,957	2,049	38,103
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	24	197,579	179,129	39,733	228,441	200,624	181,889	39,135	218,049
32970 61	Mortars	(X)	22,536	20,432	(X)	19,326	24,413	22,133	(X)	23,454
32970 63	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)	9	15,947	14,458	(X)	13,308	18,043	16,358	(X)	17,342
32970 65	Extra-high alumina refractory mortars (made predominantly of fused or synthetic alumina and mullite) ⁷	19	6,589	5,974	(X)	6,018	6,370	5,775	(X)	6,112
32970 67	Plastic refractories and ramming mixes	(X)	130,891	118,668	(X)	102,145	138,302	125,387	(X)	109,059
32970 69	Basic castable mixes, including chrome, chrome-magnesia, magnesia-chrome, magnesia, and dolomite	10	35,334	32,034	(X)	24,037	48,496	43,967	(X)	32,853
32970 69	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 plastics and ramming mixes ⁷	23	64,275	58,273	(X)	64,763	60,793	55,116	(X)	62,888
32970 68	Other nonclay plastic refractories and ramming mixes	16	31,282	28,361	(X)	13,345	29,013	26,304	(X)	13,318
32970 72	Other nonclay refractory castables and plastics	15	14,416	13,070	(X)	17,082	11,747	10,650	(X)	13,630
32970 75	Gunning mixes: Basic nonclay gunning mixes, including chrome, chrome-magnesia, magnesia-chrome, magnesia, and dolomite and other nonclay gunning mixes	15	215,332	195,224	(X)	88,730	266,260	241,396	(X)	116,839
32970 94	Ceramic refractory fibers, 1,500 ^o F and higher	11	48,427	43,905	(X)	141,526	41,184	37,338	(X)	117,061
32970 96	Other nonclay refractory materials sold in lump or ground form, including ground silica	(X)	338,840	307,199	(X)	110,948	286,758	259,980	(X)	115,618
32970 00	Domestic shipments for direct use by customers as a finished refractory and all exported material ⁵	19	(D)	(D)	(X)	68,234	(D)	(D)	(X)	73,157
32950 23	All other domestic shipments of nonclay refractory materials sold in lump or ground form as a refractory raw material ⁴	9	(D)	(D)	(X)	42,714	(D)	(D)	(X)	42,461
32950 25	Nonclay refractories, n.s.k. ⁶	(X)	(X)	(X)	(X)	27,378	(X)	(X)	(X)	16,915
32740 71	Dead-burned magnesia or magnesite ^{5 8}	(X)	108,628	98,484	(X)	31,689	148,615	134,737	(X)	40,841
	Domestic shipments for direct use as finished refractory products and all exported material	5	(D)	(D)	(X)	(D)	113,342	102,758	(X)	30,541
	All other domestic shipments predominantly for use as a refractory raw material	6	(D)	(D)	(X)	(D)	35,273	31,979	(X)	10,300
	Dead-burned dolomite	4	307,606	278,881	(X)	21,360	338,133	306,558	(X)	22,309

¹Excludes data for mullite and extra-high alumina refractories. These products are included in the nonclay refractories section.
²Includes 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).
³Includes 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.
⁴Includes shipments to refractory producers for reprocessing the manufacture of brick and other refractories.
⁵Includes 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.
⁶Not specified by kind (n.s.k.) represents the 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.
⁷"Fused" as applied to bauxite and alumina means complete melting, as in an electric furnace; after cooling, the product is crushed and graded for use in the refractory.
⁸Total 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.

D Data withheld to avoid disclosing figures for individual companies. n.s.k. Not specified by kind. [†]Revised by 5 percent or more from previously published figures. X Not applicable.

Table 8. Shipments, Exports, Imports, and Apparent Consumption of Refractories, by Type: 1994 and 1993

[Value in thousands of dollars]

Product code ¹	Product description	Unit of measure	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Percent exports to manufacturers' shipments	
			Quantity	Value	Quantity	Value at port ²	Quantity	Value
1994								
	Clay and nonclay refractories ³ .....	.....(X)	(X)	1,833,065	(X)	305,379	(X)	17.0
	Clay refractories .....	.....(X)	(X)	825,842	(X)	58,330	(X)	7.0
32550 11,14,35	Brick and shapes	Thousand standard brick equivalent	300,807	508,793	(NA)	50,006	(NA)	10.0
32550 55,61,65,70	Unshaped clay refractories and gunning mixes	Metric tons.	664,057	317,049	11,343	8,324	2.0	3.0
	Nonclay refractories. ....	.....(X)	(X)	1,007,223	(X)	247,049	(X)	25.0
32970 13,15,19	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick	Thousand standard brick equivalent	33,310	185,102	(NA)	63,001	(NA)	34.0
32970 12,48,50, 55,58	All other brick and shapes .....	.....do.....	76,763	453,312	(NA)	82,188	(NA)	18.0
32970 61,63,65, 67,68,69,72,75	Unshaped nonclay refractories and gunning mixes	Metric tons.	391,299	368,809	141,038	101,860	36.0	28.0
			Imports for consumption ^{1 4}		Apparent consumption ⁶		Percent imports to apparent consumption	
			Quantity	Value ⁵	Quantity	Value	Quantity	Value
	Clay and nonclay refractories ³ .....	.....(X)	(X)	197,389	(X)	1,725,075	(X)	11.0
	Clay refractories .....	.....(X)	(X)	24,817	(X)	792,329	(X)	3.0
32550 11,14,35	Brick and shapes	Thousand standard brick equivalent	(NA)	24,419	(NA)	483,206	(NA)	5.0
32550 55,61,65,70	Unshaped clay refractories and gunning mixes	Metric tons.	723	398	653,437	309,123	-	-
	Nonclay refractories. ....	.....(X)	(X)	172,572	(X)	932,746	(X)	19.0
32970 13,15,19	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick	Thousand standard brick equivalent	(NA)	68,907	(NA)	191,008	(NA)	36.0
32970 12,48,50, 55,58	All other brick and shapes .....	.....do.....	(NA)	82,133	(NA)	453,257	(NA)	18.0
32970 61,63,65, 67,68,69,72,75	Unshaped nonclay refractories and gunning mixes	Metric tons.	32,640	21,532	282,901	288,481	12.0	7.0

See footnotes at end of table.

Table 8. Shipments, Exports, Imports and Apparent Consumption of Refractories, by Type: 1994 and 1993—Con.

[Value in thousands of dollars]

Product code ¹	Product description	Unit of measure	Manufacturers ¹		Exports of domestic merchandise ^{1 2}		Percent exports to manufacturers' shipments	
			Quantity	Value	Quantity	Value at port ²	Quantity	Value
1993								
	Clay and nonclay refractories ³ .....	.....(X)	(X)	1,758,816	(X)	298,011	(X)	17.0
	Clay refractories .....	.....(X)	(X)	734,102	(X)	66,820	(X)	9.0
32550 11,14,35	Brick and shapes	Thousand standard brick equivalent	304,297	451,455	(NA)	57,286	(NA)	13.0
32550 55,61,65,70	Unshaped clay refractories and gunning mixes	Metric tons.	608,464	282,647	12,276	9,534	2.0	3.0
	Nonclay refractories .....	.....(X)	(X)	1,024,714	(X)	231,191	(X)	23.0
32970 13,15,19	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick	Thousand standard brick equivalent	36,060	193,133	(NA)	63,581	(NA)	33.0
32970 12,48,50, 55,58	All other brick and shapes .....	.....do.....	71,664	451,538	(NA)	73,116	(NA)	16.0
32970 61,63,65, 67,68,69,72,75	Unshaped nonclay refractories and gunning mixes	Metric tons.	436,904	380,043	121,912	94,494	28.0	25.0
			Imports for consumption ^{1 4}		Apparent consumption ⁶		Percent imports to apparent consumption	
			Quantity	Value ⁵	Quantity	Value	Quantity	Value
	Clay and nonclay refractories ³ .....	.....(X)	(X)	189,539	(X)	1,650,344	(X)	11.0
	Clay refractories .....	.....(X)	(X)	26,410	(X)	693,692	(X)	4.0
32550 11,14,35	Brick and shapes	Thousand standard brick equivalent	(NA)	25,673	(NA)	419,842	(NA)	6.0
32550 55,61,65,70	Unshaped clay refractories and gunning mixes	Metric tons.	348	737	596,536	273,850	-	-
	Nonclay refractories .....	.....(X)	(X)	163,129	(X)	956,652	(X)	17.0
32970 13,15,19	Nonclay magnesite and magnesite-chrome brick and shapes and chrome brick	Thousand standard brick equivalent	(NA)	58,596	(NA)	188,148	(NA)	31.0
32970 12,48,50, 55,58	All other brick and shapes .....	.....do.....	(NA)	83,344	(NA)	461,766	(NA)	18.0
32970 61,63,65, 67,68,69,72,75	Unshaped nonclay refractories and gunning mixes	Metric tons.	29,197	21,189	344,189	306,738	8.0	7.0

¹For 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.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³The "Clay and nonclay refractories" total shown here excludes product codes 32550 00 and 32970 00; therefore, they differ from the totals shown in tables 6 and 7.

⁴Source: Bureau of the Census report IM146, *U.S. Imports for Consumption and General Imports*.

⁵"Value at port" includes both import value and duty value.

⁶"Apparent consumption" is derived by subtracting "Exports" from the total of "Shipments" plus "Imports" (including duty).

- Represents zero. NA Not available. X Not applicable.

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.

3.3 CLAY CONSTRUCTION PRODUCTS

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 breakout 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), increased 11.4 percent to \$1.1 billion in 1994, from \$989.9 million in 1993. The South Atlantic region accounted for approximately 29 percent of the total value of brick shipments in 1994. More specifically, North Carolina accounted for approximately 13 percent of the total value of brick shipments in 1994.

Shipments of facing tile decreased 9.6 percent to \$15.0 million in 1994, from \$16.6 million in 1993.

Shipments of clay floor and wall tile increased 5.2 percent to \$722.6 million in 1994, from \$686.7 million in 1993. Of this, shipments of glazed floor and wall tile increased 4.9 percent to \$532.6 million in 1994, from \$507.9 million in 1993.

Shipments of vitrified clay sewer pipe and fittings increased 2.5 percent to \$33.3 million in 1994, from \$32.5 million in 1993.

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: 1991 to 1994

Product code	Product description	Production (quantity)	Shipments	
			Quantity	Value (million dollars)
32510 11	Brick (building or common and face) (million standard brick):			
	1994	7,153.0	7,204.4	1,103.2
	1993	6,623.3	6,655.4	989.9
	1992	6,109.5	6,230.8	920.0
32591 00	Vitrified clay sewer pipe and fittings (short tons):			
	1994	159.1	134.9	33.3
	1993	151.9	135.9	32.5
	1992	164.0	157.4	37.6
32510 61	Structural clay tile (except facing) (thousand short tons):			
	1994	(D)	(D)	(D)
	1993	(D)	(D)	(D)
	1992	(D)	(D)	(D)
32510 31	Facing tile (structural), unglazed and salt glazed, ceramic glazed, including glazed brick (million brick equivalent):			
	1994	26.8	26.6	15.0
	1993	31.2	28.8	16.6
	1992	43.0	46.9	19.1
32530 00	Clay floor and wall tile, including quarry tile (million sq. ft.):			
	1994	569.6	569.8	722.6
	1993	536.6	558.7	686.7
	1992	488.0	495.7	645.5
	1991	477.7	484.8	638.6

D Data withheld to avoid disclosing figures for individual companies.

[†]Revised by 5 percent or more from previously published figures.

Note: Detail data may not add to totals due to independent rounding.

Table 10. **Production of Brick (Building or Common and Face), by Divisions and States: 1994 and 1993**

[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
1994					
United States.....	7,153,027	1,813,718	1,913,545	1,833,639	1,592,125
New England ¹	73,030	18,569	19,075	18,410	16,976
Middle Atlantic ²	420,754	'102,656	'123,957	'105,999	'88,142
East North Central.....	658,472	'167,388	'183,092	'168,705	'139,287
Ohio.....	401,651	99,766	112,569	107,303	82,013
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.....	2,365,515	609,122	645,920	618,610	491,863
Virginia ³	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) ³	581,102	141,006	152,377	151,876	135,843
East South Central.....	1,550,269	397,020	401,653	397,229	354,367
Alabama.....	793,066	203,166	205,107	204,738	180,055
Other (Kentucky, Mississippi, and Tennessee).....	757,203	193,854	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.....	261,227	'65,747	'67,213	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).....	95,569	24,010	25,227	24,539	21,793
Pacific ⁴	160,134	38,511	46,281	43,357	31,985

See footnotes at end of table 12.

Table 10. **Production of Brick (Building or Common and Face), by Divisions and States: 1994 and 1993—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
1993					
United States	6,623,292	1,648,878	1,776,863	1,733,877	1,463,674
New England ¹	68,963	18,067	17,535	18,083	15,278
Middle Atlantic ²	'408,377	'83,255	'129,504	'120,261	'75,357
East North Central	'563,926	'136,249	'152,833	'148,525	'126,319
Ohio	'363,170	'88,467	'99,423	'95,380	79,900
Other (Illinois, Indiana, Michigan, and Wisconsin) ..	'200,756	'47,782	'53,410	'53,145	'46,419
West North Central	303,416	69,019	82,879	84,235	67,283
Kansas and Missouri	112,331	25,677	27,448	31,000	28,206
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota)	191,085	43,342	55,431	53,235	39,077
South Atlantic	'2,221,841	'566,339	'596,247	'578,971	'480,284
Virginia ³	312,328	84,153	84,604	79,047	64,524
North Carolina	'971,590	'251,564	'261,241	'255,435	'203,350
South Carolina	370,199	93,032	97,764	94,947	84,456
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) ³	567,724	137,590	152,638	149,542	127,954
East South Central	1,442,808	366,022	366,137	371,459	339,190
Alabama	706,566	184,264	176,967	181,327	164,008
Other (Kentucky, Mississippi, and Tennessee)	736,242	181,758	189,170	190,132	175,182
West South Central	1,207,959	305,019	319,010	302,980	280,950
Arkansas	223,432	52,851	58,627	57,594	54,360
Louisiana	78,413	19,478	21,953	20,296	16,686
Oklahoma	217,196	56,286	56,144	54,583	50,183
Texas	688,918	176,404	182,286	170,507	159,721
Mountain	247,332	63,929	68,321	66,245	48,837
Colorado	158,738	40,397	43,999	42,874	31,468
Other (Arizona, Idaho, Montana, Nevada, New Mexico Utah, and Wyoming)	88,594	23,532	24,322	23,371	17,369
Pacific ⁴	158,670	40,979	44,397	43,118	30,176

See footnotes at end of table 12.

Table 11. Quantity of Shipments of Brick (Building or Common and Face), by Divisions and States: 1994 and 1993

[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
1994					
United States	7,204,433	1,734,225	2,021,180	2,027,493	1,421,535
New England ¹	72,875	18,715	21,250	22,021	10,889
Middle Atlantic ²	429,230	'107,101	'132,559	'134,746	'54,824
East North Central	648,980	'165,580	'195,123	'184,739	'103,538
Ohio	398,335	105,647	123,508	111,940	57,240
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	2,371,553	582,043	657,027	675,833	456,650
Virginia ³	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) ³	542,454	119,663	149,320	157,099	116,372
East South Central	1,567,939	372,863	435,022	439,053	321,001
Alabama	778,480	184,399	212,785	211,189	170,107
Other (Kentucky, Mississippi, and Tennessee)	789,459	188,464	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	270,832	'60,155	75,241	76,218	59,218
Colorado	164,663	'35,534	'45,507	46,326	'37,296
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming)	106,169	24,621	29,734	29,892	21,922
Pacific ⁴	181,343	42,272	51,185	'51,981	35,905

See footnotes at end of table 12.

Table 11. Quantity of Shipments of Brick (Building or Common and Face), by Divisions and States: 1994 and 1993—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
1993					
United States	6,655,387	1,668,215	1,896,280	1,799,341	1,291,551
New England ¹	64,743	16,384	19,094	18,357	10,908
Middle Atlantic ²	'419,479	'107,589	'128,516	'121,576	'61,798
East North Central	'561,550	'139,165	'169,336	'159,059	'93,990
Ohio	'360,252	'88,877	'109,493	'101,759	60,123
Other (Illinois, Indiana, Michigan, and Wisconsin) ..	'201,298	'50,288	'59,843	'57,300	'33,867
West North Central	302,506	78,608	89,002	81,916	52,980
Kansas and Missouri	114,613	30,662	33,242	31,276	19,433
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota)	187,893	47,946	55,760	50,640	33,547
South Atlantic	'2,222,635	'548,671	'622,881	'604,967	'446,116
Virginia ³	315,320	78,825	92,001	87,999	56,495
North Carolina	'966,614	'239,303	'271,710	'266,231	'189,370
South Carolina	379,335	92,071	105,561	101,979	79,724
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) ³	561,366	138,472	153,609	148,758	120,527
East South Central	1,447,864	364,097	404,507	381,476	297,784
Alabama	706,066	179,291	195,190	184,154	147,431
Other (Kentucky, Mississippi, and Tennessee)	741,798	184,806	209,317	197,322	150,353
West South Central	1,205,033	306,990	337,481	314,878	245,684
Arkansas	224,207	56,086	64,905	58,091	45,125
Louisiana	79,397	20,021	21,955	20,271	17,150
Oklahoma	210,893	58,166	61,460	54,360	36,907
Texas	690,536	172,717	189,161	182,156	146,502
Mountain	258,279	64,934	75,382	68,687	49,276
Colorado	159,388	39,985	46,678	41,890	30,835
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming)	98,891	24,949	28,704	26,797	18,441
Pacific ⁴	173,298	41,777	50,081	48,425	33,015

See footnotes at end of table 12.

Table 12. Value of Shipment of Brick (Building or Common and Face), by Divisions and States: 1994 and 1993

[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
1994					
United States	1,103,250	265,687	311,643	314,486	211,434
New England ¹	15,672	3,971	4,564	4,691	2,446
Middle Atlantic ²	84,425	21,307	26,431	25,995	10,692
East North Central	112,537	29,464	34,120	31,902	17,051
Ohio	72,684	19,685	22,782	20,283	9,934
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	318,079	77,287	87,275	90,773	62,744
Virginia ³	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) ³	73,843	16,844	20,697	21,347	14,955
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	58,586	13,606	16,299	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)	24,131	5,613	6,839	6,861	4,818
Pacific ⁴	50,952	11,958	14,520	14,707	9,767

See footnotes at end of table.

Table 12. Value of Shipment of Brick (Building or Common and Face), by Divisions and States: 1994 and 1993—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
1993					
United States	989,935	246,561	284,944	268,630	189,800
New England ¹	14,598	3,673	4,279	4,067	2,579
Middle Atlantic ²	82,106	20,940	25,297	24,010	11,859
East North Central	92,958	23,480	28,293	26,501	14,684
Ohio	62,339	15,685	19,105	17,873	9,676
Other (Illinois, Indiana, Michigan, and Wisconsin) ..	30,619	7,795	9,188	8,628	5,008
West North Central	50,661	13,366	14,717	13,564	9,014
Kansas and Missouri	17,027	4,463	4,904	4,572	3,088
Other (Iowa, Minnesota, Nebraska, North Dakota, and South Dakota)	33,634	8,903	9,813	8,992	5,926
South Atlantic	298,932	71,975	85,132	82,596	59,229
Virginia ³	40,682	10,105	11,875	11,423	7,279
North Carolina	132,943	30,901	38,274	37,859	25,909
South Carolina	51,766	12,712	14,574	13,794	10,686
Other (Delaware, District of Columbia, Florida, Georgia, Maryland, and West Virginia) ³	73,541	18,257	20,409	19,520	15,355
East South Central	168,764	42,663	47,259	44,317	34,525
Alabama	82,638	21,084	22,900	21,410	17,244
Other (Kentucky, Mississippi, and Tennessee)	86,126	21,579	24,359	22,907	17,281
West South Central	182,093	46,153	50,821	45,982	39,137
Arkansas	33,868	8,032	9,820	8,444	7,572
Louisiana	11,305	2,865	3,207	2,857	2,376
Oklahoma	30,223	8,278	8,633	7,608	5,704
Texas	106,697	26,978	29,161	27,073	23,485
Mountain	53,881	13,417	15,842	14,459	10,163
Colorado	31,875	7,878	9,395	8,500	6,102
Other (Arizona, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming)	22,006	5,539	6,447	5,959	4,061
Pacific ⁴	45,942	10,894	13,304	13,134	8,610

¹Represents a combined total for Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.²Represents a combined total for New Jersey, New York, and Pennsylvania.³In the document entitled "Manufacturing Profiles: 1993," Maryland and Virginia were combined for this table.⁴Represents a combined total for California, Oregon, and Washington. No production or shipments were reported for Alaska or Hawaii.[†]Revised by 5 percent or more from previously published figures.

Table 13. Production of Clay Construction Products: 1994 and 1993

Product description	Total	Fourth quarter	Third quarter	Second quarter	First quarter
1994					
Brick (building or common and face)	7,153,027	1,813,718	1,913,545	1,833,639	1,592,125
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick	26,848	'7,981	'6,431	'5,542	'6,894
Structural clay tile (except facing)	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile	569,565	139,763	142,998	149,006	137,798
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches	366,316	91,810	93,684	92,695	88,127
Glazed floor and wall tile having a facial area 59 square inches or greater	78,622	19,424	17,940	22,545	18,713
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	124,627	'28,529	31,374	33,766	'30,958
Vitrified clay sewer pipe and fittings	'159,112	'41,996	'45,687	'40,635	30,794
1993					
Brick (building or common and face)	6,623,292	1,648,878	1,776,863	1,733,877	1,463,674
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick	31,179	7,831	7,760	8,220	7,368
Structural clay tile (except facing)	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile	536,630	130,637	131,577	141,652	132,764
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches	335,032	80,089	'79,859	91,676	83,408
Glazed floor and wall tile having a facial area 59 square inches or greater	89,016	23,507	22,017	22,473	21,019
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	112,582	27,041	29,701	'27,503	28,337
Vitrified clay sewer pipe and fittings	151,870	36,751	44,252	35,876	34,991

See footnotes at end of table 15.

Table 14. Quantity of Shipments of Clay Construction Products: 1994 and 1993

Product description	Total	Fourth quarter	Third quarter	Second quarter	First quarter
1994					
Brick (building or common and face)	7,204,433	1,734,225	2,021,180	2,027,493	1,421,535
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick	26,553	'6,925	'7,727	'7,032	'4,869
Structural clay tile (except facing)	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile	'569,825	139,266	'148,048	'144,639	'137,872
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches	370,884	91,192	'96,696	92,417	'90,579
Glazed floor and wall tile having a facial area 59 square inches or greater	74,009	18,641	20,193	18,828	16,347
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	124,932	'29,433	'31,159	'33,394	'30,946
Vitrified clay sewer pipe and fittings	134,913	33,158	40,645	37,031	24,079
1993					
Brick (building or common and face)	6,655,387	1,668,215	1,896,280	1,799,341	1,291,551
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick	28,838	6,555	7,419	8,448	6,416
Structural clay tile (except facing)	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile	558,708	139,603	146,041	141,663	131,401
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches	345,568	88,928	87,590	88,048	81,002
Glazed floor and wall tile having a facial area 59 square inches or greater	91,642	23,185	23,319	23,040	22,098
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	'121,498	'27,490	35,132	30,575	28,301
Vitrified clay sewer pipe and fittings	135,894	31,247	38,817	37,722	28,108

See footnotes at end of table 15.

Table 15. Value of Shipments of Clay Construction Products: 1994 and 1993

Product description	Total	Fourth quarter	Third quarter	Second quarter	First quarter
1994					
Brick (building or common and face)	1,103,250	265,687	311,643	314,486	211,434
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick	15,025	³3,991	³4,028	³3,722	³3,284
Structural clay tile (except facing)	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile	722,553	173,591	186,162	185,019	177,781
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches	463,068	111,637	¹119,846	117,125	¹114,460
Glazed floor and wall tile having a facial area 59 square inches or greater	69,566	17,158	19,235	17,956	15,217
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	189,919	¹44,796	¹47,081	¹49,938	¹48,104
Vitrified clay sewer pipe and fittings	33,270	8,156	10,582	9,059	5,473
1993					
Brick (building or common and face)	989,935	246,561	284,944	268,630	189,800
Facing tile (structural) and ceramic glazed brick, including unglazed and salt brick	16,560	3,950	4,327	4,768	3,515
Structural clay tile (except facing)	(D)	(D)	(D)	(D)	(D)
Clay floor and wall tile, including quarry tile	686,682	174,061	178,060	173,558	161,003
Glazed floor and wall tile having a facial area greater than 6 and less than 59 square inches	429,607	110,575	109,077	108,346	101,609
Glazed floor and wall tile having a facial area 59 square inches or greater	78,292	19,507	19,932	20,063	18,790
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	178,783	43,979	49,051	45,149	40,604
Vitrified clay sewer pipe and fittings	32,499	7,335	9,506	9,237	6,421

D Data withheld to avoid disclosing figures for individual companies.

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

Table 16. Shipments, Exports, and Imports of Selected Clay Construction Products: 1994 and 1993

[Value in thousands of dollars]

Product description	Unit of measure	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Percent exports to manufacturers' shipments ¹	
		Quantity	Value (f.o.b. plant)	Quantity	Value (at port)	Quantity	Value ³
1994							
Brick (building or common and face)	Thousand brick.....	7,204,433	1,103,250	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.....	Thousand sq. meters...	53,007	722,553	(X)	23,520	(X)	3.3
Vitrified clay sewer pipe and fittings	Metric tons ..	122,315	33,270	2,891	2,217	2.4	6.7
1993							
Brick (building or common and face)	Thousand brick.....	6,655,387	989,935	42,643	7,205	0.6	0.7
Facing tile and structural clay tile .....	.....do.....	(D)	(D)	(X)	4,560	(X)	(D)
Clay floor and wall tile.....	Thousand sq. meters...	51,973	686,682	(X)	22,638	(X)	3.3
Vitrified clay sewer pipe and fittings	Metric tons ..	123,204	32,499	260	1,549	0.2	4.8
		Imports for consumption ⁴		Apparent consumption ⁶		Percent imports to apparent consumption	
		Quantity	Value ⁵	Quantity	Value ³	Quantity	Value
1994							
Brick (building or common and face)	Thousand brick.....	8,967	2,621	7,169,667	1,097,556	0.1	0.2
Facing tile and structural clay tile .....	.....do.....	(X)	1,882	(X)	(D)	(X)	(D)
Clay floor and wall tile.....	Thousand sq. meters...	66,072	613,034	(X)	1,312,067	(X)	46.7
Vitrified clay sewer pipe and fittings	Metric tons ..	830	1,170	120,254	32,223	0.7	3.6
1993							
Brick (building or common and face)	Thousand brick.....	10,170	2,085	6,622,914	984,815	0.2	0.2
Facing tile and structural clay tile .....	.....do.....	(X)	1,726	(X)	(D)	(X)	(D)
Clay floor and wall tile.....	Thousand sq. meters...	59,608	641,900	(X)	1,305,944	(X)	49.2
Vitrified clay sewer pipe and fittings	Metric tons ..	588	558	123,532	31,508	0.5	1.8

¹For 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.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Value calculations are based on the estimated producers' value of exports.

⁴Source: Bureau of the Census report IM146, *U.S. Imports for Consumption*.

⁵Represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States. Value does not include the U.S. import duties for 1994. Value does include the U.S. import duties for 1993.

⁶Apparent consumption is derived by subtracting exports from the total of shipments plus imports.

D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

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.

3.4 PLUMBING FIXTURES

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 177 companies.

Shipments of low consumption water closet bowls (1.6 or less g.p.f.) almost doubled, from 2.8 million in 1993 to 5.4 million in 1994. Bathtub shipments increased 9 percent, from 3.5 million in 1993 to 3.8 million in 1994.

Shipments of kitchen sinks increased 5 percent, from 4.8 million in 1993 to 5.0 million in 1994.

SUMMARY OF FINDINGS

Manufacturers' shipments of plumbing fixtures during 1994 were valued at \$2,923 million. This represents a 9-percent increase from the 1993 level of \$2,670 million.

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: 1990 to 1994

[Quantity in thousands of units]

Product description	1994	1993	1992	1991	1990
Lavatories	6,996	6,958	6,262	6,045	7,096
Vitreous china and other nonmetals	5,403	5,447	4,471	4,386	5,226
Cast iron (enameled)	(¹)	(¹)	489	501	635
Steel	1,593	1,512	1,302	1,158	1,235
Water closet bowls	9,685	8,845	8,682	8,064	8,311
Flush tanks	7,559	7,434	7,516	7,129	7,934
Kitchen sinks	5,034	4,810	4,505	4,132	4,491
Cast iron (enameled)	(NA)	(NA)	696	634	665
Steel and other materials	(NA)	(NA)	3,809	3,498	3,826
Cast-iron (enameled) and all other materials	(²)	(²)	(NA)	(NA)	(NA)
Steel	4,056	3,918	(NA)	(NA)	(NA)
Bathtubs	3,826	3,507	3,215	3,047	3,300
Cast iron (enameled)	(³)	(³)	1,301	365	421
Steel (enameled)	928	864	(⁴)	726	845
Plastic and all other materials	(³)	(³)	1,914	1,956	2,034
Plastic, fiberglass, and cultured marble	2,119	1,859	(NA)	(NA)	(NA)
Whirlpool baths	439	385	343	254	270

¹The data for "Lavatories, cast iron (enameled)" are included with "Lavatories, vitreous china and other nonmetals" to avoid disclosing figures for individual companies.

²The data for "Kitchen sinks, cast iron (enameled) and all other materials" are included with "Kitchen sinks, total" to avoid disclosing figures for individual companies.

³The data for "Bathtubs, cast iron (enameled)" and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing figures for individual companies.

⁴The data for "Bathtubs, steel (enameled)" are included with "Bathtubs, cast iron (enameled)" to avoid disclosing figures for individual companies.

NA Not available.

Table 18. Value of Shipments of Plumbing Fixtures, By Material: 1991 to 1994

[Value in thousands of dollars]

Product description	1994	1993	1992	1991
Total	2,922,732	2,670,165	2,514,555	2,311,147
Metal	567,329	578,455	585,191	545,054
Cast iron (enameled)	247,476	247,476	256,843	230,377
Steel and other metal	319,853	330,979	328,348	314,677
Vitreous china	842,460	843,388	785,633	726,392
Fiberglass	901,592	836,733	839,738	708,031
Gel coat	377,948	388,176	364,844	370,513
Acrylic	523,644	448,557	474,894	337,518
Plastics	254,781	271,509	237,489	196,981
Cultured marble	116,559	135,698	110,858	82,234
Other	138,222	135,811	126,631	114,747
All other materials, nonmetal ¹	356,570	140,080	66,504	134,689

¹Includes plumbing fixtures, n.s.k. (not specified by kind).

Table 19. Quantity of Shipments of Plumbing Fixtures: 1991 to 1994

[Quantity in thousands of units]

Quarter and year	Lavatories	Water closet bowls	Flush tanks	Kitchen sinks	Bathtubs	Whirlpool baths
1994						
Total	6,996	9,685	7,559	5,034	3,826	439
First quarter	1,713	2,275	1,801	1,258	893	101
Second quarter	1,743	2,504	1,915	1,327	964	110
Third quarter	1,828	2,470	1,934	1,233	1,003	120
Fourth quarter	1,711	2,436	1,909	1,216	966	108
1993						
Total	6,958	8,845	7,434	4,810	3,507	385
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
1992						
Total	6,262	8,682	7,516	4,505	3,215	343
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
1991						
Total	7,096	8,310	7,130	4,133	3,046	254
First quarter	1,452	1,950	1,727	988	655	59
Second quarter	1,530	2,069	1,790	1,080	787	66
Third quarter	1,611	2,156	1,918	1,081	846	68
Fourth quarter	1,451	1,890	1,695	984	758	61

Note: Detail may not add to totals due to independent rounding.

Table 20. Total Production and Shipments of Plumbing Fixtures: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1994			1993		
			Quantity produced	Shipments		Quantity produced	Shipments	
				Quantity	Value		Quantity	Value
	Plumbing fixtures	(NA)	(X)	(X)	2,922,732	(X)	(X)	2,670,165
	Drinking fountains ¹	(NA)	45,157	45,682	12,088	41,281	41,608	10,094
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	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
	Lavatories	(NA)	6,765,206	6,995,625	347,704	6,850,622	6,958,241	336,619
34310 17	Cast iron (enameled)	3	(²)	(²)	(²)	(²)	(²)	(²)
34310 18	Steel (enameled)	5	1,552,816	1,556,195	24,522	1,445,276	1,483,579	23,439
34310 19	Steel (stainless)	7	30,472	36,944	13,488	27,421	27,956	9,272
32610 17	Vitreous china	10	3,212,755	3,517,702	168,563	3,100,212	3,208,317	154,527
30880 04	Cultured marble	78	1,246,766	1,169,174	93,645	1,536,856	1,496,647	98,267
30880 31	Other plastics ²	7	721,809	715,610	47,486	740,864	741,742	51,114
19001 03	All other materials	1	(²)	(²)	(²)	(²)	(²)	(²)
	Water closet bowls (vitreous china) 1.6 or less g.p.f. low consumption (any material)	(NA)	10,076,278	9,684,691	525,978	8,729,949	8,844,903	461,622
	Flushometer	9	5,647,360	5,438,800	317,055	2,833,567	2,783,709	168,778
32610 21	One piece	9	545,836	517,804	36,541	498,436	504,431	36,244
32610 24	Close couple (for use with flush tank) ³	8	117,510	103,099	20,971	252,523	232,480	53,292
32610 27	All other materials	9	3,765,572	3,624,988	151,411	5,145,423	5,324,283	203,308
19001 04	Flush tanks (vitreous china)	5	(³)	(³)	(³)	(³)	(³)	(³)
32610 31	Urinals	9	8,436,347	7,558,978	254,221	7,310,273	7,433,654	229,602
	Metal	(NA)	245,615	265,184	24,849	249,469	251,625	24,299
34310 38	Vitreous china	7	1,108	1,317	770	2,770	2,906	1,226
32610 36	All other materials	9	244,507	263,867	24,079	246,699	248,719	23,073
	Kitchen sinks, not including bar sinks ⁴	(NA)	5,116,968	5,034,187	278,902	4,785,263	4,809,780	262,262
34310 41	Cast iron (enameled)	2	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
34310 42	Steel (enameled)	6	446,650	433,026	11,883	374,232	393,774	10,466
34310 47	Steel (stainless)	8	3,673,308	3,623,315	155,996	3,511,385	3,524,026	152,244
19001 07	All other materials	4	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
19001 08	Bar sinks (all materials)	17	346,951	342,561	17,219	333,617	338,451	16,530
	Wash sinks and service sinks, mop sinks, sink and laundry tray combinations, and laundry trays ⁵	(NA)	887,557	882,952	43,515	651,832	647,824	44,550
34310 54	Metal	7	42,512	42,665	12,902	38,726	39,428	11,325
30880 33	Plastics	5	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
32610 54	Vitreous china	4	8,390	8,786	2,662	9,468	9,860	2,908
32722 84	Concrete and all other materials	4	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
	Bathtubs, including wall surrounds when sold as combined units, not including whirlpool baths ⁶	(NA)	3,863,443	3,825,525	534,393	3,528,352	3,507,425	497,281
34310 61	Cast iron (enameled)	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
34310 62	Steel (enameled)	4	942,289	928,037	65,128	875,427	864,123	60,698
30880 12	Fiberglass (FRP) gel coat	33	1,959,476	1,963,620	307,534	1,759,585	1,693,683	266,713
30880 13	Fiberglass (FRP) acrylic	29	142,258	139,352	42,568	152,955	149,302	43,455
30880 14	Cultured marble	50	23,042	22,262	10,972	22,571	21,853	9,229
30880 15	Other plastics (PVC, ABS)	7	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
19001 09	All other materials	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
	Shower receptors, sold separately	(NA)	270,638	246,502	17,327	369,865	375,927	19,922
30886 55	Plastics	19	256,628	232,734	14,481	351,301	357,336	16,545
19001 10	All other materials	26	14,010	13,768	2,846	18,564	18,591	3,377
	Shower stalls, including receptor	(NA)	930,386	918,105	155,181	872,060	862,531	140,395
34310 74	Metal ⁷	1	89,159	88,886	21,350	5,319	5,192	2,605
30880 21	Fiberglass (FRP) gel coat	27	520,484	515,925	89,559	572,405	574,976	97,667
30880 22	Fiberglass (FRP) acrylic	16	215,333	208,509	37,272	206,634	194,217	32,781
30880 23	Other plastics	7	105,410	104,785	7,000	87,702	88,146	7,342
19001 11	All other materials	18	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
	Wall surrounds, sold as separate units	(NA)	1,049,129	1,040,738	57,282	891,642	892,450	53,626
30880 70	Showers (all materials)	43	387,570	386,645	25,522	314,608	315,041	21,448
30880 71	Bathtubs (all materials)	38	661,559	654,093	31,760	577,034	577,409	32,178
19222 08	Bidets (all materials)	8	47,153	59,549	6,480	60,425	61,940	7,019
	Whirlpool baths, not spas or hot tubs (noninstitutional)	(NA)	441,531	439,159	296,327	401,735	384,613	270,174
34310 86	Cast iron (enameled) ⁸	2	18,368	21,835	15,328	26,164	25,504	13,464
30880 26	Fiberglass (FRP) gel coat	22	36,209	36,213	23,193	34,213	30,874	18,704
30880 27	Fiberglass (FRP) acrylic	35	341,630	334,982	232,347	294,817	284,180	208,239
30880 28	Cultured marble	45	9,990	9,700	11,137	11,108	11,004	12,038
30886 29	Other plastics	6	35,334	36,429	17,320	35,433	33,051	17,729
19001 12	All other materials	3	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)

See footnotes at end of table.

Table 20. Total Production and Shipments of Plumbing Fixtures: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1994			1993		
			Quantity produced	Shipments		Quantity produced	Shipments	
				Quantity	Value		Quantity	Value
19001 13	Plumbing fixtures—Con. Hot tubs (noninstitutional, all materials) . .	1	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)
19001 15	Spas (noninstitutional, all materials) ⁹	28	138,041	137,507	302,504	129,658	125,186	257,546
	All other fixtures not described above. . . .	(NA)	(X)	(X)	48,762	(X)	(X)	38,624
30882 20	Plastic	6	(X)	(X)	(D)	(X)	(X)	(D)
19002 20	All other materials	9	(X)	(X)	(D)	(X)	(X)	(D)

¹The data for "Drinking fountains, metal," "Drinking fountains, vitreous china," and "Drinking fountains, all other materials" are combined to avoid disclosing figures for individual companies.

²The data for "Lavatories, cast iron (enameled)" and "Lavatories, all other materials" are included with "Lavatories, other plastics" to avoid disclosing figures for individual companies.

³The data for "Water closet bowls, all other materials" are included with "Water closet bowls, close couple" to avoid disclosing figures for individual companies.

⁴The data for "Kitchen sinks, cast iron (enameled)" and "Kitchen sinks, all other materials" are included with "Kitchen sinks, total" to avoid disclosing figures for individual companies.

⁵The data for "Wash sinks, plastics" and "Wash sinks, concrete and all other materials" are included with "Wash sinks, total" to avoid disclosing figures for individual companies.

⁶The data for "Bathtubs, cast iron (enameled)," "Bathtubs, other plastics," and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing figures for individual companies.

⁷The data for "Shower stalls, all other materials" are included with "Shower stalls, metal" to avoid disclosing figures for individual companies.

⁸The data for "Whirlpool baths, all other materials" are included with "Whirlpool baths, cast iron (enameled)" to avoid disclosing figures for individual companies.

⁹The data for "Hot tubs" are included with "Spas" to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. X Not applicable.

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Table 21. Production, Shipments,

[Quantity in units. Value

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	
1		Plumbing fixtures	(NA)	(X)	(X)	683,206	(X)	(X)	(X)	749,600	(X)
2		Drinking fountains ¹	(NA)	10,311	10,409	2,693	1,060	13,190	13,154	3,281	1,099
3	34310 15	Metal	5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
4	32610 12	Vitreous china	4	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
5	19001 02	All other materials	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
6		Lavatories	(NA)	1,722,589	1,713,404	83,341	641,109	1,724,582	1,742,772	87,417	711,768
7	34310 17	Cast iron (enameled)	3	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
8	34310 18	Steel (enameled)	5	381,296	389,476	6,337	86,090	386,474	379,146	6,008	93,131
9	34310 19	Steel (stainless)	7	^a 8,054	^a 9,141	^b 3,311	(²)	^a 6,683	^a 8,932	^b 3,250	(²)
10	32610 17	Vitreous china	10	824,809	861,952	40,156	403,606	820,072	875,742	42,344	433,721
11	30880 04	Cultured marble	78	316,678	277,909	21,991	91,464	323,332	293,568	23,436	120,801
12	30880 31	Other plastics ²	7	191,752	174,926	11,546	59,949	187,433	185,384	12,379	64,115
13	19001 03	All other materials	1	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
14		Water closet bowls (vitreous china)	(NA)	2,482,087	2,274,884	121,881	706,617	2,603,115	2,503,703	138,506	812,482
15	19002 02	1.6 or less g.p.f. low consumption (any material)	9	1,369,169	1,230,633	69,380	364,038	1,478,345	1,439,235	85,464	440,998
16	32610 21	Flushometer	9	128,532	122,481	8,458	29,973	128,085	119,836	8,375	32,518
17	32610 24	One piece	8	30,970	30,739	6,833	22,819	33,787	26,584	5,122	26,530
18	32610 27	Close couple (for use with flush tank) ³	9	953,416	891,031	37,210	289,787	962,898	918,048	39,545	312,436
19	19001 04	All other materials	5	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
20	32610 31	Flush tanks (vitreous china)	9	2,123,152	1,800,531	58,310	703,686	2,084,405	1,915,037	64,059	793,622
21		Urinals	(NA)	57,152	59,744	5,561	28,809	58,307	65,042	6,158	25,613
22	34310 38	Metal	7	294	314	186	(D)	285	323	188	(D)
23	32610 36	Vitreous china	9	56,858	59,430	5,375	(D)	58,022	64,719	5,970	(D)
24		Kitchen sinks, not including bar sinks ⁴	(NA)	1,312,902	1,257,945	67,417	210,593	1,347,206	1,326,797	71,386	216,589
25	34310 41	Cast iron (enameled)	2	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
26	34310 42	Steel (enameled)	6	114,647	114,710	3,131	21,928	109,707	105,984	2,887	23,748
27	34310 47	Steel (stainless)	8	926,393	910,657	38,260	(⁴)	984,659	971,277	39,477	(⁴)
28	19001 07	All other materials	4	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
29	19001 08	Bar sinks (all materials)	17	90,235	87,037	4,327	12,105	93,248	92,929	4,376	12,293
30		Wash sinks and service sinks, mop sinks, sink and laundry tray combinations, and laundry trays ⁵	(NA)	224,259	221,189	11,012	11,828	222,483	220,999	10,895	11,590
31	34310 54	Metal	7	12,714	10,963	3,334	(⁵)	10,996	11,133	3,307	(⁵)
32	30880 33	Plastics	5	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
33	32610 54	Vitreous china	4	1,858	2,141	642	1,579	1,727	1,889	575	1,382
34	32722 84	Concrete and all other materials	4	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
35		Bathtubs, including wall surrounds when sold as combined units, not including whirlpool baths ⁶	(NA)	942,239	892,910	123,956	181,864	969,718	963,866	134,565	182,842
36	34310 61	Cast iron (enameled)	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
37	34310 62	Steel (enameled)	4	224,693	221,961	15,857	42,278	234,117	230,251	16,226	46,274
38	30880 12	Fiberglass (FRP) gel coat	33	466,031	451,766	71,179	58,216	493,552	502,718	76,216	47,571
39	30880 13	Fiberglass (FRP) acrylic	29	36,379	34,978	10,472	4,446	34,730	33,215	10,667	4,709
40	30880 14	Cultured marble	50	^a 5,588	^a 5,401	2,677	(⁶)	^a 5,560	^a 5,322	2,630	(⁶)
41	30880 15	Other plastics (PVC, ABS)	7	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
42	19001 09	All other materials	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
43		Shower receptors, sold separately	(NA)	66,542	62,805	4,439	11,202	67,122	63,206	4,494	11,979
44	30886 55	Plastics	19	^b 62,670	^b 58,979	^b 3,674	^b 10,934	^b 63,168	^b 59,305	^b 3,716	^b 11,549
45	19001 10	All other materials	26	^a 3,872	^a 3,826	765	268	^a 3,954	^a 3,901	778	430
46		Shower stalls, including receptor	(NA)	238,307	231,155	38,243	25,673	234,085	229,943	38,919	24,694
47	34310 74	Metal ⁷	1	22,314	22,254	5,360	10,488	22,308	22,222	5,336	11,263
48	30880 21	Fiberglass (FRP) gel coat	27	135,472	132,562	23,019	11,427	135,895	135,266	23,457	9,732
49	30880 22	Fiberglass (FRP) acrylic	16	54,446	50,345	8,130	^a 3,758	49,394	46,048	8,359	^a 3,606
50	30880 23	Other plastics	7	^a 26,075	^a 25,994	1,734	(⁷)	^a 26,488	^a 26,407	1,767	(⁷)
51	19001 11	All other materials	18	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
52		Wall surrounds, sold as separate units	(NA)	281,687	280,281	15,392	31,828	272,323	271,537	14,860	31,639
53	30880 70	Showers (all materials)	43	99,626	98,879	6,540	8,721	102,262	101,435	6,663	8,726
54	30880 71	Bathtubs (all materials)	38	^a 182,061	^a 181,402	8,852	^a 23,107	^a 170,061	^a 170,102	8,197	^a 22,913
55	19222 08	Bidets (all materials)	8	13,827	15,620	1,711	9,967	11,042	14,722	1,608	8,665

See footnotes at end of table.

and Stocks of Plumbing Fixtures: 1994

in thousands of dollars]

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)	759,457	(X)	(X)	(X)	730,469	(X)	1
12,591	12,970	3,446	697	9,065	9,149	2,668	638	2
(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	3
(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	4
(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	5
1,689,888	1,827,959	92,108	593,910	1,628,147	1,711,490	84,838	589,247	6
(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	7
397,099	416,461	6,452	73,482	387,947	371,112	5,725	90,030	8
^a 8,434	^a 10,515	^b 3,992	(²)	^a 7,301	^a 8,356	^b 2,935	(²)	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
165,768	182,001	12,123	49,647	176,856	173,299	11,438	56,221	12
(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	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
986,410	922,806	37,718	343,479	862,848	893,103	36,938	285,439	18
(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	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
1,221,171	1,233,078	70,197	189,439	1,235,689	1,216,367	69,902	193,526	24
(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	25
111,717	110,142	2,966	23,420	110,579	102,190	2,899	29,908	26
872,551	861,957	39,388	(⁴)	889,705	879,424	38,871	(⁴)	27
(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	28
80,071	79,165	4,288	13,064	83,397	83,430	4,228	12,901	29
220,182	220,466	10,780	10,077	220,633	220,298	10,828	9,879	30
9,127	10,336	3,108	(⁵)	9,675	10,233	3,153	(⁵)	31
(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	32
1,939	2,320	707	1,078	2,866	2,436	738	1,439	33
(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	34
972,043	1,002,841	140,405	147,460	979,443	965,908	135,467	161,670	35
(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	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
^a 5,504	^a 5,401	2,691	(⁶)	^a 6,390	^a 6,138	2,974	(⁶)	40
(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	41
(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	42
64,895	59,489	4,125	17,037	72,079	61,002	4,269	27,520	43
^b 61,782	^b 56,666	^b 3,507	^b 16,401	^b 69,008	^b 57,784	^b 3,584	^b 27,371	44
^a 3,113	^a 2,823	618	636	^a 3,071	^a 3,218	685	149	45
234,249	234,347	40,383	24,018	223,745	222,660	37,636	24,472	46
22,292	22,214	5,330	10,928	22,245	22,196	5,324	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	^a 3,101	56,456	56,364	9,947	^a 3,496	49
^a 26,382	^a 26,186	1,751	(⁷)	^a 26,465	^a 26,198	1,748	(⁷)	50
(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	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
^a 158,304	^a 159,705	7,740	^a 21,022	^a 151,133	^a 142,884	6,971	^a 28,647	54
10,552	15,403	1,660	6,801	11,732	13,804	1,501	7,263	55

Table 21. Production, Shipments,

[Quantity in units. Value

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)	103,034	100,884	68,073	21,224	112,617	109,917	74,834	21,603
57	34310 86	Cast iron (enameled) ⁸	2	4,579	6,451	3,066	769	4,776	5,220	6,177	823
58	30880 26	Fiberglass (FRP) gel coat	22	8,797	8,562	5,543	1,896	9,553	8,845	5,833	2,000
59	30880 27	Fiberglass (FRP) acrylic	35	81,466	76,045	53,573	17,240	86,812	83,879	58,543	17,963
60	30880 28	Cultured marble	45	2,308	2,290	2,557	⁹ 1,319	2,364	2,344	2,621	⁹ 817
61	30886 29	Other plastics	6	5,884	7,536	3,334	(⁸)	9,112	9,629	4,658	(⁸)
62	19001 12	All other materials	3	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)
63	19001 13	Hot tubs (noninstitutional, all materials)	1	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)
64	19001 15	Spas (noninstitutional, all materials) ¹⁰	28	32,174	30,210	64,448	6,385	36,522	37,497	82,260	5,713
65		All other fixtures not described above	(NA)	(X)	(X)	12,402	(X)	(X)	(X)	11,982	(X)
66	30882 20	Plastic	6	(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)
67	19002 20	All other materials	9	(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)

¹The data for "Drinking fountains, metal," "Drinking fountains, vitreous china," and "Drinking fountains, all other materials" are combined to avoid disclosing figures for individual companies.

²The data for "Lavatories, cast iron (enameled)," and "Lavatories, all other materials," are included with "Lavatories, other plastics" to avoid disclosing figures for individual companies.

³The data for "Water closet bowls, all other materials" are included with "Water closet bowls, close couple" to avoid disclosing figures for individual companies.

⁴The data for "Kitchen sinks, cast iron (enameled)" and "Kitchen sinks, all other materials" are included with "Kitchen sinks, total" to avoid disclosing figures for individual companies. Stocks, end of quarter, for "Kitchen sinks, steel (stainless)" also are included with "Kitchen sinks, total" to avoid disclosing figures for individual companies.

⁵The data for "Wash sinks, plastics" and "Wash sinks, concrete and all other materials" are included with "Wash sinks, total" to avoid disclosing figures for individual companies. Stocks, end of quarter, for "Wash sinks, metal" also are included with "Wash sinks, total" to avoid disclosing figures for individual companies.

⁶The data for "Bathtubs, cast iron (enameled)," "Bathtubs, other plastics," and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing figures for individual companies.

⁷The data for "Shower stalls, all other materials" are included with "Shower stalls, metal" to avoid disclosing figures for individual companies. Stocks, end of quarter, for "Shower stalls, other plastics" also are included with "Shower stalls, metal" to avoid disclosing figures for individual companies.

⁸The data for "Whirlpool baths, all other materials" are included with "Whirlpool baths, cast iron (enameled)" to avoid disclosing figures for individual companies.

⁹Stocks, end of quarter, for "Whirlpool baths, other plastics" are included with "Whirlpool baths, cultured marble" to avoid disclosing figures for individual companies.

¹⁰The data for "Hot tubs" are included with "Spas" to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. X Not applicable.

Note: The 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): ^a25 to 50 percent of this item is estimated. ^bOver 50 percent of this item is estimated.

and Stocks of Plumbing Fixtures: 1994—Con.

in thousands of dollars]

Quantity produced	Third quarter			Fourth quarter				Line no.
	Shipments		Stocks, end of quarter	Quantity produced	Shipments		Stocks, end of quarter	
	Quantity	Value			Quantity	Value		
116,038	120,018	81,203	17,468	109,842	108,340	72,217	19,283	56
4,452	5,117	3,049	666	4,561	5,047	3,036	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	⁹ 2,089	2,961	2,729	3,357	⁹ 1,873	60
11,306	9,941	4,880	⁽⁸⁾	9,032	9,323	4,448	⁽⁸⁾	61
⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	62
⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	63
36,784	37,408	82,774	5,502	32,561	32,392	73,022	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 22. Production, Shipments,

[Quantity in units. Value

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	
1		Plumbing fixtures	(NA)	(X)	(X)	641,376	(X)	(X)	(X)	661,362	(X)
2		Drinking fountains ¹	(NA)	8,854	8,752	1,996	1,248	10,549	10,778	2,336	998
3	34310 15	Metal	5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
4	32610 12	Vitreous china	4	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
5	19001 02	All other materials	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
6		Lavatories	(NA)	1,761,050	1,771,875	85,536	610,354	1,810,196	1,795,227	85,589	639,473
7	34310 17	Cast iron (enameled)	2	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
8	34310 18	Steel (enameled)	5	^a 355,554	^a 359,079	^a 5,876	^a 71,180	^a 367,477	^a 387,715	^b 6,080	^a 62,279
9	34310 19	Steel (stainless)	6	^a 7,503	^a 7,065	^b 2,250		^a 6,683	^a 6,780	^b 2,193	(²)
10	32610 17	Vitreous china	10	778,028	786,086	37,565	^c 382,797	822,692	815,553	39,197	^c 400,698
11	30880 04	Cultured marble	79	424,478	430,897	^c 26,681	92,391	431,086	^c 407,828	25,887	110,012
12	30880 31	Other plastics ²	8	^c 195,487	^c 188,748	^c 13,164	^c 63,986	^c 182,265	^c 177,351	^c 12,232	^c 66,484
13	19001 03	All other materials	1	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
14		Water closet bowls (vitreous china)	(NA)	2,162,065	2,171,840	113,805	638,151	2,237,651	2,110,043	109,979	723,414
15	19002 02	1.6 or less g.p.f. low consumption (any material)	9	566,829	526,482	32,467	189,365	586,739	624,587	38,445	153,379
16	32610 21	Flushometer	9	129,738	131,712	9,276	^a 48,945	122,336	122,705	8,920	^a 48,032
17	32610 24	One piece	8	^a 74,928	^a 67,249	^a 15,714	^a 41,329	^a 76,601	^a 57,924	^a 12,976	^a 57,178
18	32610 27	Close couple (for use with flush tank) ³	9	1,390,570	1,446,397	56,348	^c 358,512	1,451,975	^c 1,304,827	^c 49,638	^c 464,825
19	19001 04	All other materials	5	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
20	32610 31	Flush tanks (vitreous china)	9	1,888,633	1,798,698	54,038	^c 557,754	1,834,074	1,794,579	55,705	^c 691,675
21		Urinals	(NA)	58,813	61,181	5,996	^c 30,025	57,820	59,708	5,737	^c 28,372
22	34310 38	Metal	7	700	758	318	(D)	827	782	328	(D)
23	32610 36	Vitreous china	9	58,113	60,423	5,678	(D)	56,993	58,926	5,409	(D)
24		Kitchen sinks, not including bar sinks ⁴	(NA)	1,180,942	1,165,743	66,723	259,232	1,209,198	1,211,634	63,813	263,455
25	34310 41	Cast iron (enameled)	2	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
26	34310 42	Steel (enameled)	6	^a 84,925	^a 90,771	^a 2,407	^a 20,288	^a 104,006	^a 106,633	^a 2,909	^a 21,971
27	34310 47	Steel (stainless)	9	^a 856,842	^a 852,034	^a 39,676	^a	^a 889,014	^a 896,163	^a 37,994	^a
28	19001 07	All other materials	3	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
29	19001 08	Bar sinks (all materials)	15	^a 83,500	^a 84,409	4,031	10,977	83,229	83,364	4,056	11,497
30		Wash sinks and service sinks, mop sinks, sink and laundry tray combinations, and laundry trays ⁵	(NA)	163,135	161,377	11,069	9,865	162,588	161,354	11,080	10,132
31	34310 54	Metal	7	^b 9,274	^b 9,244	^b 2,784	^b	^b 9,879	^b 9,370	^b 2,757	^b
32	30880 33	Plastics	5	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
33	32610 54	Vitreous china	4	3,179	2,370	678	3,008	2,478	2,672	813	2,800
34	32722 84	Concrete and all other materials	4	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
35		Bathtubs, including wall surrounds when sold as combined units, not including whirlpool baths ⁶	(NA)	865,861	843,626	119,986	123,851	895,043	886,473	125,370	127,341
36	34310 61	Cast iron (enameled)	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
37	34310 62	Steel (enameled)	4	^a 206,030	^a 204,108	^a 14,874	^a 26,161	^a 219,058	^a 220,090	^a 15,284	^a 25,329
38	30880 12	Fiberglass (FRP) gel coat	34	405,138	395,918	62,674	40,055	444,051	437,285	69,184	43,966
39	30880 13	Fiberglass (FRP) acrylic	31	^a 35,868	^a 34,501	^a 9,480	^a 5,495	^a 37,228	^a 36,113	^a 10,583	^a 4,706
40	30880 14	Cultured marble	47	5,650	5,472	^b 2,306	^b	^b 5,646	^b 5,483	^b 2,320	^b
41	30880 15	Other plastics (PVC, ABS)	8	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
42	19001 09	All other materials	1	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
43		Shower receptors, sold separately	(NA)	91,549	92,793	4,857	10,889	94,926	95,693	5,020	9,370
44	30886 55	Plastics	20	^a 87,031	^a 88,326	^a 4,073	10,141	^a 89,810	^a 90,940	^a 4,188	8,960
45	19001 10	All other materials	25	^a 4,518	^b 4,467	^b 784	^b 748	^a 5,116	^b 4,753	^b 832	^b 410
46		Shower stalls, including receptor	(NA)	201,344	199,273	31,026	21,376	199,960	198,955	32,306	22,138
47	34310 74	Metal ⁷	1	1,296	1,284	645	8,876	1,302	1,340	670	9,522
48	30880 21	Fiberglass (FRP) gel coat	25	^c 123,593	^c 124,421	^c 21,123	^c 9,081	^c 131,301	^c 131,615	^c 22,161	^c 9,808
49	30880 22	Fiberglass (FRP) acrylic	15	53,501	50,503	^c 7,360	3,419	44,889	43,421	7,603	2,806
50	30880 23	Other plastics	14	22,954	23,065	1,898	(⁷)	22,468	22,579	1,872	(⁷)
51	19001 11	All other materials	16	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
52		Wall surrounds, sold as separate units	(NA)	222,844	222,837	13,924	26,347	220,047	219,551	13,357	27,462
53	30880 70	Showers (all materials)	40	79,922	79,770	^c 5,429	^c 6,509	78,321	78,471	^c 5,360	^c 6,486
54	30880 71	Bathtubs (all materials)	35	^c 142,922	^c 143,067	^c 8,495	19,838	141,726	141,080	7,997	20,976
55	19222 08	Bidets (all materials)	8	15,878	16,324	1,729	10,435	15,204	14,442	1,703	^c 11,623

See footnotes at end of table.

and Stocks of Plumbing Fixtures: 1993

in thousands of dollars]

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)	683,200	(X)	(X)	(X)	684,227	(X)	1
12,179	12,364	3,213	817	9,699	9,714	2,549	826	2
(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	3
(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	4
(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	5
1,675,643	1,716,463	82,669	533,454	1,603,733	1,674,676	82,825	551,069	6
(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	7
'367,586	'366,741	'5,712	'74,461	'354,659	'370,044	'5,771	'70,413	8
^a 6,186	^a 6,464	^b 2,128	(²)	^a 7,049	^a 7,647	^b 2,701	(²)	9
730,782	785,772	37,451	'346,949	768,710	820,906	'40,314	'372,890	10
'397,551	373,463	'24,943	'56,495	'283,741	'284,459	'20,756	55,140	11
173,538	184,023	12,435	55,549	189,574	191,620	13,283	52,626	12
(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	13
2,098,494	2,238,989	113,654	614,558	2,231,739	2,324,031	124,184	585,731	14
732,686	702,863	40,817	189,660	947,313	929,777	57,049	254,069	15
111,053	'114,304	8,690	'41,351	135,309	135,710	9,358	'34,057	16
^a 60,271	^a 59,106	'13,371	^a 53,222	^a 40,723	^a 48,201	'11,231	^a 29,237	17
1,194,484	'1,362,716	'50,776	'330,325	'1,108,394	'1,210,343	'46,546	'268,368	18
(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	19
1,765,099	1,943,839	60,125	'525,246	1,822,467	1,896,538	59,734	'447,747	20
60,222	63,864	6,209	25,143	72,614	66,872	6,357	'25,753	21
747	925	356	(D)	'496	'441	224	(D)	22
59,475	62,939	5,853	(D)	72,118	66,431	6,133	(D)	23
1,175,334	1,204,783	64,127	163,484	1,219,789	1,227,620	67,599	161,392	24
(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	25
'94,374	'98,941	'2,574	'21,714	'90,927	'97,429	'2,576	'19,522	26
883,333	888,165	37,518	(⁴)	882,196	887,664	37,056	(⁴)	27
(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	28
83,660	85,394	4,187	10,739	'83,228	85,284	4,256	9,767	29
161,025	161,471	10,925	8,762	165,084	163,622	11,476	8,399	30
'8,719	'9,829	'2,750	(⁵)	'10,854	'10,985	'3,034	(⁵)	31
(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	32
1,814	2,069	609	2,587	1,997	2,749	808	1,913	33
(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	34
912,201	914,122	128,655	119,151	855,247	863,204	123,270	129,963	35
(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	36
'224,228	'222,553	'15,459	'27,204	'226,111	'217,372	'15,081	'36,143	37
466,345	465,196	72,542	43,351	'444,051	395,284	'62,313	45,212	38
40,026	38,817	11,495	'5,445	'39,833	'39,871	11,897	5,180	39
'5,759	'5,551	'2,332	(⁶)	'5,516	'5,347	'2,271	(⁶)	40
(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	41
(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	42
92,888	94,012	4,979	8,356	90,502	93,429	5,066	6,108	43
^a 88,342	^a 89,474	^a 4,177	7,820	^a 86,118	^a 88,596	^a 4,107	'5,801	44
^a 4,546	^b 4,538	^b 802	^b 536	^a 4,384	^b 4,833	^b 959	^b 307	45
214,050	211,207	34,923	20,147	256,706	253,096	42,140	20,231	46
1,375	1,293	651	8,894	1,346	1,275	639	9,106	47
'134,298	'135,301	'23,532	8,551	183,213	183,639	30,851	8,140	48
55,915	52,040	8,872	2,702	'52,329	'48,253	'8,946	'2,985	49
22,462	22,573	1,868	(⁷)	'19,818	'19,929	1,704	(⁷)	50
(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	51
218,403	219,316	13,373	26,915	230,348	230,746	12,972	29,628	52
77,669	77,872	'5,318	'6,411	'78,696	'78,928	'5,341	'6,510	53
'140,734	'141,444	'8,055	20,504	'151,652	'151,818	7,631	23,118	54
12,975	15,246	1,695	'10,134	16,368	15,928	1,892	'11,175	55

Table 22. Production, Shipments,

[Quantity in units. Value

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)	92,020	87,241	61,801	16,328	98,497	94,505	67,504	17,651
57	34310 86	Cast iron (enameled) ⁸	2	5,988	6,046	3,598	773	6,294	6,289	3,376	743
58	30880 26	Fiberglass (FRP) gel coat	22	'8,270	7,433	4,321	'2,169	'8,148	7,449	4,624	2,480
59	30880 27	Fiberglass (FRP) acrylic	34	65,458	63,105	46,554	'10,182	72,845	69,539	52,008	11,184
60	30880 28	Cultured marble	43	'2,715	^a '2,700	^a '2,948	^r ⁹ '3,204	^a '2,779	^a '2,776	^a '3,044	⁹ '3,244
61	30886 29	Other plastics	7	'3,936	'3,936	'355	⁽⁹⁾	'4,330	'4,332	'405	⁽⁹⁾
62	19001 12	All other materials	4	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾
63	19001 13	Hot tubs (noninstitutional, all materials)	1	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾
64	19001 15	Spas (noninstitutional, all materials) ¹⁰	27	^a '28,581	^a '27,341	^a '54,992	^a '4,699	^a '35,663	^a '32,387	^a 68,048	^a '4,134
65		All other fixtures not described above	(NA)	(X)	(X)	'9,867	(X)	(X)	(X)	'9,759	(X)
66	30882 20	Plastic	6	(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)
67	19002 20	All other materials	8	(X)	(X)	(D)	(X)	(X)	(X)	(D)	(X)

¹The data for "Drinking fountains, metal," "Drinking fountains, vitreous china," and "Drinking fountains, all other materials" are combined to avoid disclosing figures for individual companies.

²The data for "Lavatories, cast iron (enameled)" and "Lavatories, all other materials" are included with "Lavatories, other plastics" to avoid disclosing figures for individual companies.

³The data for "Water closet bowls, all other materials" are included with "Water closet bowls, close couple" to avoid disclosing figures for individual companies.

⁴The data for "Kitchen sinks, cast iron (enameled)" and "Kitchen sinks, all other materials" are included with "Kitchen sinks, total" to avoid disclosing figures for individual companies. Stocks, end of quarter, for "Kitchen sinks, steel (stainless)" also are included with "Kitchen sinks, total" to avoid disclosing figures for individual companies.

⁵The data for "Wash sinks, plastics" and "Wash sinks, concrete and all other materials" are included with "Wash sinks, total" to avoid disclosing figures for individual companies. Stocks, end of quarter, for "Wash sinks, metal" also are included with "Wash sinks, total" to avoid disclosing figures for individual companies.

⁶The data for "Bathtubs, cast iron (enameled)," "Bathtubs, other plastics," and "Bathtubs, all other materials" are included with "Bathtubs, total" to avoid disclosing figures for individual companies.

⁷The data for "Shower stalls, all other materials" are included with "Shower stalls, metal" to avoid disclosing figures for individual companies. Stocks, end of quarter, for "Shower stalls, other plastics" also are included with "Shower stalls, metal" to avoid disclosing figures for individual companies.

⁸The data for "Whirlpool baths, all other materials" are included with "Whirlpool baths, cast iron (enameled)" to avoid disclosing figures for individual companies.

⁹Stocks, end of quarter, for "Whirlpool baths, other plastics" are included with "Whirlpool baths, cultured marble" to avoid disclosing figures for individual companies.

¹⁰The data for "Hot tubs" are included with "Spas" to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. ^rRevised by 5 percent or more from previously published figures.
NA Not available. X Not applicable.

Note: The 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): ⁹25 to 50 percent of this item is estimated. ^bOver 50 percent of this item is estimated.

and Stocks of Plumbing Fixtures: 1993—Con.

in thousands of dollars]

Quantity produced	Third quarter			Fourth quarter			Stocks, end of quarter	Line no.
	Shipments		Stocks, end of quarter	Shipments		Stocks, end of quarter		
	Quantity	Value		Quantity	Value			
105,224	100,839	72,412	18,441	105,994	102,028	68,457	18,152	56
6,934	6,567	3,203	1,077	6,948	6,602	3,287	1,380	57
'8,931	'8,039	4,896	'2,271	8,864	7,953	4,863	'2,157	58
78,242	75,065	'56,769	12,037	'78,272	'76,471	'52,908	10,744	59
^a '2,855	^a '2,809	^a '3,079	^a '3,056	^a '7,759	^a '2,719	^a '2,967	^a '3,871	60
'5,114	'4,762	'427	⁽⁹⁾	9,151	8,283	4,432	⁽⁹⁾	61
⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	62
⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	63
^a '34,635	^a '34,431	^a '72,480	^a '4,004	^a '30,779	^a '31,027	^a '62,026	^a '3,328	64
(X)	(X)	'9,574	(X)	(X)	(X)	'9,424	(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: 1994 and 1993

[Value in thousands of dollars]

Product code ¹	Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise ^{1 2} (value at port)	Value of imports for consumption ^{1 3 4}	Apparent consumption ⁵
1994					
32610 pt.	Plumbing fixtures	2,566,162	178,078	248,488	2,636,572
34310 pt.	Vitreous.....	842,460	64,697	75,828	853,591
30880 pt.	Metal.....	567,329	74,970	116,671	609,030
	Plastics and fiberglass.....	1,156,373	38,411	55,989	1,173,951
1993					
32610 pt.	Plumbing fixtures	2,530,085	150,842	145,996	2,525,239
34310 pt.	Vitreous.....	843,388	64,235	97,624	876,777
30880 pt.	Metal.....	578,455	42,340	⁶ 12,301	536,115
	Plastics and fiberglass.....	1,108,242	44,267	48,372	1,112,347

¹For 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.

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

³Source: Bureau of the Census report IM 145, *U.S. Imports for Consumption*.

⁴This 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.

⁵Apparent consumption is derived by subtracting exports from the total of manufacturers' shipments plus imports.

⁶This figure does not include "Other sanitary fixtures, of metal."

pt. Part.

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 Annette Ralston, 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 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. Excluded from this section are the synthetic organic chemicals for which data are published by the U.S. International Trade Commission.

4.1 INORGANIC CHEMICALS AND FERTILIZER MATERIALS AND RELATED PRODUCTS

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 (CIRs) 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 1994 and 1993 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 \$2,280.7 million in 1994, a less than 1 percent increase from the 1993 level of \$2,278.2 million. Value of shipments of chlorine (SIC 28121) increased 54 percent to \$839.6 million in 1994, from \$546.1 million in 1993. Value of shipments of sodium hydroxide (SIC 28123) decreased 23 percent to \$1,053.2 million in 1994, from \$1,369.9 million in 1993. Value of shipments of other alkalis (SIC 28125) had a relatively modest increase of 7 percent to \$381.1 million in 1994, from \$355.4 million in 1993.

The unit price of liquid sodium hydroxide (SIC 28123 61, 28123 65) decreased 26 percent to \$97.19 per short ton in 1994, from \$130.55 per short ton in 1993. The unit price of dry sodium hydroxide (SIC 28123 67) decreased 5 percent to \$392.43 per short ton in 1994, from \$411.85 in 1993.

Titanium dioxide (SIC 28161) production increased 3 percent to 2,318.1 thousand short tons in 1994, from 2,253.1 thousand short tons in 1993. The unit price decreased 6 percent to \$1,658.34 per short ton in 1994, from \$1,767.43 per short ton in 1993.

Shipments of inorganic chemicals, n.e.c. (SIC 2819), increased 5 percent, from the 1993 total of \$11,860.3 million to \$12,442.4 million in 1994. Leading the industry in shipments were potassium and sodium compounds (SIC 28197), which decreased 1 percent, from \$1,884.3 million in 1993 to \$1,866.4 million in 1994; and other inorganic chemicals, n.e.c. (SIC 28199), with \$6,466.9 million in shipments in 1994, a 10 percent increase from 1993 shipments of \$5,883.2 million.

United States production of sulfuric acid (SIC 28193) totaled 44,813.0 thousand short tons (100 percent H₂SO₄

in 1994, approximately 11.1 percent above the figure of 39,838.5 thousand short tons for 1993. Value of shipments (including interplant transfers) amounted to \$487.5 million in 1994, compared with the value of \$515.9 million for 1993. The average unit price of sulfuric acid (SIC 28193) was \$40.91 per short ton in 1994. This is a decrease of 9.9 percent, from the average unit price of \$45.41 per short ton in 1993.

Value of shipments of synthetic ammonia, nitric acid, and ammonium compounds (SIC 28731) increased 17.9 percent to \$3,319.7 million in 1994, from the 1993 level of \$2,816.2 million. Shipments of urea (SIC 28732) increased 4.4 percent to \$657.2 million in 1994, and shipments of phosphoric acid increased 11.9 percent to \$1,084.6.

Production of superphosphate and other phosphatic fertilizer materials (100% P₂O₅) (SIC 28742) increased 13.9 percent to 10,023.9 thousand short tons for 1994. The value of shipments amounted to \$2,830.4 million in 1994, compared with the value of \$2,057.3 million in 1993.

Table 1. **Summary of Production and Shipments of Inorganic Chemicals and Fertilizer Materials: 1990 to 1994**

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	Year	Total production (quantity)	Total shipments including interplant transfers	
				Quantity	Value
2812- —	Alkalies and chlorine	1994	(X)	(X)	12,280,701
		1993	(X)	(X)	12,278,203
		1992	(X)	(X)	12,760,736
		1991	(X)	(X)	13,028,742
		1990	(X)	(X)	13,187,043
28121 —	Chlorine (100% Cl)	1994	(X)	(X)	839,607
		1993	(X)	(X)	546,061
		1992	(X)	(X)	194,472
		1991	(X)	(X)	259,682
		1990	(X)	(X)	477,885
28123 —	Sodium hydroxide (caustic soda)	1994	(X)	(X)	1,053,164
		1993	(X)	(X)	1,369,924
		1992	(X)	(X)	2,206,304
		1991	(X)	(X)	2,386,971
		1990	(X)	(X)	2,340,826
28125 —	Other alkalies	1994	(X)	(X)	381,072
		1993	(X)	(X)	355,383
		1992	(X)	(X)	353,239
		1991	(X)	(X)	375,020
		1990	(X)	(X)	361,029
28120 00	Alkalies and chlorine, n.s.k.	1994	(X)	(X)	16,858
		1993	(X)	(X)	16,835
		1992	(X)	(X)	16,721
		1991	(X)	(X)	17,069
		1990	(X)	(X)	17,303
2816- —	Inorganic color pigments	1994	(X)	(X)	2,470,873
		1993	(X)	(X)	2,390,828
		1992	(X)	(X)	2,427,827
		1991	(X)	(X)	2,064,626
		1990	(X)	(X)	2,260,890
28161 00	Titanium dioxide (composite and pure) (commodity weight)	1994	1,379,884	1,397,850	2,318,113
		1993	1,279,308	1,274,802	2,253,117
		1992	1,253,368	1,240,603	2,316,352
		1991	1,094,915	1,080,866	1,948,664
		1990	1,077,373	1,095,642	2,131,204

See footnotes at end of table.

Table 1. **Summary of Production and Shipments of Inorganic Chemicals and Fertilizer Materials: 1990 to 1994—Con.**

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	Year	Total production (quantity)	Total shipments including interplant transfers	
				Quantity	Value
2819- —	Inorganic chemicals, n.e.c.....	1994	(X)	(X)	¹ 12,442,449
		1993	(X)	(X)	¹ 11,860,287
		1992	(X)	(X)	¹ 12,838,421
		1991	(X)	(X)	¹ 12,816,734
		1990	(X)	(X)	¹ 13,611,974
28194 —	Inorganic acids (except nitric, phosphoric, and sulfuric).....	1994	(X)	(X)	578,080
		1993	(X)	(X)	¹ 505,584
		1992	(X)	(X)	504,673
		1991	(X)	(X)	559,292
		1990	(X)	(X)	603,161
28195 00	Aluminum oxide (except natural alumina).....	1994	4,469,989	4,484,002	812,863
		1993	4,953,668	4,898,361	920,358
		1992	4,916,016	4,927,383	947,499
		1991	5,094,253	5,085,357	1,080,771
		1990	5,292,548	5,274,413	1,498,512
28196 —	Aluminum compounds.....	1994	(X)	(X)	597,918
		1993	(X)	(X)	573,884
		1992	(X)	(X)	595,235
		1991	(X)	(X)	661,769
		1990	(X)	(X)	665,212
28197 —	Potassium and sodium compounds (except bleaches, alkalis, and alums).....	1994	(X)	(X)	1,866,416
		1993	(X)	(X)	1,884,284
		1992	(X)	(X)	1,931,851
		1991	(X)	(X)	1,891,469
		1990	(X)	(X)	1,956,277
28198 00	Chemical catalytic preparations.....	1994	(X)	(X)	1,421,715
		1993	(X)	(X)	1,380,261
		1992	(X)	(X)	1,349,520
		1991	(X)	(X)	1,238,045
		1990	(X)	(X)	1,220,979
28199 —	Other inorganic chemicals, n.e.c.....	1994	(X)	(X)	6,466,930
		1993	(X)	(X)	5,883,226
		1992	(X)	(X)	6,532,519
		1991	(X)	(X)	6,566,961
		1990	(X)	(X)	6,846,431
28190 00	Industrial inorganic chemicals, n.s.k.....	1994	(X)	(X)	¹ 211,062
		1993	(X)	(X)	¹ 196,750
		1992	(X)	(X)	¹ 219,614
		1991	(X)	(X)	¹ 231,848
		1990	(X)	(X)	¹ 232,039
28422 00	Household bleaching compounds.....	1994	312,909	305,721	949,985
		1993	¹ 262,595	¹ 270,164	¹ 914,778
		1992	372,648	364,071	919,776
		1991	421,966	418,331	826,231
		1990	359,448	356,154	723,976
28731 31	Ammonia, synthetic anhydrous ²	1994	17,256.4	10,410.5	1,509.3
		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
		1990	17,003.3	10,381.6	1,072.1
28731 50	Ammonium nitrate, original solution ³	1994	8,516.6	(X)	(X)
		1993	8,280.9	(X)	(X)
		1992	7,980.6	(X)	(X)
		1991	7,819.2	(X)	(X)
		1990	7,713.7	(X)	(X)
28731 57	Ammonium sulfate ²	1994	2,587.8	2,488.6	164.5
		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
		1990	2,519.0	2,528.7	130.1

See footnotes at end of table.

Table 1. **Summary of Production and Shipments of Inorganic Chemicals and Fertilizer Materials: 1990 to 1994—Con.**

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	Year	Total production (quantity)	Total shipments including interplant transfers	
				Quantity	Value
28732 —	Urea (100%)	1994	7,952.1	5,098.5	657.2
		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
		1990	8,216.8	5,361.8	639.5
28731 11	Nitric acid (100%)	1994	8,611.1	964.3	118.3
		1993	8,253.9	678.0	88.5
		1992	8,136.0	672.0	85.4
		1991	7,926.6	623.1	81.8
		1990	7,931.0	647.4	80.6
28741 81, 85	Phosphoric acid (100% P ₂ O ₅)	1994	12,792.2	4,227.9	1,084.6
		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
		1990	12,034.5	4,169.7	1,226.3
28193 —	Sulfuric acid, gross (100%)	1994	44,813.0	11,916.4	487.5
		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
		1990	44,336.9	11,878.6	589.4
28742 —	Superphosphates and other fertilizer materials (100% P ₂ O ₅)	1994	10,023.9	9,972.6	2,830.4
		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
		1990	8,981.5	9,015.8	2,711.2

¹Totals include values for industrial inorganic chemicals not specified by kind (n.s.k.). N.s.k. represents the 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 the mailing panel. The n.s.k. value has been estimated based on the rate of change for the reporting establishments applied to the previous years' figure.

²Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

³Represents total amount of original solution produced for all purposes.

n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. [†]Revised by 5 percent or more from previously published figures.
X Not applicable.

Table 2A. Production and Shipments of Selected Inorganic Chemicals: 1994 and 1993

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1994			1993		
		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)	12,280,701	(X)	(X)	12,278,203
28121 —	Chlorine (100% Cl)	(X)	(X)	839,607	(X)	(X)	546,061
28121 11	Gas	² 12,187,313	512,105	61,689	² 12,078,934	455,645	42,185
28121 15	Liquid	9,934,248	5,242,419	777,918	9,865,297	5,288,918	503,876
28123 —	Sodium hydroxide (caustic soda)	(X)	(X)	1,053,164	(X)	(X)	1,369,924
28123 50	Sodium hydroxide, total liquid (all processes) (100% NaOH)	³ 12,554,567	(X)	(X)	³ 12,493,386	(X)	(X)
28123 61	Liquid, 68 to 74% ⁴	⁵ (⁵)	⁵ (⁵)	⁵ (⁵)	⁵ (⁵)	⁵ (⁵)	⁵ (⁵)
28123 65	Liquid, all other ⁴	⁵ 12,498,906	⁵ 10,021,739	⁵ 974,008	⁵ 12,449,689	⁵ 9,905,176	⁵ 1,293,128
28123 67	Dry (all forms) ⁶	(D)	201,708	79,156	195,891	186,468	76,796
28125 —	Other alkalies	(X)	(X)	381,072	(X)	(X)	355,383
28125 21	Potassium hydroxide (caustic potash) (88 to 92% KOH):						
28125 23	Liquid	(D)	389,160	143,220	(D)	(D)	(D)
28125 30	Solid	(D)	30,773	21,890	(D)	(D)	(D)
28125 34	Finished sodium bicarbonate	480,003	(D)	(D)	(D)	(D)	(D)
28125 40	Potassium carbonate	(D)	(D)	(D)	(D)	(D)	(D)
28125 90	Sodium carbonate (soda ash):						
14745 11	Natural and synthetic ⁷	10,277,812	(NA)	(NA)	9,899,390	(NA)	(NA)
28125 90	Alkalies, n.e.c., including soda ash, sal soda, and modified sodas; excluding alkaline detergents	(X)	(X)	23,940	(X)	(X)	24,790
28120 00	Alkalies and chlorine, n.s.k.	(X)	(X)	16,858	(X)	(X)	16,835
2816- —	Inorganic color pigments	(X)	(X)	2,470,873	(X)	(X)	2,390,828
28161 00	Titanium dioxide (composite and pure) (commodity weight) ..	1,379,995	1,397,850	2,318,113	1,279,308	1,274,802	2,253,117
28163 13	Chrome green (C.P.)	(D)	(D)	(D)	(D)	(D)	(D)
28163 15	Chrome yellow and orange (C.P.)	11,320	11,330	34,887	12,849	13,204	32,625
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.)	31,778	32,040	79,787	27,303	26,745	68,717
2819- —	Inorganic chemicals, n.e.c. ⁸	(X)	(X)	112,442,449	(X)	(X)	111,860,287
28193 00	Sulfuric acid, gross (new and fortified) ⁹	44,812,960	11,916,330	487,465	39,838,494	11,361,985	⁵ 515,940
28194 —	Inorganic acids (except nitric, phosphoric, and sulfuric)	(X)	(X)	578,080	(X)	(X)	⁵ 505,584
28194 11	Boric (boracic)	(D)	(D)	(D)	(D)	(D)	(D)
28194 41	Hydrochloric acid, including anhydrous (100% HCl) ¹⁰	3,734,485	1,431,279	117,419	3,491,865	1,395,116	89,504
28194 45	From salt and acid	¹¹ (¹¹)	¹¹ (¹¹)	¹¹ (¹¹)	¹¹ (¹¹)	¹¹ (¹¹)	¹¹ (¹¹)
28194 47	From chlorine and hydrogen	348,871	264,323	28,691	397,036	318,189	26,131
28194 51	Byproduct and other	¹¹ 3,385,614	¹¹ 1,166,956	¹¹ 88,728	¹¹ 3,094,829	¹¹ 1,076,927	¹¹ 63,373
28194 61	Hydrocyanic, including anhydrous (100% HCN)	466,440	121,868	77,084	441,858	85,997	42,060
28194 65	Hydrofluoric (100% HF):						
28194 67	Produced and withdrawn from system:						
28194 67	Anhydrous	(D)	(D)	(D)	¹² 170,664	(D)	(D)
28194 67	Technical	(D)	(D)	(D)	(¹²)	(D)	(D)
28194 98	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)	135,120	(X)	(X)	¹ 129,945
28195 00	Aluminum oxide (except natural alumina)	4,469,989	4,484,002	812,863	4,953,668	4,898,361	920,358
28196 —	Aluminum compounds	(X)	(X)	597,918	(X)	(X)	573,884
28196 13	Chloride:						
28196 17	Liquid and crystal (100% AlCl ₃)	19,427	(D)	(D)	21,238	(D)	(D)
28196 25	Anhydrous (100% AlCl ₃)	26,070	26,610	14,795	19,348	19,417	¹ 12,449
28196 27	Hydroxide, trihydrate (100% Al ₂ O ₃ ·3H ₂ O)	1,052,460	1,059,217	207,490	914,261	913,271	170,573
28196 51	Fluoride (technical)	(D)	(D)	(D)	(D)	(D)	(D)
28196 55	Sulfate:						
28196 55	Commercial (17% Al ₂ O ₃), excluding municipalities	1,106,672	1,048,169	101,761	1,071,850	1,051,661	104,594
28196 73	Iron-free (17% Al ₂ O ₃)	176,160	171,883	18,088	173,144	174,306	20,988
28196 79	Aluminates (sodium aluminate, potassium aluminate, etc. (100% by weight)	148,623	146,855	29,285	127,954	125,422	24,862
28196 79	Other inorganic aluminum compounds (e.g., light aluminum hydroxide, and cryolite)	(X)	(X)	178,910	(X)	(X)	184,328

See footnotes at end of table.

Table 2A. Production and Shipments of Selected Inorganic Chemicals: 1994 and 1993—Con.

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1994			1993		
		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.						
28197 —	Potassium and sodium compounds (except bleaches, alkalis, and alums)	(X)	(X)	1,866,416	(X)	(X)	1,884,284
	Potassium compounds, n.e.c.:						
28197 13	Iodide(100% KI)	1,574	1,379	12,695	1,270	1,069	11,141
28197 16	Sulfate (100% K ₂ SO ₄)	424,011	409,904	60,104	(D)	(D)	(D)
28197 18	Pyrophosphate (tetrapotassium pyrophosphate) (100% K ₄ P ₂ O ₇)	26,330	22,746	26,158	'30,195	'25,113	'29,295
28197 23	Potassium phosphates (100% by weight)	12,813	12,445	17,023	12,467	12,306	16,981
28197 24	Potassium silicates (100% by weight)	7,679	(D)	(D)	5,856	5,817	3,382
28197 17	Other potassium salts and compounds, n.e.c., including potassium chlorate, nitrate, and perchlorate	(X)	(X)	97,111	(X)	(X)	'81,352
28197 21	Sodium (metal) (100% Na)	(D)	(D)	(D)	(D)	(D)	(D)
	Sodium compounds, n.e.c.:						
28197 28	Sodium bromides (100% by weight)	(D)	(D)	(D)	(D)	(D)	(D)
28197 27	Chlorate (100% NaClO ₃)	559,015	561,031	174,108	539,259	489,388	167,258
28197 29	Hydrosulfide (sodium sulfhydrylate) (100% NaSH)	116,798	120,641	25,483	99,252	104,170	23,462
28197 30	Hydrosulfite (100% Na ₂ S ₂ O ₄)	(D)	(D)	(D)	(D)	(D)	(D)
	Phosphate:						
28197 32	Monobasic (100% NaH ₂ S ₂ PO ₄) ¹³	(D)	(D)	(D)	(D)	(D)	(D)
28197 33	Dibasic (100% Na ₂ HPO ₄) ¹³	20,193	20,738	27,644	21,869	21,583	27,972
28197 34	Tribasic (100% Na ₃ PO ₄)	22,308	24,252	18,039	24,028	25,019	17,067
28197 35	Tetrabasic (pyro) (100% Na ₄ P ₂ O ₇)	(D)	14,878	14,767	17,293	17,431	17,228
28197 36	Meta (100% NaPO ₃)	39,836	36,353	34,211	'33,094	'32,251	'31,954
28197 37	Acid pyro	32,800	32,675	32,011	32,614	32,623	32,478
28197 38	Tripoly (100% Na ₅ P ₃ P ₁₀)	(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) ¹⁴	1,007,442	583,086	139,218	1,006,031	580,024	163,167
28197 42	Metasilicate pentahydrate (100% Na ₂ SiO ₃)	47,298	39,378	13,424	48,234	47,845	11,851
28197 44	Metasilicate anhydrous (100% Na ₂ SiO ₃)	47,478	41,503	19,612	50,047	51,629	17,717
28197 51	Silicofluoride (100% Na ₂ SiF ₅)	(D)	(D)	(D)	(D)	(D)	(D)
	Sulfate:						
28197 61	High purity (100% Na ₂ SO ₄)	(D)	(D)	(D)	353,115	356,560	31,945
28197 66	Lower purity (100% Na ₂ SO ₄) and Glauber's salt (100% Na ₂ SO ₄ ·10H ₂ O)	(D)	(D)	(D)	238,560	210,968	5,212
28197 84	Sulfite (100% Na ₂ SO ₃)	113,989	103,397	25,527	'116,727	'108,545	'27,244
28197 85	Thiosulfate (hypo) (100% Na ₂ S ₂ O ₃ ·5H ₂ O)	(D)	(D)	(D)	(D)	(D)	(D)
28197 87	Other sodium compounds, n.e.c., including sodium bisulfate, bifluoride, borate, flouride, and other silicates, excluding bleaches	(X)	(X)	652,352	(X)	(X)	'648,988
28198 00	Chemical catalytic preparations	(X)	(X)	1,421,715	(X)	(X)	1,380,261
28199 —	Other inorganic chemicals, n.e.c.	(X)	(X)	6,466,930	(X)	(X)	5,883,226
28199 01	Reagent and high purity grades of inorganic chemicals refined from purchased technical grades	(X)	(X)	(D)	(X)	(X)	(D)
28199 02	Antimony compounds, excluding pigment grades	(X)	(X)	67,972	(X)	(X)	'51,603
	Barium compounds:						
28199 04	Carbonate (precipitated) (100% BaCO ₃)	(D)	(D)	(D)	(D)	(D)	(D)
28199 05	Sulfate (100% BaSO ₄)	(D)	(D)	(D)	(D)	(D)	(D)
28199 06	Other barium compounds, including barium chloride, nitrate, peroxide, and sulfide; excluding pigment grades	(X)	(X)	20,118	(X)	(X)	18,786
28199 09	Bismuth compounds, excluding bismuth carbonate ¹⁵	(X)	(X)	10,774	(X)	(X)	10,002
28199 10	Bromine (isolated) (100% Br)	(D)	56,574	35,002	235,752	59,319	35,565
28199 11	Cadmium compounds	(X)	(X)	(D)	(X)	(X)	(D)
	Calcium compounds:						
28199 12	Carbide (commercial)	(D)	(D)	(D)	(D)	(D)	(D)
28199 13	Carbonate (precipitated) (100% CaCO ₃)	2,254,015	2,234,759	249,374	'1,774,197	'1,744,414	'198,967
28199 14	Chloride (100% CaCl ₂)	638,343	(D)	(D)	484,409	(D)	(D)
	Phosphates:						
28199 18	Monobasic (100% CaH ₄ (PO ₄) ₂)(21% P)	774,134	762,616	178,576	'761,659	'753,142	'181,716
28199 19	Dibasic (100% CaHPO ₄)(18.5% P)	833,115	828,386	224,568	'792,812	'789,573	'221,706
	Tribasic (100% Ca ₃ (PO ₄) ₂)(18% P):						
28742 71	Animal feed grades	413,729	425,474	84,439	418,740	408,423	85,204
28199 22	Other grades	36,459	39,134	29,160	38,903	36,100	25,781
28199 23	Other inorganic calcium compounds	(X)	(X)	49,686	(X)	(X)	45,152
	Carbon activated:						
28199 25	Granular carbons (dry weight)	81,705	82,687	154,640	80,367	76,389	147,333
28199 27	Pulverized carbons (dry weight)	75,796	75,039	67,432	63,438	61,166	57,162

See footnotes at end of table.

Table 2A. Production and Shipments of Selected Inorganic Chemicals: 1994 and 1993—Con.

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1994			1993		
		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)	110,756	(X)	(X)	¹ 72,951
	Copper compounds:						
28199 35	Cuprous oxide (100% Cu ₂ O)	(D)	(D)	(D)	(D)	(D)	(D)
28199 37	Other copper compounds, including copper cyanide and copper sulfate	(X)	(X)	86,174	(X)	(X)	81,468
28199 38	Gold compounds	(X)	(X)	(D)	(X)	(X)	(D)
28199 39	Hydrogen peroxide (100% by weight) ¹⁶	318,420	329,846	227,772	301,581	284,636	231,659
28199 40	Iodine, crude or resublimed (100% I)	(D)	(D)	(D)	(D)	3,423,728	13,664
	Iron compounds:						
28199 42	Ferric chloride (100% FeCl ₃)	205,858	210,669	33,502	210,876	212,468	29,558
28199 43	Iron oxides and hydroxides (100% by weight), excluding iron oxide pigments	35,294	(D)	(D)	27,488	(D)	(D)
28199 44	Other iron compounds, including ferrous sulfate	(X)	(X)	52,892	(X)	(X)	48,712
28199 45	Lithium compounds	(X)	(X)	(D)	(X)	(X)	(D)
	Magnesium compounds:						
28199 48	Chloride (100% MgCl ₂)	(D)	93,923	16,293	(D)	94,063	17,795
28199 49	Sulfate (100% MgSO ₄)	(D)	(D)	(D)	(D)	(D)	(D)
28199 50	Other magnesium compounds, including magnesium and epsom salts	(X)	(X)	83,109	(X)	(X)	¹ 71,341
	Manganese compounds:						
28199 51	Dioxide (100% MnO ₂)	55,509	52,091	80,234	51,505	51,174	80,155
28199 52	Other manganese compounds, including potassium, and other permanganates, battery grade, and manganese sulfate	(X)	(X)	64,560	(X)	(X)	57,422
	Mercury and compounds:						
28199 53	Mercury, redistilled	(D)	(D)	(D)	(D)	(D)	(D)
28199 54	Other mercury compounds, including mercuric oxide; excluding mercuric fulminate and medicinal grades	(X)	(X)	78	(X)	(X)	(D)
	Molybdenum compounds:						
28199 5A	Oxides (100% by weight)	(D)	(D)	(D)	(D)	(D)	(D)
28199 5B	Molybdates (ammonium molybdate, sodium molybdates, etc. (100% 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% by weight)	(D)	(D)	(D)	(D)	(D)	(D)
28199 57	Chloride (100% NiCl ₂)	(D)	(D)	(D)	51	49	352
28199 55	Sulfate (100% NiSO ₄)	(D)	(D)	(D)	(D)	(D)	(D)
28199 59	Other nickel compounds	(X)	(X)	22,554	(X)	(X)	19,229
	Phosphorus and compounds:						
28199 58	Phosphorus, elemental (technical)	254,987	258,395	381,952	257,684	252,200	368,342
28199 60	Oxychloride (100% POCl ₃)	36,064	9,721	9,290	32,092	7,050	5,727
28199 61	Pentasulfide (100% P ₂ S ₅)	60,877	46,785	50,212	60,500	45,635	49,391
28199 63	Trichloride (chloride) (100% PCl ₃)	157,850	38,242	23,600	145,999	39,789	27,785
28199 64	Other phosphorus compounds, including phosphorus pentoxide	(X)	(X)	(D)	(X)	(X)	(D)
28199 65	Rare earth compounds	(X)	(X)	95,339	(X)	(X)	77,890
	Silicon compounds:						
28199 66	Silicon tetrachloride (siltet) (100% SiCl ₄)	(D)	(D)	(D)	(D)	(D)	(D)
28199 67	Silica gel	(X)	(X)	50,422	(X)	(X)	¹ 54,560
28199 68	Other silicon compounds	(X)	(X)	65,296	(X)	(X)	(D)
28199 73	Silver compounds	(X)	(X)	(D)	(X)	(X)	(D)
	Strontium compounds:						
28199 71	Carbonate (100% SO ₂)	(D)	(D)	(D)	(D)	(D)	(D)
28199 72	Other strontium compounds	(X)	(X)	(D)	(X)	(X)	3,835
	Sulfur and sulfur compounds:						
28199 74	Sulfur, recovered elemental (metric tons) ¹⁷	7,160,000	¹⁷ 10,350,000	¹⁷ 296,000	7,665,000	¹⁷ 7,521,000	¹⁷ 188,427
28199 75	Sulfur dioxide (produced for sale) (100% SO ₂)	229,459	229,940	40,519	233,764	¹ 231,703	¹ 39,286
28199 78	Other sulfur compounds, including sulfur chloride	(X)	(X)	77,739	(X)	(X)	73,387
28199 83	Tin compounds	(X)	(X)	(D)	(X)	(X)	(D)
	Tungsten compounds:						
28199 84	Tungstates (ammonium tungstate, sodium tungstate, etc.) (100% by weight)	(D)	(D)	(D)	(D)	(D)	(D)
28199 85	All other tungstate compounds	(X)	(X)	278	(X)	(X)	(D)

See footnotes at end of table.

Table 2A. Production and Shipments of Selected Inorganic Chemicals: 1994 and 1993—Con.

[Quantity in short tons. Value in thousands of dollars]

Product code	Product description	1994			1993		
		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% ZnSO ₄ H ₂ O)	44,607	45,959	23,872	39,881	41,614	21,947
28199 86	Oxide and peroxide (100% by weight)	(D)	(D)	(D)	(D)	(D)	(D)
28199 88	Chloride (100% ZnCl ₂)	(D)	(D)	(D)	(D)	(D)	(D)
28199 89	Other zinc compounds, excluding pigment grades	(X)	(X)	27,720	(X)	(X)	14,993
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)	1,799,009	(X)	(X)	1,761,501
28190 00	Industrial inorganic chemicals, n.s.k.	(X)	(X)	1,211,062	(X)	(X)	1,196,750
	Chlorine and other inorganic bleaching compounds.	701,491	700,732	1,175,151	627,426	636,635	1,116,365
28422 —	Household	312,909	305,721	949,985	262,595	270,164	914,778
28422 43	Liquid (sodium hypochlorite, etc.) (less than 7 percent available chlorine or equivalent oxidizing value) (100% Cl equivalent)	262,072	247,337	711,202	210,922	209,494	673,734
28422 53	Dry (calcium hypochlorite, etc.) (less than 50 percent available chlorine or equivalent oxidizing value) (100% Cl equivalent)	50,837	58,384	238,783	51,673	60,670	241,044
28199 00	Industrial	388,582	395,011	225,166	364,831	366,471	201,587
28199 30	Liquid (sodium hypochlorite, etc.) (7 percent or more available chlorine or equivalent oxidizing value) (100% 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% Cl equivalent)	(D)	(D)	(D)	(D)	(D)	(D)

¹Totals include values for industrial inorganic chemicals not specified by kind (n.s.k.). N.s.k. represents the 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 the mailing panel. The n.s.k. value has been estimated based on the rate of change for the reporting establishments applied to the previous years' figure.

²Includes quantities liquefied for use, storage, or shipments.

³Includes quantities later evaporated to dry caustic soda and reported as such.

⁴Includes some liquid shipped as interplant transfers to other establishments for further processing to dry forms.

⁵Product code 28123 61, "Sodium hydroxide liquid, 68 to 74%," is combined with product code 28123 65, "Sodium hydroxide liquid, all other," to avoid disclosing figures for individual companies.

⁶Includes unspecified amounts produced from liquid caustic received from other establishments.

⁷Source: U.S. Bureau of Mines.

⁸Includes value of inorganic chemicals shipped by establishments classified in both "manufacturing" and "nonmanufacturing" industries.

⁹Detail data for sulfuric acid are found in table 2B.

¹⁰Includes anhydrous hydrochloric acid production. Quantity of shipments is 135,200 short tons in 1994 and 122,223 short tons in 1993; value of shipments of \$30,339 in 1994 and \$25,983 in 1993. Quantity of production is withheld to avoid disclosing data for individual companies.

¹¹Product 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 figures for individual companies.

¹²Product code 28194 65, "Hydrofluoric acid technical produced and withdrawn from the system" is combined with product code 28194 71, "Hydrofluoric acid anhydrous produced and withdrawn from the system" to avoid disclosing figures for individual companies.

¹³Represents quantities produced only for sale or interplant transfer.

¹⁴Quantity produced excludes quantities consumed in the manufacture of meta-, ortho-, and sequisilicates. Shipments figures include unspecified amounts shipped to other plants for use in manufacturing meta-, ortho-, and sequisilicates.

¹⁵Product code 28199 09, "Other bismuth compounds, excluding bismuth carbonate," is classified as a medicinal chemical and is out of scope of this survey.

¹⁶Production includes unspecified amounts of hydrogen peroxide produced but not withdrawn from the system.

¹⁷1994 and 2 months of 1993 data include "Frasch sulfur" data to conform with proprietary data requirements.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. Revised by 5 percent or more from previously published figures. X Not applicable.

Table 2B. Production and Shipments of Fertilizer Materials: 1994 and 1993

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Chemical and basis	1994			1993		
		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)	44,813.0	11,916.4	487.5	39,838.5	11,362.0	515.9
28193 11	Oleum under 40 percent	1,341.5	841.2	41.6	1,282.5	767.4	43.3
28193 15	Oleum 40 percent	(D)	(D)	(D)	(D)	(D)	(D)
28193 17	Oleum over 40 percent	(D)	(D)	(D)	(D)	(D)	(D)
28193 31	Other than oleum ¹	43,218.1	10,821.7	430.1	38,278.9	10,324.6	455.2
28193 51	Sulfuric acid produced through decomposition of alkylation acid and other spent acids, including sulfuric acid sludge	(D)	(X)	(X)	(D)	(X)	(X)
28731 —	Synthetic ammonia, nitric acid, and ammonium compounds	(X)	(X)	3,319.7	(X)	(X)	2,816.2
28731 11	Nitric acid (100% HNO ₃)	28,611.1	964.3	118.3	28,523.8	678.0	88.5
28731 31	Ammonia, synthetic anhydrous (100% NH ₃) ³	17,256.4	10,410.5	1,509.3	17,195.2	10,435.5	1,174.3
28731 30	Fertilizer use	15,430.8	9,111.7	1,336.7	15,427.0	9,335.5	1,052.1
28731 32	Other uses	1,825.6	1,298.8	172.6	1,768.2	1,100.0	122.3
28731 50	Ammonium nitrate:						
	Original solution (100% NH ₄ NO ₃) ⁴	8,516.6	(X)	(X)	8,280.9	(X)	(X)
	Fertilizer use (100% NH ₄ NO ₃):						
	Solution	3,997.9	328.9	34.0	3,913.7	268.8	24.2
28731 52	Solution produced for sale	260.7	(D)	(D)	226.4	(D)	(D)
28731 54	Solution produced for consumption	3,737.2	(D)	(D)	3,687.2	(D)	(D)
28731 51	Solid	2,251.0	2,456.7	322.1	2,225.8	2,169.0	256.3
28731 53	Explosives and other uses (solution and solid)	2,267.7	2,117.7	309.7	2,141.4	2,016.4	238.6
28731 55	Nitrogen solutions (100% N), including mixtures containing urea	3,493.1	3,180.3	751.1	3,584.3	3,464.0	748.3
28731 65	Solutions containing ammonia ⁵	131.4	107.7	17.0	127.4	129.6	24.5
28731 66	Ammonium nitrate/urea solutions	3,361.7	3,072.6	734.0	3,456.9	3,334.4	723.8
28731 73	Ammonium nitrate/calcium nitrate solutions	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
28731 67	All other two-component products	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
28731 57	Ammonium sulfate, synthetic and byproduct other than coke oven byproduct (100% (NH ₄) ₂ SO ₄) ³	2,587.8	2,488.6	164.5	2,432.4	2,416.9	150.4
28731 56	Synthetic	(D)	(D)	(D)	(D)	(D)	(D)
28731 58	Byproduct, other than coke oven	(D)	(D)	(D)	(D)	(D)	(D)
28731 69	Other ammonium compounds, including ammonium chloride, gray and white	(X)	(X)	110.7	(X)	(X)	135.6
28732 —	Urea (100%)	7,952.1	5,098.5	657.2	8,329.6	5,254.8	629.6
	For fertilizer use:						
28732 16	Solutions produced as intermediate in nitrogen solutions	2,864.1	(D)	(D)	3,123.8	(D)	(D)
28732 18	Solid	4,243.0	4,210.8	542.5	4,236.8	4,236.8	490.1
	Other uses:						
28732 21	Feed (solid and solution)	241.9	(D)	(D)	300.8	(D)	(D)
28732 22	All other (solid and solution)	602.9	613.6	78.3	668.2	679.4	89.4
28741 —	Phosphoric acid (100% P ₂ O ₅)	12,792.2	4,227.9	1,084.6	11,515.1	3,687.5	969.3
28741 81	Thermal	324.2	163.1	139.2	322.1	148.1	123.5
28741 85	Wet	12,468.0	4,064.8	945.4	11,193.0	3,539.5	845.8
	By use:						
28741 86	Fertilizer	11,588.8	3,521.6	755.3	10,324.7	3,000.8	652.0
28741 87	Feed and other	879.0	543.2	190.1	868.3	538.7	193.8
	By grade:						
28741 88	Ortho (less than 65% P ₂ O ₅)	11,252.1	3,078.8	606.1	10,068.0	2,692.1	600.6
28741 89	Super (65% or more P ₂ O ₅)	1,215.7	986.0	339.3	1,125.0	847.4	245.2
28742 —	Superphosphates and other phosphatic fertilizer materials:						
	Gross weight	19,071.3	18,797.8	(⁶)	17,022.8	16,820.5	(⁶)
	Phosphoric oxide content (100% P ₂ O ₅)	10,023.9	9,972.6	2,830.4	8,800.9	8,813.8	2,057.3
28742 15, 41	Normal, enriched, and concentrated superphosphates:						
	Gross weight	1,887.7	1,704.4	(⁶)	1,532.1	1,368.8	(⁶)
	Phosphoric oxide content (100% P ₂ O ₅)	853.3	811.8	197.2	765.4	753.5	153.1
28742 51	Monoammonium phosphates:						
	Gross weight	2,935.5	2,976.3	(⁶)	2,869.8	2,903.8	(⁶)
	Phosphoric oxide content (100% P ₂ O ₅)	1,754.1	1,788.6	473.8	1,543.4	1,544.5	359.2
28742 52	Diammonium phosphates:						
	Gross weight	13,568.0	13,503.4	(⁶)	12,016.3	11,998.7	(⁶)
	Phosphoric oxide content (100% P ₂ O ₅)	77,049.8	7,017.0	2,072.0	6,130.0	6,179.7	1,456.4
28742 55, 61	Other ammonium phosphates and other phosphatic fertilizer materials:						
	Gross weight	680.0	613.7	(⁶)	604.6	549.2	(⁶)
	Phosphoric oxide content (100% P ₂ O ₅)	445.6	434.1	87.4	362.1	336.1	88.6

¹Figures for "Other than oleum" include chamber process acid.

²Includes unspecified amounts of nitric acid produced but not withdrawn from the system.

³Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

⁴Represents 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).

⁵"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 avoid disclosing figures for individual companies.

⁶Value for gross weight and (100% P₂O₅) are the same for each 28742 product code.

D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

Table 3. Quantities of Selected Inorganic Acids and Fertilizer Materials Produced and Consumed in Same Plant: 1994 and 1993

[Thousands of short tons]

Product code	Product description	Basis	Consumed in producing plants	
			1994	1993
28194 41	Hydrochloric acid, including anhydrous	100% HCl	2,353.1	2,141.1
28194 45	From salt and acid	do.	(¹)	(¹)
28194 47	From chlorine and hydrogen	do.	77.0	90.1
28194 51	Byproduct and other	do.	2,276.2	2,051.0
28194 51	Hydrocyanic acid, including anhydrous	100% HCN	341.8	350.4
28194 61, 65	Hydrofluoric acid:			
28194 67	Anhydrous and technical	100% HF	(D)	(D)
28193 —	Mixed acids (sulfuric and nitric)		(D)	(D)
28193 —	Sulfuric acid, gross (new and fortified)	100% H ₂ SO ₄	31,391.3	27,047.8
28731 11	Nitric acid	100% HNO ₃	7,774.5	7,919.5
28731 30, 32	Ammonia (synthetic) anhydrous ²	100% HN ₃	6,982.9	6,944.0
28731 51	Ammonium nitrate:			
28731 52, 54	Fertilizer use solid	do.	(D)	(D)
28731 53	Fertilizer use solution ³	100% NH ₄ NO ₃	3,473.9	3,644.7
28731 57	Explosives and other uses (solution and solid)	do.	(D)	(D)
28731 57	Ammonium sulfate ²	100% (NH ₄) ₂ SO ₄	(D)	(D)
28732 16, 18	Urea:			
28741 81	Fertilizer use, solution and solid	100% urea	2,902.1	2,988.1
28741 85	Phosphoric acid	100% P ₂ O ₅	8,401.9	7,846.9
28742 —	Thermal	do.	(D)	(D)
28742 —	Wet	do.	(D)	(D)
28742 —	Superphosphates and other fertilizer materials	do.	31.8	34.5

¹Product code 28194 41, "Hydrochloric acid from salt and acid" is combined with product code 28194 47, "Hydrochloric acid by-product and other" to avoid disclosing figures for individual companies.

²Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

³Excludes amount converted to solid nitrate.

D Data withheld to avoid disclosing figures for individual companies.

Table 4. Summary of Selected Fertilizer Materials/Interplant Transfers: 1994 and 1993

[Quantity in thousands of short tons. Value in millions of dollars]

Product code	Product description	Basis	1994		1993	
			Quantity	Value	Quantity	Value
28193 —	Sulfuric acid, gross (new and fortified)	100% H ₂ SO ₄	2,176.3	40.4	2,066.8	51.2
28193 11	Oleum under 40 percent	do.	(D)	(D)	(D)	(D)
28193 15	Oleum 40 percent	do.	(D)	(D)	(D)	(D)
28193 17	Oleum 40 percent or more	do.	(D)	(D)	(D)	(D)
28193 31	Other than oleum ¹	do.	2,146.8	39.2	2,008.2	48.5
28731 31	Ammonia, synthetic anhydrous ²	100% NH ₃	1,050.3	125.8	1,001.8	102.4
28731 30	Fertilizer use	do.	(D)	(D)	(D)	(D)
28731 32	Other uses	do.	(D)	(D)	(D)	(D)
28731 57	Ammonium sulfate ²	100% (NH ₄) ₂ SO ₄	(D)	(D)	(D)	(D)
28731 11	Nitric acid	100% HNO ₃	(D)	(D)	(D)	(D)
28732 —	Urea	100% urea	(D)	(D)	(D)	(D)
28741 81, 85	Phosphoric acid	100% P ₂ O ₅	(D)	(D)	(D)	(D)
28742 —	Superphosphates and other phosphatic fertilizer materials	do.	(D)	(D)	(D)	(D)

¹Figures for "Other than oleum" includes chamber process acid.

²Excludes data for byproduct ammonia liquor and ammonium sulfate published by the Department of Energy.

D Data withheld to avoid disclosing figures for individual companies.

Table 5. Sodium Sulfate, Production and Number of Establishments, by Process: 1994 and 1993

[Net tons of 100% Na₂SO₄]

Process	Number of establishments ¹		Production	
	1994	1993	1994	1993
Total	16	15	526,696	591,675
Natural	3	3	(D)	(D)
Viscose rayon	3	2	(D)	(D)
Sodium dichromate	1	1	(D)	(D)
Phenol, boric acid, formic acid, and other	9	9	145,439	141,996

¹The processes used to manufacture sodium sulfate are specified in the SRI, Directory of Chemical Producers, 1994.

D Data withheld to avoid disclosing figures for individual companies.

Note: Net tons includes Glauber's salt converted to 100 percent Na₂SO₄.

Table 6. Production of Specified Inorganic Chemicals, by States: 1994 and 1993

[Short tons]

Geographic area	Hydrochloric acid (100% HCl) (2819441, 445, and 447)		Aluminum sulfate commercial (17% Al ₂ O ₃) (2819651)		Chlorine gas (281211)		Sodium hydroxide (all processes) (2812350)	
	1994	1993	1994	1993	1994	1993	1994	1993
United States	3,734,485	3,491,865	1,106,672	1,071,850	12,187,313	12,078,934	12,554,567	12,493,386
Alabama	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Arkansas	(D)	(D)	(D)	(D)	-	-	-	-
California	(D)	(D)	58,249	59,460	(D)	(D)	-	-
Colorado	-	-	(D)	(D)	-	-	-	-
Delaware	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Florida	-	-	(D)	(D)	-	-	-	-
Georgia	(D)	(D)	107,079	105,509	(D)	(D)	(D)	(D)
Illinois	111,195	145,488	(D)	(D)	-	-	-	-
Indiana	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Kentucky	262,014	408,403	-	-	(D)	(D)	(D)	(D)
Louisiana	1,151,313	1,072,084	92,025	79,112	4,823,919	4,742,138	4,871,724	4,863,607
Maine	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Maryland	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Massachusetts	(D)	(D)	(D)	(D)	-	-	-	-
Michigan	57,806	88,146	(D)	(D)	(D)	(D)	-	-
Minnesota	-	-	(D)	(D)	-	-	-	-
Mississippi	-	-	(D)	(D)	(D)	(D)	-	-
Missouri	-	-	-	-	-	-	(D)	(D)
Montana	-	-	(D)	(D)	-	-	-	-
Nevada	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Jersey	27,255	24,375	(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)	70,443	70,576	(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)	62,177	55,982	(D)	(D)	(D)	(D)
Texas	1,348,441	1,016,945	12,930	16,526	(D)	(D)	(D)	(D)
Utah	-	-	(D)	(D)	(D)	(D)	(D)	(D)
Virginia	-	-	(D)	(D)	-	-	-	-
Washington	(D)	22,024	(D)	(D)	417,786	453,704	467,828	505,052
West Virginia	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Wisconsin	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

- Represents zero.

D Data withheld to avoid disclosing figures for individual companies.

[†]Revised by 5 percent or more from previously published figures.

Table 7. Total Shipments (Including Interplant Transfers) of Sulfuric Acid, by States: 1994 and 1993

[Quantity in thousands of short tons of 100% H₂SO₄. Value in millions of dollars]

State	1994		1993	
	Quantity	Value	Quantity	Value
United States	11,916.4	487.5	11,362.0	515.9
Arizona	(D)	(D)	(D)	(D)
California	850.3	40.4	684.6	38.6
Florida	633.1	16.2	433.6	8.7
Georgia	360.9	13.5	332.5	13.1
Illinois	(D)	(D)	(D)	(D)
Louisiana	1,724.0	83.3	1,718.8	96.4
New Jersey	(D)	(D)	(D)	(D)
Ohio	345.4	21.0	346.9	27.6
Texas	1,746.9	88.7	1,729.9	92.0
Virginia	(D)	(D)	(D)	(D)
Washington	(D)	(D)	(D)	(D)
Other States	3,875.9	155.9	3,876.4	162.8

D Data withheld to avoid disclosing figures for individual companies.

Table 8. Production of New Sulfuric Acid, by States: 1994 and 1993

[Thousands of short tons of 100% H₂SO₄]

State	1994 ¹	1993 ¹
United States	42,262.2	39,838.5
Arizona	2,062.5	1,923.3
California	1,189.9	1,187.8
Florida	19,891.3	16,039.8
Georgia	517.9	504.1
Illinois	(D)	(D)
Louisiana	5,833.8	5,428.9
Missouri	(D)	(D)
New Jersey	(D)	(D)
New Mexico	(D)	(D)
Ohio	443.1	444.0
Oklahoma and Texas	3,207.5	3,006.9
Virginia	(D)	(D)
Washington	(D)	(D)
Other States	6,798.9	8,821.9

¹Includes data for Government-owned, privately operated plants.

D Data withheld to avoid disclosing figures for individual companies.

Table 9A. Primary Production and Stocks of Specified Inorganic Chemicals, by Quarter: 1994 and 1993

[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% AlCl ₃)	1994	26,070	8,033	5,530	6,224	6,283	(NA)
		1993	19,348	4,635	4,704	4,797	5,212	(NA)
28195 00	Aluminum oxide (alumina) (100% Al ₂ O ₃)	1994	4,469,989	1,146,498	1,093,527	1,117,159	1,112,805	133,192
		1993	4,953,668	1,246,708	1,274,195	1,245,308	1,187,457	130,892
28196 51	Aluminum sulfate (commercial) ¹ (17% Al ₂ O ₃)	1994	1,106,672	255,316	284,086	305,399	261,871	(NA)
		1993	1,071,850	256,596	267,068	288,907	259,279	(NA)
28194 11	Boric (boracic) (100% H ₃ BO ₃)	1994	(D)	(D)	(D)	(D)	(D)	(D)
		1993	(D)	(D)	(D)	(D)	(D)	(D)
28199 12	Calcium carbide (commercial)	1994	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
Calcium phosphate:								
28199 18	Monobasic (21% minimum P)	1994	774,134	177,531	195,588	189,190	211,825	53,304
		1993	761,659	196,169	178,224	192,346	194,920	49,485
28199 19	Dibasic (except fertilizer grades) (100% CaHPO ₄)	1994	833,115	222,156	203,953	191,049	215,957	46,320
		1993	792,812	193,556	202,826	187,738	208,692	48,538
Tribasic (100% Ca ₃ (PO ₄) ₂):								
28742 71	Animal feed grades (defluorinated phosphate rock)	1994	413,729	89,782	95,784	114,938	113,225	28,865
		1993	418,740	101,671	116,190	99,004	101,875	28,989
28199 22	Other grades	1994	36,459	8,156	10,318	9,028	8,957	1,712
		1993	38,903	9,856	11,403	8,019	9,625	(D)
Carbon activated, excluding								
reactivated carbon (dry weight)								
28199 25	Granular carbons	1994	81,705	19,439	22,243	18,218	21,805	10,560
		1993	80,367	20,335	19,997	20,441	19,594	11,029
28199 27	Pulverized carbons	1994	75,796	16,174	15,975	21,952	21,695	5,249
		1993	63,438	13,878	16,056	17,134	16,370	8,716
Chlorine (100% Cl):								
28121 11	Total gas ²	1994	12,187,313	2,986,648	2,987,912	3,075,709	3,137,044	(NA)
		1993	12,078,934	2,917,013	3,013,647	3,075,586	3,072,688	(NA)
28121 15	Total liquid	1994	9,934,248	2,422,944	2,420,002	2,518,805	2,572,497	(NA)
		1993	9,865,297	2,407,999	2,456,409	2,506,079	2,494,810	(NA)
Chrome colors (C.P.):								
28163 15	Chrome yellow and orange	1994	11,320	2,996	3,492	3,032	1,800	(NA)
		1993	12,849	(D)	(D)	3,527	2,437	(NA)
28163 17	Molybdate chrome orange	1994	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
Hydrochloric acid (100% HCl):								
Total								
28194 41	From salt and acid	1994	3,734,485	873,643	894,868	975,000	990,974	(NA)
		1993	3,491,865	895,545	853,409	857,195	885,716	(NA)
28194 45	From chlorine and hydrogen	1994	348,871	85,068	90,655	84,058	89,090	(NA)
		1993	397,036	104,754	97,820	87,153	107,309	(NA)
28194 47	Byproduct and other	1994	3,385,614	788,116	803,274	891,876	902,348	(NA)
		1993	3,094,829	790,790	755,590	770,042	778,407	(NA)

See footnotes at end of table.

Table 9A. Primary Production and Stocks of Specified Inorganic Chemicals, by Quarter: 1994 and 1993—Con.

[Short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	Stocks on hand December 31
	Hydrofluoric acid (100% HF): Produced and withdrawn from system:							
28194 61, 65	Anhydrous and technical	1994 (D)	36,746	(D)	(D)	(D)	(D)	(NA)
		1993	170,664	46,206	42,740	35,432	46,286	(NA)
28199 39	Hydrogen peroxide (100% by weight) .	1994	318,420	72,050	80,864	86,324	79,182	(NA)
		1993	301,581	69,704	68,555	80,958	82,364	(NA)
28199 58	Phosphorus elemental (technical).....	1994	254,987	64,659	64,412	61,364	64,552	9,788
		1993	257,684	64,544	70,486	62,054	60,600	10,985
28199 60	Phosphorus oxychloride (100% POCl ₃)	1994	36,064	8,606	8,794	9,409	9,255	(NA)
		1993	32,092	8,342	8,161	7,215	8,374	(NA)
28199 61	Phosphorus pentasulfide (100% P ₂ S ₅)	1994	60,877	16,209	15,759	12,616	16,293	(NA)
		1993	60,500	15,243	15,650	14,635	14,972	(NA)
28199 63	Phosphorus trichloride (chloride) (100% PCl ₃)	1994	157,850	39,023	40,721	40,443	37,663	(NA)
		1993	145,999	37,208	35,423	35,110	38,258	(NA)
28125 21	Potassium hydroxide ⁴	1994 (D)	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
28197 18	Potassium pyrophosphate (tetrapotassium pyrophosphate) (100% K ₄ P ₂ O ₇)	1994	26,330	6,421	6,878	6,352	6,679	(NA)
		1993	30,195	7,933	8,825	7,524	5,913	(NA)
28199 69	Silicon tetrachloride (silitet) (100% SiCl ₄)	1994 (D)	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
28197 21	Sodium (metal) (100% Na)	1994 (D)	(D)	(D)	(D)	(D)	(D)	(D)
		1993	(D)	(D)	(D)	(D)	(D)	(D)
28125 30	Sodium bicarbonate, finished (58% Na ₂ O).....	1994	480,003	114,548	118,321	125,296	121,838	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
28125 30 14745 11	Sodium carbonate, natural and synthetic (58% Na ₂ O)	1994	10,277,812	2,417,638	2,503,208	2,550,862	2,806,104	223,845
		1993	9,899,390	2,459,140	2,515,959	2,583,755	2,340,536	302,555
28199 33	Sodium bichromate and chromate (hydrous)	1994 (D)	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
28197 27	Sodium chlorate (100% NaClO ₃)	1994	559,015	131,032	134,829	145,689	147,465	(S)
		1993	539,259	134,330	132,053	135,880	136,996	44,608
28197 30	Sodium hydrosulfite (100% Na ₂ SO ₄) ..	1994 (D)	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
	Sodium hydroxide (caustic soda) (100% NaOH) (all processes):							
28123 50	Liquid ⁵	1994	12,554,567	3,079,216	3,024,677	3,176,467	3,274,207	(D)
		1993	12,493,386	3,039,429	3,113,151	3,171,280	3,169,526	(D)
28123 67	Dry (all forms).....	1994 (D)	45,661	47,785	57,581	(D)	(NA)	
		1993	195,891	49,225	49,960	51,531	45,175	(NA)

See footnotes at end of table.

Table 9A. Primary Production and Stocks of Specified Inorganic Chemicals, by Quarter: 1994 and 1993—Con.

[Short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter	Stocks on hand December 31
Sodium phosphate:								
28197 34	Tribasic (100% Na ₃ PO ₄)	1994	22,308	4,616	6,866	5,817	5,009	(NA)
		1993	24,028	5,696	(D)	6,001	(D)	(NA)
28197 35	Tetrabasic (pyro) (100% Na ₄ P ₂ O ₇)	1994	(D)	3,847	4,666	(D)	3,310	(NA)
		1993	17,293	(D)	3,782	(D)	5,242	(NA)
28197 36	Meta (100% NaPO ₃)	1994	39,836	9,918	10,710	9,447	9,761	(NA)
		1993	33,094	9,341	6,962	7,986	8,805	(NA)
28197 38	Tripoly (100% Na ₅ P ₃ O ₁₀)	1994	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	(D)	(D)	(D)	(D)	(D)	(NA)
Sodium silicate:								
28197 41	Soluble silicate glass (water glass, solid and liquid)(anhydrous) ⁶	1994	1,007,442	223,686	249,596	264,705	269,455	(NA)
		1993	1,006,031	229,387	266,452	250,030	260,162	(NA)
28197 42	Metasilicate pentahydrate (100% Na ₂ SiO ₃ ·5H ₂ O)	1994	47,298	12,752	11,807	11,625	11,114	(NA)
		1993	48,234	12,859	11,877	11,372	12,126	(NA)
28197 44	Metasilicate anhydrous (100% Na ₂ SiO ₃)	1994	47,478	14,515	11,541	10,014	11,408	(NA)
		1993	50,047	13,808	11,472	13,456	11,311	(NA)
Sodium sulfate (100% Na ₂ SO ₄):								
	Total	1994	526,696	151,089	144,141	111,420	120,046	(NA)
		1993	591,675	217,306	116,049	128,486	129,834	(NA)
28197 61	High purity (more than 99% Na ₂ SO ₄)	1994	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	353,115	(D)	(D)	(D)	(D)	(NA)
28197 66	Lower purity (99% or less Na ₂ SO ₄) and Glauber's salt (100% Na ₂ SO ₄ ·10H ₂ O)	1994	(D)	(D)	(D)	(D)	(D)	(NA)
		1993	238,560	(D)	(D)	(D)	(D)	(NA)
28161 00	Titanium dioxide (composite and pure) (100% TiO ₂) (commodity weight)	1994	1,379,884	329,475	352,125	353,340	344,944	⁷ 116,461
		1993	1,279,308	333,515	317,159	311,605	317,029	⁷ 135,671

¹Excludes quantities produced and consumed by municipalities.²Total gas production including quantities liquefied for use, storage, or shipments.³"Hydrochloric acid produced from salt and acid" is combined with "Hydrochloric acid byproduct and other" to avoid disclosing figures for individual companies.⁴Liquid production figures represent total production including quantities later evaporated to solid caustic and reported as such.⁵Includes some liquid shipped as interplant transfers to other establishments for further processing to dry forms.⁶Excludes quantities produced and consumed in the same establishment in the manufacture of meta-, ortho-, and sesquisilicates.⁷Represents total stocks of producing companies, including amounts held at locations other than producing locations.

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Table 9B. Primary Production of Inorganic Fertilizer Chemicals, By Quarter: 1994 and 1993

[Thousands of short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28731 31	Ammonia, synthetic anhydrous (100% NH ₃): Production	1994	17,256.4	4,362.8	4,235.7	4,220.2	4,437.8
		1993	17,195.2	4,280.5	4,080.3	4,217.5	4,616.9
		1994	(NA)	1,282.2	789.6	1,041.6	1,281.5
		1993	(NA)	1,994.5	1,243.2	1,138.1	1,142.4
28731 30	Fertilizer use: Production	1994	15,430.8	3,881.6	3,817.0	3,791.4	3,940.8
		1993	15,427.0	3,886.4	3,652.9	3,745.1	4,142.5
		1994	(NA)	1,138.6	573.6	747.0	924.4
		1993	(NA)	1,804.0	1,085.4	956.2	987.8
28731 32	Other uses: Production	1994	1,825.6	477.0	424.9	432.5	491.2
		1993	1,768.2	394.0	427.4	472.4	474.4
		1994	(NA)	(S)	(S)	(S)	(S)
		1993	(NA)	(S)	(S)	181.9	(S)
28731 50	Ammonium nitrate (100% NH ₄ NO ₃): Original solution ¹ : Production	1994	8,516.6	2,180.8	2,142.8	1,973.7	2,219.2
		1993	8,280.9	2,151.8	2,060.6	1,877.9	2,190.6
		1994	(NA)	221.1	213.0	196.9	283.2
		1993	(NA)	215.4	148.1	274.0	317.2
28731 52	Fertilizer use: Solution produced for sale as such for direct application: Production	1994	260.7	76.7	71.2	62.5	50.3
		1993	226.4	61.8	60.6	52.3	51.8
		1994	(NA)	(S)	(S)	(S)	(S)
		1993	(NA)	(D)	(D)	(S)	(S)
28731 54	Solution produced for consumption in the manufacture of nitrogen solutions or other fertilizer materials: Production	1994	3,737.2	966.2	921.3	851.3	998.4
		1993	3,687.2	936.9	959.6	822.0	968.8
		1994	(NA)	(S)	(S)	(S)	(S)
		1993	(NA)	31.3	38.1	(S)	(S)
28731 51	Solid: Production	1994	2,244.1	656.2	590.4	467.0	530.5
		1993	2,225.8	643.4	538.8	482.8	560.8
		1994	(NA)	61.5	54.0	62.6	74.9
		1993	(NA)	103.7	(S)	93.8	112.0
28731 53	Explosives and other uses (solutions and solids) ² : Production	1994	2,267.7	488.5	555.0	588.4	635.7
		1993	2,141.4	509.6	501.6	520.8	609.3
		1994	(NA)	(S)	(S)	(S)	(S)
		1993	(NA)	(S)	(S)	(S)	(S)
28731 56 28731 58	Ammonium sulfate (100% (NH ₄) ₂ SO ₄): Production	1994	2,587.8	644.7	654.8	644.0	644.3
		1993	2,432.4	586.6	622.8	607.7	615.3
		1994	(NA)	148.5	131.5	192.1	218.3
		1993	(NA)	98.9	49.6	170.6	176.8
28731 11	Nitric acid (100% HNO ₃): Production	1994	8,611.1	2,237.6	2,164.0	1,964.0	2,245.6
		1993	8,523.9	2,112.6	2,179.8	1,946.8	2,284.6
		1994	(NA)	(X)	(X)	(X)	(X)
		1993	(NA)	(X)	(X)	(X)	(X)

See footnotes at end of table.

Table 9B. Primary Production of Inorganic Fertilizer Chemicals, By Quarter: 1994 and 1993—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% N):	Production	1994 3,493.1	979.3	967.7	704.6	841.5
			1993 3,584.3	848.8	864.0	851.6	1,020.0
		Stocks on hand, end of quarter.....	1994 (NA)	416.5	271.5	296.9	340.5
			1993 (NA)	380.1	160.9	387.1	335.7
28731 65	Solutions containing ammonia ³ :	Production	1994 131.4	33.0	40.2	28.9	29.2
			1993 127.4	10.6	11.9	53.9	51.0
		Stocks on hand, end of quarter.....	1994 (NA)	12.5	7.9	11.1	86.3
			1993 (NA)	18.8	13.2	8.2	10.1
28731 66	Solutions containing ammonium nitrate/urea:	Production	1994 3,361.7	947.1	926.6	675.2	812.8
			1993 3,456.9	838.2	852.2	797.6	969.0
		Stocks on hand, end of quarter.....	1994 (NA)	404.0	263.6	285.8	254.2
			1993 (NA)	361.3	147.7	378.9	325.6
28731 73	Solutions containing ammonium nitrate/calcium nitrate:	Production	1994 (3)	(3)	(3)	(3)	(3)
			1993 (3)	(3)	(3)	(3)	(3)
		Stocks on hand, end of quarter.....	1994 (NA)	(X)	(X)	(X)	(X)
			1993 (NA)	(X)	(X)	(X)	(X)
28731 67	All other two-component products:	Production	1994 (3)	(3)	(3)	(3)	(3)
			1993 (3)	(3)	(3)	(3)	(3)
		Stocks on hand, end of quarter.....	1994 (NA)	(3)	(3)	(3)	(3)
			1993 (NA)	(3)	(3)	(3)	(3)
28741 —	Phosphoric acid (100% P ₂ O ₅):	Production	1994 12,819.5	3,081.8	3,269.6	3,213.6	3,254.5
			1993 11,515.1	2,872.0	3,014.1	2,688.1	2,940.9
		Stocks on hand, end of quarter.....	1994 (NA)	255.1	281.3	259.2	277.8
			1993 (NA)	303.2	284.7	274.6	248.4
28741 81	Thermal:	Production	1994 324.2	79.9	81.7	83.6	79.0
			1993 322.1	85.6	86.4	83.3	66.7
		Stocks on hand, end of quarter.....	1994 (NA)	10.8	8.6	12.4	10.3
			1993 (NA)	13.0	11.6	13.0	13.6
28741 85	Wet:	Production	1994 12,468.0	3,001.8	3,188.0	3,102.5	3,175.7
			1993 11,193.0	2,786.4	2,927.7	2,604.8	2,874.2
		Stocks on hand, end of quarter.....	1994 (NA)	244.2	272.7	245.9	267.5
			1993 (NA)	290.2	273.1	261.6	234.8
28741 86	By use: Fertilizer:	Production	1994 11,588.8	2,779.9	2,952.0	2,889.3	2,967.6
			1993 10,324.6	2,562.8	2,722.5	2,407.3	2,632.0
		Stocks on hand, end of quarter.....	1994 (NA)	(D)	(D)	(D)	(D)
			1993 (NA)	(D)	(D)	(D)	(D)
28741 87	Feed and other:	Production	1994 879.2	223.9	238.0	211.4	206.0
			1993 868.3	224.9	201.1	196.6	245.7
		Stocks on hand, end of quarter.....	1994 (NA)	(D)	(D)	(D)	(D)
			1993 (NA)	(D)	(D)	(D)	(D)
28741 88	By grade: Ortho (less than 65% P ₂ O ₅):	Production	1994 11,252.1	2,695.7	2,873.6	2,822.4	2,860.4
			1993 10,068.0	2,515.4	2,653.5	2,336.9	2,562.2
		Stocks on hand, end of quarter.....	1994 (NA)	210.6	243.3	213.9	240.0
			1993 (NA)	236.9	232.0	227.9	201.4
28741 89	Super (more than 65% P ₂ O ₅):	Production	1994 1,215.9	305.3	314.2	281.4	315.0
			1993 1,125.0	271.1	274.6	267.7	311.5
		Stocks on hand, end of quarter.....	1994 (NA)	33.6	29.4	32.0	27.5
			1993 (NA)	53.4	41.1	33.7	33.4

See footnotes at end of table.

Table 9B. Primary Production of Inorganic Fertilizer Chemicals, By Quarter: 1994 and 1993—Con.

[Thousands of short tons]

Product code	Product description	Year	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28732 —	Urea (100% urea):	1994	7,979.2	2,111.2	1,907.1	1,896.5	2,064.4
		1993	8,329.6	2,143.6	2,057.0	1,905.8	2,223.2
	Stocks on hand, end of quarter.....	1994	(NA)	491.2	336.8	372.1	418.5
		1993	(NA)	342.2	329.7	532.9	542.0
28732 16	For fertilizer use:	1994	2,864.1	778.9	735.8	599.2	750.2
		1993	3,123.8	822.4	759.7	674.3	867.4
	Stocks on hand, end of quarter.....	1994	(NA)	(D)	(D)	(D)	(D)
		1993	(NA)	(D)	(D)	(D)	(D)
28732 18	Solid:	1994	4,243.0	1,118.0	964.8	1,055.7	1,104.6
		1993	4,236.8	1,044.0	1,071.0	990.8	1,131.0
	Stocks on hand, end of quarter.....	1994	(NA)	338.0	272.3	271.0	310.9
		1993	(NA)	243.4	262.9	396.3	443.0
28732 21	Other uses:	1994	241.9	78.3	54.4	56.3	52.9
		1993	300.8	76.6	55.3	76.7	92.2
	Stocks on hand, end of quarter.....	1994	(NA)	7.7	4.3	5.6	6.4
		1993	(NA)	5.4	3.6	12.9	6.6
28732 22	All other (solid and solution):	1994	602.9	137.2	156.5	152.2	157.1
		1993	668.2	200.6	171.0	164.0	132.6
	Stocks on hand, end of quarter.....	1994	(NA)	(S)	(S)	(S)	(S)
		1993	(NA)	(D)	(D)	(D)	(D)

¹Represents 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).

²Excludes data for Government-owned, privately operated plants.

³"Solutions containing ammonium nitrate/calcium nitrate" (product code 28731 73) and "All other two-component products" (product code 28731 67) are combined with "Solutions meet containing ammonia" (product code 28731 65) to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

Note: Detail may not add to total due to independent rounding.

Table 9C. **Production, Shipments, and Stocks of Superphosphates and Other Phosphatic Fertilizer Materials, By Quarter: 1994 and 1993**

[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% P ₂ O ₅).....	1994	10,023.9	2,354.8	2,559.8	2,528.1	2,581.1
			1993	8,800.9	2,185.5	2,410.9	2,001.7	2,202.8
		Shipments, including interplant transfers (100% P ₂ O ₅).....	1994	9,972.6	2,540.1	2,425.3	2,587.5	2,419.7
			1993	8,813.8	2,107.4	2,602.5	1,997.3	2,106.6
		Stocks on hand, end of quarter (gross weight) . . .	1994	(NA)	499.7	641.3	602.8	704.4
			1993	(NA)	928.7	462.2	503.2	721.4
28742 15, 41	Normal, concentrated, and enriched superphosphates (triple) (over 40% P ₂ O ₅):	Production (100% P ₂ O ₅).....	1994	853.3	211.2	218.7	210.6	212.8
			1993	765.4	236.9	204.0	139.5	185.1
		Shipments, including interplant transfers (100% P ₂ O ₅).....	1994	811.9	220.2	186.3	197.7	207.7
			1993	753.5	229.1	195.8	140.0	188.6
		Stocks on hand, end of quarter (gross weight) . . .	1994	(NA)	41.2	84.2	105.9	99.8
			1993	(NA)	132.2	(D)	(D)	85.2
28742 51	Ammonium phosphates: Monoammonium phosphates:	Production (100% P ₂ O ₅).....	1994	1,754.1	449.0	434.9	448.3	421.9
			1993	1,543.4	404.1	375.3	396.4	367.5
		Shipments, including interplant transfers (100% P ₂ O ₅).....	1994	1,788.6	485.1	434.6	478.1	390.8
			1993	1,544.5	372.2	451.8	379.4	341.1
		Stocks on hand, end of quarter (gross weight) .	1994	(NA)	168.0	146.2	117.8	116.1
			1993	(NA)	207.9	88.0	180.4	179.6
28742 52	Diammonium phosphates:	Production (100% P ₂ O ₅).....	1994	7,049.8	1,598.3	1,801.3	1,808.2	1,842.0
			1993	6,130.0	1,442.5	1,711.0	1,400.3	1,576.2
		Shipments, including interplant transfers (100% P ₂ O ₅).....	1994	7,017.0	1,738.2	1,669.5	1,863.3	1,746.0
			1993	6,179.7	1,422.3	1,812.4	1,432.5	1,512.5
		Stocks on hand, end of quarter (gross weight) .	1994	(NA)	216.4	373.2	301.5	405.9
			1993	(NA)	490.0	331.1	252.0	358.0
28742 55, 61	Other ammonium phosphates and other phosphatic fertilizer materials ¹ :	Production (100% P ₂ O ₅).....	1994	366.7	96.3	104.9	61.0	104.5
			1993	362.1	102.0	120.6	65.5	74.0
		Shipments, including interplant transfers (100% P ₂ O ₅).....	1994	355.1	96.6	135.0	48.4	75.2
			1993	336.1	83.8	142.5	45.4	64.4
		Stocks on hand, end of quarter (gross weight) . . .	1994	(NA)	74.1	37.7	77.6	82.6
			1993	(NA)	98.6	43.1	70.8	98.6

¹“Other ammonium phosphates” (product code 28742 55) is combined with “Other phosphatic fertilizer materials” (product code 28742 61) to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Note: Detail may not add to total due to independent rounding.

Table 10. Production and Stocks of Sulfuric Acid, by Process, by Quarter: 1994 and 1993

[Thousands of short tons of 100% H₂SO₄]

Quarter and year	Production				Sulfuric acid produced through decomposition	Spent acid used in fortification ²	Stocks (gross) at producing plants at end of period
	Sulfuric acid, gross, new and fortified			New acid ¹			
	Total	Oleum grades	Other than oleum grades				
1994							
Total	44,813.0	1,594.9	43,218.1	42,262.2	(D)	(D)	(NA)
First quarter	11,608.3	410.0	11,198.2	11,024.8	(D)	(D)	623.0
Second quarter	11,332.2	428.9	10,903.3	10,712.2	(D)	(D)	594.4
Third quarter	11,225.6	443.5	10,782.1	10,541.1	(D)	(D)	518.7
Fourth quarter	10,646.9	312.5	10,334.4	9,984.1	(D)	(D)	696.2
1993							
Total	39,838.5	1,559.6	38,278.9	37,081.7	(D)	(D)	(NA)
First quarter	9,585.6	422.0	9,163.6	8,954.9	(D)	(D)	720.7
Second quarter	10,254.6	351.1	9,903.6	9,584.4	(D)	(D)	687.6
Third quarter	9,558.5	357.3	9,201.2	8,818.9	(D)	(D)	737.0
Fourth quarter	10,439.7	429.1	10,010.6	9,723.4	(D)	(D)	728.8

¹Represents gross production of sulfuric acid less acid produced through decomposition and spent acid used in fortification.²Spent acid fortified by the addition of sulfur trioxide.

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Note: Detail may not add to total due to independent rounding.

Table 11. **Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1994 and 1993**

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise ¹		Percent exports to production (quantity)	Imports for consumption ²		Apparent consumption ⁴ (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value ³		
1994									
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)	11,382,200	770,638	139,949	6.8	486,703	103,898	11,098,265	4.4
28125 21	Potassium hydroxide, liquid	(D)	54,732	20,516	(D)	50,001	7,821	(D)	(D)
28125 30	Finished sodium bicarbonate	435,180	51,917	17,536	11.9	8,560	4,236	391,823	2.2
28161 00	Titanium dioxide (composite and pure)	1,251,028	352,325	485,223	28.2	129,293	218,124	1,024,176	12.6
28193 —	Sulfuric acid, gross	40,628,250	140,206	11,051	0.3	2,134,492	85,068	42,622,536	5.0
28194 11	Boric acid	(D)	87,357	53,319	(D)	19,654	12,930	(D)	(D)
28194 41, 45, 47	Hydrochloric acid	3,385,752	45,176	7,885	1.3	57,060	5,636	3,397,636	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	(D)	21,124	28,267	(D)	16,895	11,947	(D)	(D)
28194 98, 28195 00	Aluminum oxide	4,052,574	997,284	243,661	24.6	3,059,804	593,080	6,115,094	50.0
28196 13, 17	Aluminum chloride	41,248	10,966	6,379	26.6	4,329	2,221	34,611	12.5
28196 25	Aluminum hydroxide trihydrate	954,180	68,035	27,671	7.1	99,829	70,195	985,974	10.1
28196 27	Aluminum flouride	(D)	16,077	9,113	(D)	23,709	22,719	(D)	(D)
28196 51	Aluminum sulfate (commercial)	1,003,329	7,056	3,529	0.7	30,881	11,622	1,027,154	3.0
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	-	-	-	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	477,512	34,279	12,089	7.2	214,855	19,021	658,088	32.6
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)	2,043,530	37,614	12,229	1.8	68,979	10,373	2,074,895	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	1,865,343	106,727	72,054	5.7	15,925	8,416	1,774,541	0.9
28199 27	Carbon activated (granular and pulverized) ⁵	142,793	26,311	49,027	18.4	26,601	42,135	143,083	18.6
28199 35	Cuprous oxide	(D)	(NA)	(NA)	(NA)	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	(D)	4,395	2,515	(D)	23,113	8,056	(D)	(D)
28199 49	Magnesium sulfate	(D)	4,160	2,205	(D)	9,793	2,800	(D)	(D)
28199 51	Manganese dioxide	50,325	3,316	3,598	6.6	29,774	48,884	76,783	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)

See footnotes at end of table.

Table 11. Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1994 and 1993—Con.

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise ¹		Percent exports to production (quantity)	Imports for consumption ²		Apparent consumption ⁴ (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value ³		
1994—Con.									
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	0.0
28199 71	Strontium carbonate	(D)	1,616	799	(D)	33,075	20,581	(D)	(D)
28199 74	Sulfur, recovered elemental.....	6,491,387	530,770	20,159	8.2	1,583,458	76,910	7,544,075	21.0
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	40,443	4,802	2,884	11.9	7,197	4,182	42,838	16.8
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	Bleaches (sodium and calcium hypochlorite, etc.)	635,984	48,720	39,709	7.7	21,725	18,088	608,989	3.6
28731 30, 32	Ammonia, synthetic anhydrous.....	15,645	(D)	(NA)	(D)	(D)	(NA)	(D)	(D)
28731 50	Ammonium nitrate, original solution.	7,721	55	(NA)	0.7	507	(NA)	8,174	6.2
28731 66	Nitrogen solutions, ammonium nitrate/urea solutions.....	3,167	119	(NA)	3.8	312	(NA)	3,360	9.3
28731 56, 58	Ammonium sulfate	2,346	762	(NA)	32.5	456	(NA)	2,039	22.3
28732 —	Urea	7,210	914	(NA)	12.7	3,160	(NA)	9,456	33.4
28741 81, 85	Phosphoric acid	11,598	(D)	(NA)	(D)	16	(NA)	(D)	(D)
28742 15, 41	Normal, concentrated, and enriched superphosphates	1,711	809	(NA)	47.3	-	(NA)	902	-
28742 52	Diammonium phosphates	12,301	9,195	(NA)	74.7	15	(NA)	3,122	0.5
28193 —	Sulfuric acid, gross	40,628	140	(NA)	0.3	2,135	(NA)	42,623	5.0
1993'									
28121 11	Chlorine gas	10,950,983	36,892	11,966	0.3	293,387	27,304	11,207,478	2.6
28123 50	Sodium hydroxide, total liquid (all processes)	11,326,733	877,133	140,187	7.7	455,046	89,138	10,904,646	4.2
28125 21	Potassium hydroxide, liquid.....	(D)	57,527	21,500	(D)	46,186	8,200	(D)	(D)
28125 30	Finished sodium bicarbonate	(D)	46,696	21,718	(D)	7,773	5,174	(D)	(D)
28161 00	Titanium dioxide (composite and pure).....	1,159,844	290,191	405,164	25.0	117,611	214,177	987,264	11.9
28193 —	Sulfuric acid, gross	36,118,308	144,921	11,168	0.4	2,430,091	70,694	38,403,478	6.3
28194 11	Boric acid	(D)	74,467	50,499	(D)	16,745	12,015	(D)	(D)
28194 41, 45, 47	Hydrochloric acid.....	3,165,789	40,109	5,959	1.3	69,353	4,348	3,195,033	2.2
28194 61, 65	Hydrofluoric acid	154,727	9,087	11,909	5.9	62,948	59,977	208,588	30.2
28194 51, 67	Other inorganic acids	(D)	17,386	23,665	(D)	16,819	14,394	(D)	(D)
28194 98, 28195 00	Aluminum oxide	4,491,086	1,202,992	282,220	26.8	3,873,107	750,720	7,161,201	54.1
28196 13, 17	Aluminum chloride.....	36,796	7,780	5,240	21.1	9,880	5,696	38,896	25.4
28196 25	Aluminum hydroxide trihydrate	828,886	52,970	23,608	6.4	96,800	52,842	872,716	11.1
28196 27	Aluminum flouride	(D)	26,876	21,586	(D)	39,397	31,118	(D)	(D)
28196 51	Aluminum sulfate (commercial).....	971,759	6,757	2,120	0.7	25,900	6,943	990,902	2.6
28196 73	Aluminates (sodium aluminat, etc.)	116,005	15,099	4,896	13.0	1,013	1,161	101,919	1.0
28197 13	Potassium iodide.....	1,151	85	1,185	7.4	119	1,044	1,185	10.0
28197 16	Potassium sulfate	(D)	-	-	(D)	87,308	17,343	(D)	(D)

See footnotes at end of table.

Table 11. **Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1994 and 1993—Con.**

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise ¹		Percent exports to production (quantity)	Imports for consumption ²		Apparent consumption ⁴ (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value ³		
1993^r—Con.									
28197 23	Potassium phosphates	11,303	2,820	3,806	24.9	2,699	3,713	11,182	24.1
28197 24	Potassium silicates	5,309	1,540	901	29.0	283	205	4,052	7.0
28197 21	Sodium metal	(D)	7,722	19,846	(D)	693	1,452	(D)	(D)
28197 27	Sodium chlorate	488,902	11,650	5,717	2.4	368,185	122,718	845,437	43.5
28197 84	Sodium sulfite	105,827	41,020	12,640	38.8	10,674	4,697	75,481	14.1
28197 32, 33	Sodium phosphate mono and dibasic	(D)	3,240	5,872	(D)	8,364	9,102	(D)	(D)
28197 34	Sodium phosphate tribasic	21,784	813	896	3.7	3,859	2,274	24,830	15.5
28197 38	Sodium phosphate tripoly	(D)	51,884	35,530	(D)	56,734	38,254	(D)	(D)
28197 41, 42, 45, 47	Sodium silicates (other than metasilicates)	912,086	24,411	9,290	2.7	3,716	7,990	891,391	0.4
28197 44	Sodium metasilicates	89,103	11,207	5,713	12.6	2,383	1,524	80,279	3.0
28197 61, 66	Sodium sulfate	536,423	30,289	11,138	5.6	173,416	15,855	679,550	25.5
28197 85	Sodium thiosulfate (hypo)	(D)	2,504	1,749	(D)	2,007	889	(D)	(D)
28199 05	Barium sulfate	(D)	246	565	(D)	12,244	10,757	(D)	(D)
28199 04	Barium carbonate	(D)	381	1,618	(D)	10,858	6,438	(D)	(D)
28199 10	Bromine	213,737	6,013	7,441	2.8	850	525	208,574	0.4
28199 12	Calcium carbide	(D)	28,772	15,735	(D)	1,175	622	(D)	(D)
28199 13	Calcium carbonate (precipitated)	1,608,519	25,862	7,570	1.6	59,651	10,820	1,642,308	3.6
28199 14	Calcium chloride	439,174	47,588	14,228	10.8	209,923	23,845	601,509	34.9
28199 18, 19, 22, 25, 28742 71	Calcium phosphates	1,824,219	131,675	76,866	7.2	23,233	13,536	1,715,777	1.4
28199 27	Carbon activated (granular and pulverized) ⁵	130,376	30,546	60,324	23.4	24,421	42,204	124,251	19.7
28199 35	Cuprous oxide	(D)	(NA)	(NA)	(NA)	77	216	(D)	(D)
28199 39	Hydrogen peroxide	273,419	44,542	29,113	16.3	51,753	29,614	280,630	18.4
28199 40	Iodine	(D)	1,014	8,556	(D)	3,509	27,925	(D)	(D)
28199 43	Iron oxides and hydroxides	24,921	18,473	35,385	74.1	16,672	20,564	23,120	72.1
28199 48	Magnesium chloride	(D)	3,141	2,635	(D)	5,323	2,314	(D)	(D)
28199 49	Magnesium sulfate	(D)	4,139	1,666	(D)	6,652	2,021	(D)	(D)
28199 51	Manganese dioxide	46,695	3,647	3,144	7.8	26,772	40,947	69,820	38.3
28199 53	Mercury	(D)	888	1,228	(D)	40	151	(D)	(D)
28199 5B	Molybdates	(D)	958	4,784	(D)	556	2,725	(D)	(D)
28199 56	Nickel oxides and hydroxides	(D)	308	2,950	(D)	863	8,110	(D)	(D)
28199 57	Nickel chloride	46	181	829	393.5	762	1,544	627	121.5
28199 55	Nickel sulfate	(D)	856	2,626	(D)	3,552	5,940	(D)	(D)
28199 58	Phosphorous, elemental	233,621	18,355	32,186	7.9	1,056	7,256	216,322	0.5
28199 60, 63	Phosphorous, oxychloride and trichloride	161,461	1,109	3,463	0.7	19	1,769	160,371	-
28199 71	Strontium carbonate	(D)	374	373	(D)	24,770	15,286	(D)	(D)
28199 74	Sulfur, recovered elemental	6,949,229	502,791	18,237	7.2	2,012,016	67,035	8,458,454	23.8
28199 75	Sulfur dioxide	211,935	1,217	418	0.6	67,174	10,627	277,892	24.2
28199 84	Tungstates	(D)	186	2,424	(D)	1,767	10,117	(D)	(D)
28199 87	Zinc sulfate	36,157	4,334	2,716	12.0	5,617	3,334	37,440	15.0
28199 86	Zinc oxide and peroxide	(D)	5,455	7,251	(D)	34,657	38,076	(D)	(D)
28199 88	Zinc chloride	(D)	1,135	947	(D)	3,575	3,668	(D)	(D)
28163 13, 15, 17, 18, 19	Chrome colors	46,040	2,312	9,402	5.0	4,981	13,101	48,709	10.2
28199 15, 30, 28422 43, 53	Bleaches (sodium and calcium hypochlorite, etc.)	649,142	35,373	33,598	5.4	19,852	18,348	633,621	3.1
28731 30, 32	Ammonia, synthetic anhydrous	15,590	(D)	(NA)	(D)	(D)	(NA)	(D)	(D)
28731 50	Ammonium nitrate, original solution	7,508	66	(NA)	0.9	485	(NA)	7,927	6.1
28731 66	Nitrogen solutions, ammonium nitrate/urea solutions	3,250	28	(NA)	0.9	391	(NA)	3,613	10.8
28731 56, 58	Ammonium sulfate	2,205	758	(NA)	34.4	367	(NA)	1,814	20.2
28732 —	Urea	7,552	659	(NA)	8.7	2,964	(NA)	9,857	30.1

See footnotes at end of table.

Table 11. **Production, Exports, Imports, and Apparent Consumption of Selected Inorganic Chemicals and Fertilizer Materials: 1994 and 1993—Con.**

[Quantity in thousands of metric tons. Value in thousands of dollars]

Product code	Product description	Production (quantity)	Exports of domestic merchandise ¹		Percent exports to production (quantity)	Imports for consumption ²		Apparent consumption ⁴ (quantity)	Percent imports to apparent consumption (quantity)
			Quantity	Value		Quantity	Value ³		
1993^r—Con.									
28741 81, 85	Phosphoric acid	10,440	(D)	(NA)	(D)	17	(NA)	(D)	(D)
28742 15, 41	Normal, concentrated, and enriched superphosphates ⁶	1,389	780	(NA)	56.2	-	(NA)	609	-
28742 52	Diammonium phosphates ⁶	10,894	7,239	(NA)	66.4	38	(NA)	3,694	1.0
28193 —	Sulfuric acid, gross	36,118	145	(NA)	0.4	2,430	(NA)	38,404	6.3

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²Source: Bureau of the Census report IM146, *U.S. Imports for Consumption*.³This dollar value represents c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus calculated import duty.⁴Apparent consumption is derived by subtracting exports from manufacturers' production plus imports. Apparent consumption does not include any adjustments for changes in inventories.⁵Includes reactivated carbon.⁶The phosphatic fertilizer materials production figures are collected and published on a 100% P₂O₅ basis; however, the import and export figures are collected and published on a gross weight basis. Due to the difference in the basis, the production, import, and export data are not comparable.- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available. ^rRevised by 5 percent or more from previously published figures.

Note: 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 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. Histori-

cal 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.

4.2 INDUSTRIAL GASES

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 1994, total manufacturers' shipments of industrial gases amounted to \$3,291.6 million, an increase of 3.4 percent from the 1993 shipments of \$3,182.2 million.

Total shipments of carbon dioxide increased 1.1 percent to \$338.1 million in 1994, from \$334.1 million in 1993. Carbon dioxide gas decreased 12.2 percent to \$64.4 million in 1994, from \$73.4 million in 1993. Carbon dioxide liquid increased 5.2 percent to \$242.9 million in 1994, from \$230.8 million in 1993; however, solid carbon dioxide (dry ice) increased 1.6 percent in 1994, bringing its value to \$30.4 million, from a 1993 value of \$29.9 million.

Total production of nitrogen increased 10.8 percent to 881.7 billion cubic feet in 1994, from 795.5 billion in 1993; however, shipments of nitrogen increased only 0.5 percent to \$1,077.0 million in 1994, from \$1,070.8 million in 1993. Production of nitrogen gas increased 13.6 percent in 1994 to 606.7 billion cubic feet, from 534.2 billion in 1993; but shipments of nitrogen gas increased 10.9 percent to \$488.7 million in 1994, from \$440.5 million in 1993. Production of liquid nitrogen for merchant shipments increased 3.4 percent in 1994 to 233.3 billion cubic feet, from 225.5 billion in 1993; however, shipments decreased 7.6 percent to \$542.5 million in 1994, from \$587.5 million in 1993.

Total production of oxygen increased 10.5 percent to 605.0 billion cubic feet in 1994, from 547.1 billion in 1993; but shipments of oxygen increased 1.1 percent to \$878.7 million in 1994, from \$869.1 million in 1993. Production of oxygen gas increased 11.5 percent in 1994 to 455.1 billion cubic feet, from 407.8 billion in 1993; however, shipments of oxygen gas increased 4.9 percent to \$560.9 million in 1994,

from \$534.2 million in 1993. Production of liquid oxygen for merchant shipments increased 5.4 percent in 1994 to 110.4 billion cubic feet, from 104.7 billion in 1993; however, shipments decreased 7.8 percent to \$285.5 million in 1994, from \$309.9 million in 1993.

Total production of hydrogen increased 19.3 percent to 254.2 billion cubic feet in 1994, from 212.9 billion in 1993; but shipments of hydrogen increased only 7.3 percent to \$283.5 million in 1994, from \$264.2 million in 1993.

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: 1991 to 1994

[Value in millions of dollars]

Product code	Product description	Year	Unit of measure	Production	Shipments	
					Quantity	Value
28132 00	Acetylene.....	1994	Billion cu. ft.	5.4	2.9	151.8
		1993	.....do	5.2	2.7	134.1
		1992	.....do	5.3	2.9	141.6
		1991	.....do	5.5	2.9	135.7
28133 00	Carbon dioxide: Gas.....	1994	1,000 short tons ..	6,744.7	6,336.3	64.4
		1993	.....do	6,816.4	6,402.5	73.4
		1992	.....do	6,936.5	6,538.5	75.0
		1991	.....do	7,949.4	7,644.7	76.3
	Liquid	1994	.....do	5,899.2	5,727.0	242.9
		1993	.....do	5,543.4	5,266.2	230.8
		1992	.....do	5,542.0	5,372.9	230.4
		1991	.....do	5,001.2	4,853.2	267.4
	Solid (dry ice)	1994	.....do	288.0	286.8	30.9
		1993	.....do	295.9	294.9	29.9
		1992	.....do	262.0	261.2	27.2
		1991	.....do	267.2	266.6	30.6
28135 00	Nitrogen	1994	Billion cu. ft.	881.7	839.2	1,077.0
		1993	.....do	795.5	751.3	1,070.8
		1992	.....do	818.5	792.9	981.5
		1991	.....do	769.9	753.1	953.7
28136 00	Oxygen.....	1994	.....do	605.0	564.7	878.7
		1993	.....do	547.1	522.9	869.1
		1992	.....do	525.2	498.9	767.3
		1991	.....do	469.7	446.6	767.0
28137 pt.	Hydrogen.....	1994	.....do	254.2	121.3	283.5
		1993	.....do	212.9	96.5	264.2
		1992	.....do	162.2	84.3	259.7
		1991	.....do	152.7	79.9	226.8

pt. Part. *Revised by 5 percent or more from previously published figures.

Table 13. Quantity of Primary Production of Specified Industrial Gases: 1994 and 1993

[Production and quantity of shipments in million cubic feet. Value in thousands of dollars]

Product code	Product description	Unit of measure	1994			1993		
			Production	Shipments		Production	Shipments	
				Quantity	Value		Quantity	Value
2813- —	Industrial gases.....	(X)	(X)	(X)	3,291,578	(X)	(X)	3,182,193
28132 00	Acetylene ¹	Million cu. ft.	5,366	2,922	151,739	5,167	2,701	¹ 134,061
28132 11	Produced for compression, including cylinder and pipeline.....	do						
28132 21	Produced for pipeline shipment, excluding that shipped to be compressed, and for consumption in this plant.....	do	767	742	79,268	¹ 757	¹ 736	¹ 71,201
28133 00	Carbon dioxide ²	Short tons	12,931,877	12,350,017	338,090	12,655,727	11,963,588	334,103
28133 01	Gas, including amounts produced and liquefied.....	do	6,744,710	6,336,270	64,374	6,816,375	¹ 6,402,507	73,400
28133 02	Liquid, including amounts produced and used to make dry ice.....	do	5,899,209	5,726,978	242,851	5,543,442	5,266,220	230,773
28133 31	Solid (dry ice).....	do	287,958	286,769	30,865	295,910	294,861	29,930
28135 00	Nitrogen ³	Million cu. ft.	881,700	839,246	1,076,962	795,519	751,318	1,070,838
28135 22	Gas produced by: Cryogenic on-site and pipeline AND							
28135 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies.....	do	606,656	591,718	488,737	534,179	513,941	440,454
28135 24	Captive uses for consumption in this plant: Cryogenic processes AND							
28135 26	Noncryogenic processes (psa, vpsa, membranes, etc.).....	do	⁴ 27,529	(X)	(X)	⁴ 22,909	(X)	(X)
28135 12	Liquid produced for: Merchant shipment.....	do	233,258	233,561	542,516	225,494	224,630	587,477
28135 32	Consumption in this plant.....	do	(⁴)	(X)	(X)	(⁴)	(X)	(X)
28135 34	Supplemental shipments or uses.....	do	14,257	13,967	45,709	12,937	12,747	42,907
28136 00	Oxygen.....	do	604,955	564,697	878,717	547,133	522,938	869,096
28136 22	Gas produced by: Cryogenic on-site and pipeline AND							
28136 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies.....	do	455,130	444,006	560,947	407,776	407,790	534,217
28136 24	Captive uses for consumption in this plant: Cryogenic processes AND							
28136 26	Noncryogenic processes (psa, vpsa, membranes, etc.).....	do	⁵ 28,702	(X)	(X)	⁵ 25,225	(X)	(X)
28136 12	Liquid produced for: Merchant shipment.....	do	110,362	110,116	285,457	104,699	106,023	309,908
28136 32	Consumption in this plant.....	do	(⁵)	(X)	(X)	(⁵)	(X)	(X)
28136 34	Supplemental shipments or uses.....	do	10,761	10,575	32,313	9,433	9,125	24,971
28137 00	Elemental gases and other industrial gases, n.e.c.....	Million cu. ft.	(X)	(X)	803,571	(X)	(X)	733,801
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	18,177	17,840	285,477	15,621	14,988	261,018
	Helium ⁶	do	3,620	3,620	(X)	3,445	3,445	(X)
	Hydrogen ⁷	do	254,184	121,277	283,530	212,874	96,458	264,241

See footnotes at end of table.

Table 13. Quantity of Primary Production of Specified Industrial Gases: 1994 and 1993—Con.

[Production and quantity of shipments in million cubic feet. Value in thousands of dollars]

Product code	Product description	Unit of measure	1994			1993		
			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 AND							
28137 32	Pipeline and on-site use .....	.do.....	⁸ 135,098	121,277	283,530	⁸ 105,655	96,458	264,241
28137 42	Consumption in this plant .....	.do.....	119,086	(X)	(X)	107,219	(X)	(X)
	Liquid produced for:							
28137 52	Merchant shipment AND							
28137 62	Supplemental shipments or uses .....	.do.....	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)
28137 90	Other elemental gases.....	(X).....	(X)	(X)	(D)	(X)	(X)	(D)
28137 71	Nitrous oxide AND							
28137 98	Other compressed and liquefied gases ⁹	(X).....	(X)	(X)	133,563	(X)	(X)	¹ 124,187
28130 00	Industrial gases, n.s.k.....	(X).....	(X)	(X)	42,499	(X)	(X)	40,294

¹Excludes information from railroad ships, shipyards, welding shops, and small establishments using portable generators.²Excludes 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.³Excludes amounts produced and consumed in the manufacturing of synthetic ammonia or ammonia derivatives.⁴Product code 28135 32 has been combined with product codes 28135 24 and 28135 26 to avoid disclosing figures for individual companies.⁵Product code 28136 32 has been combined with product codes 28136 24 and 28136 26 to avoid disclosing figures for individual companies.⁶Source: U.S. Department of Interior, Bureau of Mines.⁷Excludes 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 the production of ammonia. Also excludes amounts produced by the ammonia dissociation process (cracking of ammonia). Also excludes amounts produced in petroleum refineries for captive use.⁸Product codes 28137 52 and 28137 62 are combined with product codes 28137 22 and 28137 32 to avoid disclosing figures for individual companies.⁹Excludes 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, *Inorganic Chemicals*.

D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind.

¹Revised by 5 percent or more from previously published figures. X Not applicable.

Note: N.s.k. represents the 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. The n.s.k. value has been estimated based on the rate of change for the reporting establishments applied to the previous year's figures.

Table 14. **Production and Shipments of Acetylene, By Geographic Area: 1994 and 1993**

[Production and quantity in million cubic feet. Value in thousands of dollars]

Geographic area	1994			1993		
	Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value
Total	5,366	2,922	151,739	5,167	2,701	¹ 134,061
Northeast Region.....	62	65	5,054	77	¹ 75	5,458
North Central Region	217	209	28,038	225	209	20,194
East North Central.....	149	142	21,524	160	144	13,867
West North Central.....	68	67	6,514	65	65	6,327
South Region	4,946	2,523	105,943	4,708	2,256	¹ 91,497
South Atlantic and East South Central	678	673	44,254	651	642	39,998
West South Central.....	4,268	1,850	61,689	4,057	1,614	¹ 51,499
West Region.....	141	125	12,704	157	161	16,912
Mountain.....	29	26	2,829	26	26	2,488
Pacific	112	99	9,875	131	135	14,424

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

See note at end of table 17.

Table 15. **Production and Shipments of Carbon Dioxide, By Geographic Area: 1994 and 1993**

[Production and quantity in short tons. Value in thousands of dollars]

Geographic area	Liquid			Solid		
	Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value
1994						
Total	5,899,209	5,726,978	242,851	287,958	286,769	30,865
Northeast Region.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
North Central Region	1,706,555	1,666,123	62,547	152,322	152,071	14,258
East North Central.....	¹ 1,234,782	¹ 1,224,789	¹ 49,799	¹ 78,279	¹ 79,124	¹ 8,716
West North Central.....	471,773	441,334	12,748	74,043	72,947	5,542
South Region	3,010,003	2,892,803	119,334	84,951	83,505	9,830
South Atlantic and East South Central	1,732,732	1,656,359	56,286	43,747	43,681	4,661
West South Central.....	1,277,271	1,236,444	63,048	41,204	39,824	5,169
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
1993						
Total	5,543,442	5,266,220	230,773	295,910	294,861	29,930
Northeast Region.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
North Central Region	1,465,045	1,338,157	¹ 50,054	164,543	163,830	14,955
East North Central.....	¹ 1,046,692	¹ 952,662	¹ 40,049	¹ 86,568	¹ 86,660	¹ 8,996
West North Central.....	418,353	385,495	10,005	¹ 77,975	¹ 77,170	¹ 5,959
South Region	2,958,658	2,828,739	121,438	¹ 78,940	¹ 78,530	¹ 8,337
South Atlantic and East South Central	1,878,706	1,799,753	71,609	43,894	43,816	4,090
West South Central.....	1,079,952	1,028,986	¹ 49,829	¹ 35,046	¹ 34,714	¹ 4,247
West Region.....	1,119,739	1,099,324	59,281	52,427	52,501	6,638
Mountain.....	363,271	319,668	17,990	18,114	18,114	1,447
Pacific	756,468	779,656	41,291	34,313	34,387	5,191

¹Totals for Northeast Region are combined with East North Central to avoid disclosing figures for individual companies.¹Revised by 5 percent or more from previously published figures.

See note at end of table 17.

Table 16. Production and Shipments of Argon and Hydrogen, By Geographic Area: 1994 and 1993

[Production and quantity in short tons. Value in thousands of dollars]

Geographic area	Argon						Hydrogen					
	1994			1993			1994			1993		
	Production	Shipments		Production	Shipments		Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value
Total	(D)	(D)	(D)	(D)	(D)	(D)	254,184	121,277	283,530	212,874	96,458	264,241
Northeast Region.....	1,231	1,302	19,162	1,212	1,206	21,019	20,215	8,316	29,646	17,972	8,508	34,294
North Central Region	(D)	(D)	(D)	(D)	(D)	(D)	27,607	3,589	12,300	20,862	3,802	11,346
East North Central Division	7,541	7,566	107,126	6,543	6,539	105,309	(D)	(D)	(D)	(D)	(D)	(D)
West North Central Division	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
South Region	9,581	9,194	149,714	8,028	7,406	125,969	188,806	(D)	(D)	157,029	(D)	(D)
South Atlantic Division	1,897	1,904	37,274	1,589	1,591	32,230	9,546	2,474	9,678	7,747	2,339	8,917
East South Central Division	1,337	1,341	18,906	1,245	1,245	18,721	4,140	(D)	(D)	3,359	(D)	(D)
West South Central Division	6,347	5,949	93,534	5,194	4,570	75,018	175,120	103,609	213,378	145,923	78,653	190,793
West Region.....	1,261	1,284	24,502	1,116	1,119	22,856	17,556	(D)	(D)	17,011	(D)	(D)

D Data withheld to avoid disclosing figures for individual companies. †Revised by 5 percent or more from previously published figures.
See note at end of table 17.

Table 17. Production and Shipments of Liquid Nitrogen and Oxygen Produced for Merchant Shipment, By Geographic Area: 1994 and 1993

[Production and quantity in short tons. Value in thousands of dollars]

Geographic area	Nitrogen						Oxygen					
	1994			1993			1994			1993		
	Production	Shipments		Production	Shipments		Production	Shipments		Production	Shipments	
		Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value
Total	233,258	233,561	542,516	225,494	224,630	587,477	110,362	110,116	285,457	104,699	106,023	309,908
Northeast Region.....	42,728	42,758	85,381	40,565	41,377	108,019	21,671	21,764	51,941	18,172	18,438	49,951
North Central Region	62,089	62,854	143,019	69,162	67,705	162,479	28,620	28,950	69,069	27,615	28,685	76,686
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	89,100	88,841	207,601	74,989	74,810	200,208	46,731	46,948	124,941	44,418	44,366	137,087
South Atlantic Division	41,701	41,564	93,127	32,877	32,868	88,844	23,817	24,003	59,276	21,635	21,628	67,792
East South Central Division	15,627	15,417	38,220	13,820	13,544	34,583	10,130	10,128	27,882	10,875	10,846	29,963
West South Central Division	31,772	31,860	76,254	28,292	28,398	76,781	12,784	12,817	37,783	11,908	11,892	39,332
West Region.....	39,341	39,108	106,515	40,778	40,738	116,771	13,340	12,454	39,506	14,494	14,534	46,184

D Data withheld to avoid disclosing figures for individual companies. †Revised by 5 percent or more from previously published figures.

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: 1994 and 1993

[Production in million cubic feet, except where otherwise noted]

Product code	Product description	1994					1993				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28132 00	Acetylene ¹	5,366	1,364	1,283	1,333	1,386	5,167	1,221	1,286	1,313	1,347
28132 11	Produced for compression, including cylinder and pipeline	767	203	181	175	208	757	'200	187	'166	'204
28132 21	Produced for pipeline shipment, excluding that shipped to be compressed, and for consumption in this plant	4,599	(S)	(S)	(S)	(S)	4,410	(S)	(S)	(S)	(S)
28133 01	Carbon dioxide: ² Gas, including amounts produced and liquefied (short tons)	6,744,710	(S)	(S)	(S)	(S)	6,816,375	(S)	(S)	(S)	(S)
28133 02	Liquid, including amounts produced and used to make dry ice (short tons)	5,899,209	1,305,533	1,453,971	1,604,204	1,535,501	5,543,442	1,333,915	1,389,466	1,550,271	1,269,790
28133 31	Solid (dry ice) (short tons)	287,958	64,200	68,142	90,781	64,835	295,910	66,312	75,245	84,269	70,084
28137 15	Argon, high purity: Produced for cylinder and bulk delivery and pipeline shipments, and for consumption in this plant	18,177	4,146	4,325	4,793	4,913	15,621	3,790	3,799	3,902	4,130
	Hydrogen ³	254,184	54,731	64,544	72,094	62,815	212,874	52,867	51,240	56,781	'51,986
	Gas produced for:										
28137 22	Merchant shipment AND										
28137 32	Pipeline and on-site use	⁴ 135,098	⁴ 32,699	⁴ 33,722	⁴ 39,717	⁴ 28,961	⁴ 105,655	⁴ 26,284	⁴ 24,925	⁴ 29,556	⁴ 24,890
28137 42	Consumption in this plant	119,086	22,032	30,823	32,377	33,854	107,219	26,583	26,315	27,225	27,096
	Liquid produced for:										
28137 52	Merchant shipment AND										
28137 62	Other shipments or uses	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
28135 00	Nitrogen ⁵	881,700	221,829	219,343	220,139	220,389	795,519	197,547	197,029	199,514	201,429
	Gas produced by:										
28135 22	Cryogenic on-site and pipeline AND										
28135 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies	606,656	153,719	152,712	149,161	151,064	534,179	135,633	132,536	132,768	133,242
	Captive uses for consumption in this plant (user-owned):										
28135 24	Cryogenic processes AND										
28135 26	Noncryogenic processes (psa, vpsa, membrane, etc.)	⁶ 27,529	⁶ 7,573	⁶ 7,115	⁶ 6,939	⁶ 5,902	⁶ 22,909	⁶ 4,925	⁶ 5,364	⁶ 5,708	⁶ 6,912
	Liquid produced for:										
28135 12	Merchant shipment	233,258	56,498	56,335	60,571	59,854	225,494	54,012	56,027	57,605	57,850
28135 32	Consumption in this plant	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
28135 34	Other shipments or uses	14,257	4,039	3,181	3,468	3,569	12,937	2,977	3,102	3,433	3,425
28136 00	Oxygen	604,955	145,070	147,264	152,054	160,567	547,133	131,387	131,745	141,188	142,813
	Gas produced by:										
28136 22	Cryogenic on-site and pipeline AND										
28136 23	Noncryogenic processes (psa, vpsa, membranes, etc.) by industrial gas-producing companies	455,130	107,817	110,618	115,373	121,322	407,776	97,384	99,456	105,144	105,792

See footnotes at end of table.

Table 18. Quantity of Primary Production of Specified Industrial Gases: 1994 and 1993—Con.

[Production in million cubic feet, except where otherwise noted]

Product code	Product description	1994					1993				
		Total	First quarter	Second quarter	Third quarter	Fourth quarter	Total	First quarter	Second quarter	Third quarter	Fourth quarter
28136 24	Oxygen—Con. Captive uses for consumption in this plant (user-owned):										
28136 26	Cryogenic processes AND Noncryogenic processes (psa, vpsa, membrane, etc.)	728,702	7(S)	7(S)	7(S)	7(S)	725,225	7(S)	7(S)	7(S)	7(S)
28136 12	Liquid produced for: Merchant shipment	110,362	26,805	26,833	28,466	28,258	104,699	25,338	24,847	26,999	27,515
28136 32	Consumption in this plant	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
28136 34	Other shipments or uses	10,761	2,872	2,660	2,605	2,624	9,433	2,209	2,265	2,241	2,718

¹Excludes information from railroad ships, shipyards, welding shops, and small establishments using portable generators.

²Excludes quantities produced and consumed in plants manufacturing soda ash and urea.

³Excludes 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 the production of ammonia. Also excludes amounts produced by the ammonia dissociation process (cracking of ammonia). Also excludes amounts produced in petroleum refineries for captive use.

⁴Product codes 28137 52 and 28137 62 have been combined with product codes 28137 22 and 28137 32 to avoid disclosing figures for individual companies.

⁵Excludes amounts produced and consumed in the manufacturing of synthetic ammonia derivatives.

⁶Product code 28315 32 has been combined with product codes 28135 24 and 28135 26 to avoid disclosing figures for individual companies.

⁷Product code 28136 32 has been combined with product codes 28136 24 and 28136 26 to avoid disclosing figures for individual companies.

[†]Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet the publication standards of the Bureau of the Census.

Table 19. Production, Exports, Imports, and Apparent Consumption of Industrial Gases: 1994 and 1993

Product code	Product description	Unit of measure	Manufacturers' production	Exports of domestic merchandise ¹	Percent exports to manufacturers' production	Imports for consumption ²	Apparent consumption ³	Percent imports to apparent consumption
1994								
28133 01, 02, 31	Carbon dioxide (gas, liquid, and solid) . .	Metric tons	11,729,212	111,893	1.0	16,123	11,633,442	0.1
28137 15	Argon	Mil. cu. meters . .	509	141	27.7	19	387	4.9
28137 22, 32, 42, 52, 62	Hydrogen	Mil. cu. meters . .	7,117	196	2.8	134	7,055	1.9
28135 00	Nitrogen	Mil. cu. meters . .	24,688	68	0.3	325	24,945	1.3
28136 00	Oxygen	Mil. cu. meters . .	16,939	91	0.5	17	16,865	0.1
1993								
28133 01, 02, 31	Carbon dioxide (gas, liquid, and solid) . .	Metric tons	11,478,618	109,271	1.0	26,349	11,395,696	0.2
28137 15	Argon	Mil. cu. meters . .	437	107	24.5	23	353	6.5
28137 22, 32, 42, 52, 62	Hydrogen	Mil. cu. meters . .	5,960	122	2.0	114	5,952	1.9
28135 00	Nitrogen	Mil. cu. meters . .	22,275	49	0.2	99	22,325	0.4
28136 00	Oxygen	Mil. cu. meters . .	15,320	59	0.4	9	15,270	0.1

¹Source: Bureau of the Census report EM545, *U.S. Exports*.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

³"Apparent consumption" is derived by subtracting "Exports" from the 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 the 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.

4.3 PAINT, VARNISH, AND LACQUER

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 1994 and 1993. 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 1994, the adjustment factors are: 1.008 for architectural coatings, .989 for product coatings 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 1994 and 1993 reflecting the adjusted totals are shown along with the originally published figures for Current Industrial Reports, quarterly series MQ28F, Paint, Varnish, and Lacquer.

In 1994, total manufacturers' shipments of paint and allied products amounted to \$15,474.8 million, an increase of 5.8 percent from the 1993 shipments of \$14,630.1 million.

Total shipments of architectural coatings increased 5.3 percent to \$5,912.7 million in 1994, from \$5,615.3 million in 1993.

Total shipments of OEM coatings increased 6.1 percent to \$5,082.6 million in 1994, from \$4,788.3 million in 1993. Shipments of powder coatings decreased 16.5 percent to \$419.9 million in 1994, from \$489.3 million in 1993.

Total shipments of special-purpose coatings increased 4.7 percent to \$3,074.7 million in 1994, from \$2,937.7 million in 1993.

Shipments of miscellaneous allied paint products increased 9.0 percent to \$1,404.8 million in 1994, from \$1,288.8 million in 1993.

EXPLANATION OF TERMS

Architectural Coatings. Coatings for on-site 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 (semi-matte) 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. Non-aqueous 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 Original Equipment Manufacturers (OEM) to meet conditions of application and product requirements, and applied to such products during the manufacturing process.

Powder Coatings. 100-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, fabric, 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 aftermarket 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: 1989 to 1994

[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
1994	1,428.5	15,474.8	645.2	5,912.7	382.1	5,082.6	193.6	3,074.7	207.6	1,404.8
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
1989	1,239.7	12,331.6	537.5	4,525.3	359.9	4,220.1	179.0	2,493.5	163.3	1,092.7

Note: Figures for 1989 through 1994 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in table 21 by adjustment factors. For 1992 through 1994, the 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, the 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: the quantity and value of OEM coatings for 1994 shown in table 21 amounted to 386,315 and \$5,139,166, respectively. Adjusting these figures by the factor of .989 (multiplying 386,315 and \$5,139,166 by .989) equals the adjusted and rounded quantity and value of 382.1 and \$5,082.6 shown above in table 20. These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (SIC 2851). The adjustment factors (based on the 1992 census relationships) bring each product code value up to 100 percent. Quarterly figures for 1994 and 1993 reflect the 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: 1994 and 1993

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

Product code	Product description	1994		1993	
		Quantity	Value	Quantity	Value
2851- —	Paint and allied products ¹	1,420,240	15,415,397	1,328,755	14,574,244
28511	Architectural coatings	640,054	5,865,814	603,326	5,570,784
	Exterior solvent type	73,477	780,612	70,465	782,031
28511 12	Solvent thinned paints and tinting bases, including barn and roof paints	14,868	152,316	15,420	167,783
28511 15	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels	15,131	193,156	13,692	173,681
28511 25	Solvent thinned undercoaters and primers	8,961	95,911	8,623	91,810
28511 35	Solvent thinned clear finishes and sealers	9,611	101,793	6,714	71,546
28511 37	Solvent thinned stains, including shingle and shake	14,221	142,545	14,074	140,374
28511 39	Other exterior solvent thinned coatings, including bituminous paints	10,685	94,891	11,942	136,837
	Exterior water-type	160,380	1,504,260	157,578	1,422,785
28511 41	Water thinned paints and tinting bases, including barn and roof paints	111,827	1,071,324	110,344	1,053,839
28511 42	Water thinned exterior-interior deck and floor enamels	1,574	16,986	1,674	17,764
28511 44	Water thinned undercoaters and primers	9,167	88,568	7,881	75,812
28511 49	Water thinned stains and sealers	9,771	85,990	7,729	66,630
28511 55	Other exterior water thinned coatings	28,041	241,392	29,950	208,740
	Interior solvent type	58,491	665,512	56,414	650,883
28511 63	Flat solvent thinned wall paints and tinting bases, including mill white paints	6,172	72,425	6,644	79,869
28511 65	Gloss and quick drying enamels and other gloss-solvent thinned paints and enamels	5,254	71,750	4,314	59,072
28511 69	Semigloss, eggshell, satin solvent thinned paints and tinting bases	12,916	136,108	14,488	152,835
28511 71	Solvent thinned undercoaters and primers	11,256	86,000	9,572	85,060
28511 75	Solvent thinned clear finishes and sealers	9,259	131,576	9,410	124,541
28511 77	Solvent thinned stains	5,422	76,282	5,271	73,397
28511 79	Other interior solvent thinned coatings	8,212	91,371	6,715	76,109

See footnotes at end of table.

Table 21. Quantity and Value of Shipments of Paint and Allied Products: 1994 and 1993—Con.

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

Product code	Product description	1994		1993	
		Quantity	Value	Quantity	Value
2851- — 28511	Paint and allied products—Con. Architectural coatings—Con.				
	Interior water-type	323,185	2,644,379	297,664	2,452,152
28511 81	Flat water thinned paints and tinting bases	148,078	1,101,173	142,506	1,011,448
28511 83	Semigloss, eggshell, satin, and other water thinned paints and tinting bases	121,583	1,103,083	110,896	1,077,433
28511 86	Water thinned undercoaters and primers	20,525	147,725	17,799	129,594
28511 88	Other interior water thinned coatings, stains, and sealers	32,999	292,398	26,463	233,677
28511 93	Architectural lacquers	7,169	67,986	6,070	58,376
28511 00	Architectural coatings, n.s.k.	17,352	203,065	'15,135	'204,557
28512	Product finishes for original equipment manufactures (OEM), excluding marine coatings	386,315	5,139,166	'360,530	'4,841,594
28512 21*	Automobile, light truck, van, and sport utility vehicle finishes	44,873	1,094,699	(NA)	(NA)
28512 22	Automobile finishes	(NA)	(NA)	39,438	955,410
28512 23	Truck, bus, and recreational vehicle finishes	(NA)	(NA)	15,343	353,869
28512 24*	Automobile parts finishes	2,263	66,144	(NA)	(NA)
28512 25	Other transportation equipment finishes, including aircraft and railroad	(NA)	(NA)	4,481	80,187
28512 26*	Heavy duty truck, bus, and recreational vehicle finishes ..	14,357	335,964	(NA)	(NA)
28512 28*	Other transportation equipment finishes	5,010	95,428	(NA)	(NA)
28512 35	Appliance, heating equipment, and air-conditioner finishes	6,580	105,617	6,062	90,400
28512 37	Wood furniture, cabinet, and fixture finishes	35,863	342,533	34,853	329,202
28512 39	Wood and composition board flat stock finishes	11,460	118,845	11,963	114,392
28512 41	Metal building product finishes, including coatings for aluminum extrusions and siding	29,115	514,046	25,002	442,517
28512 43	Container and closure finishes	51,333	487,408	49,128	474,011
28512 47	Machinery and equipment finishes, including road building equipment and farm implements	17,167	253,554	14,745	236,806
28512 49	Nonwood furniture and fixture finishes, including business equipment finishes	18,270	275,657	18,880	272,169
28512 52	Paper, paper board, film, and foil finishes, excluding pigment binders	21,572	136,572	'18,835	'122,742
28512 53	Electrical insulating coatings	5,008	103,058	'5,239	113,946
28512 54*	Appliance powder coatings ²	11,443	89,285	(NA)	(NA)
28512 55	Powder coatings ²	(NA)	(NA)	'48,767	489,299
28512 56*	Automotive powder coatings ²	9,765	86,806	(NA)	(NA)
28512 58	Architectural powder coatings (such as aluminum extrusions) ²	775	9,013	(NA)	(NA)
28512 60*	Lawn and garden powder coatings ²	3,418	31,747	(NA)	(NA)
28512 62*	General metal finishing powder coatings ²	22,543	203,015	(NA)	(NA)
28512 67	Other industrial product finishes	36,835	460,325	'28,430	'372,997
28512 00	Product finishes for original equipment manufactures (OEM), excluding marine coatings, n.s.k.	38,665	329,450	'39,364	'393,647
28513	Special-purpose coatings, including all marine coatings	191,490	3,041,246	'177,013	2,905,703
	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 01	Interior	18,223	219,555	17,250	214,206
28513 05	Exterior	42,124	607,166	'39,838	'532,435
28513 11	Traffic marking paints (all types, shelf goods, and highway department)	33,898	202,810	29,515	174,154
28513 13	Automotive, other transportation and machinery refinish paints and enamels, including primers	39,161	1,170,158	39,222	1,224,395
28513 15	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and maintenance, excluding spar varnish	19,864	340,312	'18,466	323,831
28513 19*	Marine paints for yacht and pleasure craft, new construc- tion, refinish, and maintenance	(D)	(D)	(NA)	(NA)
28513 31	Aerosol-paint concentrates produced for packaging in aerosol containers	25,917	279,311	22,847	256,856
28513 00	Special-purpose coatings, n.s.k.	(D)	(D)	'9,875	'179,826

See footnotes at end of table.

Table 21. Quantity and Value of Shipments of Paint and Allied Products: 1994 and 1993—Con.

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

Product code	Product description	1994		1993	
		Quantity	Value	Quantity	Value
2851- —	Paint and allied products—Con.				
28515	Miscellaneous allied paint products	202,381	1,369,171	187,886	1,256,163
28515 23	Paint and varnish removers	7,382	66,685	7,171	64,974
28515 31	Thinners for lacquers and other solvent based paint products	37,902	172,652	41,909	205,008
28515 33	Pigment dispersions	37,231	353,244	33,598	282,266
28515 98	Other miscellaneous allied paint products, including brush cleaners, nonpressure wood preservatives, and putty and glazing compounds	108,928	684,314	'94,968	'614,742
28515 00	Miscellaneous allied paint products, n.s.k.	10,938	92,276	'10,240	89,173

¹Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the 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 preliminary report.

²Data 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 143,829 thousand pounds in 1994 and 146,301 thousand pounds in 1993.

*New product code for 1994. D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.s.k. Not specified by kind. †Revised by 5 percent or more from previously published figures.

Table 22. Quantity and Value of Shipments of Paint, Varnish, and Lacquer, by Quarter: 1994 and 1993

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

Quarter and year	As revised							
	Total		Architectual coatings		Product coatings OEM		Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994								
Total	1,220,835	14,070,075	645,174	5,912,740	382,065	5,082,635	193,596	3,074,700
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
1993								
Total	1,143,677	13,341,352	608,153	5,615,350	356,564	4,788,336	178,960	2,937,666
Fourth quarter	257,289	3,091,107	128,650	1,184,395	87,134	1,180,082	41,505	726,630
Third quarter	310,909	3,552,705	171,290	1,574,702	89,738	1,180,561	49,881	797,442
Second quarter	318,241	3,709,832	174,818	1,651,078	92,414	1,248,090	51,009	810,664
First quarter	257,238	2,987,708	133,395	1,205,175	87,278	1,179,603	36,565	602,930
1994								
Total	1,166,694	14,100,240	658,642	5,979,511	340,596	4,992,944	167,456	3,127,785
Fourth quarter	261,015	3,286,541	140,080	1,277,034	85,352	1,261,211	35,583	748,296
Third quarter	319,059	3,791,880	188,995	1,716,444	86,564	1,254,936	43,500	820,500
Second quarter	327,006	3,874,126	190,274	1,740,815	87,074	1,265,057	49,658	868,254
First quarter	259,614	3,147,693	139,293	1,245,218	81,606	1,211,740	38,715	690,735
1993								
Total	1,093,765	12,937,294	603,597	5,548,672	321,418	4,544,362	168,750	2,844,260
Fourth quarter	245,362	2,993,740	127,678	1,170,323	78,548	1,119,959	39,136	703,458
Third quarter	297,943	3,448,935	170,011	1,556,281	80,893	1,120,472	47,039	772,182
Second quarter	304,886	3,600,491	173,480	1,631,322	83,309	1,184,431	48,097	784,738
First quarter	245,574	2,894,128	132,428	1,190,746	78,668	1,119,500	34,478	583,882

See note at end of table 20.

Table 23. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 1994 and 1993

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

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Percent exports to manufacturers' production		Imports for consumption ²		Apparent consumption ⁴		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³	Quantity	Value	
28511 00, 28512 00, 28513 00	Paint, varnish, and lacquer	1994	1,220.8	14,070.1	(NA)	624.4	(NA)	4.4	(NA)	183.5	(NA)	13,629.2
		1993	1,143.7	13,341.4	(NA)	570.8	(NA)	4.3	(NA)	143.2	(NA)	12,913.8
28515 23, 31	Paint and varnish remover, including thinners	1994	46.5	245.6	(NA)	46.9	(NA)	19.1	(NA)	14.0	(NA)	212.7
		1993	50.4	277.0	(NA)	43.7	(NA)	15.8	(NA)	10.6	(NA)	243.9
28515 98	Other miscellaneous allied paint products	1994	111.8	702.1	(NA)	98.2	(NA)	14.0	(NA)	24.5	(NA)	628.4
		1993	97.4	630.7	(NA)	144.9	(NA)	23.0	(NA)	21.9	(NA)	507.7

¹Source: Bureau of the Census report EM545, *U. S. Exports*.

²Source: Bureau of the Census report IM145, *U. S. Imports for Consumption*.

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

⁴"Apparent consumption" is equal to domestic "Shipments," plus "Imports," minus "Exports."

NA Not available.

Note: 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 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.

Historical data may be obtained from the Current Industrial Reports available at your Federal Depository Library. Prior to 1959, the series was titled "*Facts for Industry*." 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.

4.4 PHARMACEUTICAL PREPARATIONS, EXCEPT BIOLOGICALS

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 Non-Prescription definition.

Non-Prescription. 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: 1985 to 1994**

[In millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
28341 —	Pharmaceutical preparations: Pharmaceutical preparations affecting neoplasms, endocrine system, and metabolic diseases, for human use	4,132.2	3,820.3	3,317.8	2,877.4	2,743.2	2,507.4	2,071.2	1,994.9	2,140.6	2,110.2
28342 —	Pharmaceutical preparations acting on the central nervous system and sense organs, for human use	9,065.3	8,926.8	8,319.3	7,430.8	7,218.5	6,441.3	6,172.7	5,740.5	5,946.0	5,737.6
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use	5,546.7	5,234.2	4,908.7	4,810.3	4,814.6	4,874.9	4,449.9	3,795.9	3,570.3	3,170.9
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use	5,674.9	5,509.8	5,276.8	4,259.7	3,724.1	3,286.2	3,224.0	2,811.4	2,492.2	2,202.4
28345 —	Pharmaceutical preparations acting on the digestive or genito-urinary system, for human use	8,827.2	7,995.7	7,110.9	5,624.8	4,840.2	4,363.0	3,860.8	2,954.8	1,864.5	1,875.9
28346 —	Pharmaceutical preparations acting on the skin, for human use	2,218.9	1,979.7	1,759.6	1,578.5	1,558.0	1,451.7	1,388.5	1,288.3	1,327.3	1,213.3
28347 —	Vitamin, nutrient, and hematinic preparations, for human use	4,408.1	3,559.8	2,923.7	2,787.2	2,587.9	2,672.4	2,538.5	2,570.7	2,665.9	2,291.2
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use	8,188.5	7,233.6	7,017.6	6,006.1	5,411.0	4,936.2	4,593.6	4,024.9	3,821.0	3,386.2
28349 —	Pharmaceutical preparations for veterinary use	1,314.9	1,352.5	1,327.3	1,462.2	1,056.8	1,071.1	1,051.5	997.1	853.7	817.7

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
2834- —	Pharmaceutical preparations (except biologicals)	49,376,606	37,256,931	11,031,379	1,088,296	45,612,472	33,710,333	10,937,946	964,193
28341 —	Pharmaceutical preparations affecting neoplasms, endocrine system, and metabolic diseases, for human use	4,132,243	4,046,559	32,833	52,851	3,820,329	3,693,862	30,542	95,925
	Hormones and synthetic substitutes:								
	Corticoids:								
28341 11	Systemic	243,324	243,324	-	(D)	204,140	204,140	-	(D)
28341 15	Local and topical including anti-infective combinations	428,117	(D)	(D)	-	372,996	(D)	(D)	-
28341 17	Androgens	(D)	(D)	-	-	(D)	(D)	-	-
28341 19	Estrogens	241,538	241,538	-	(D)	202,399	202,399	-	(D)
28341 21	Insulin and antidiabetic agents	(D)	(D)	-	-	793,314	793,314	-	(D)
28341 25	ACTH (corticotropin)	(D)	(D)	-	-	3,338	3,338	-	-
28341 27	Oral contraceptive preparations	149,722	149,722	-	-	(D)	(D)	-	-
28341 29	Progestogens, excluding premenstrual tension preps (see product code 28345 85)	(D)	(D)	-	(D)	67,963	67,963	-	(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)
28341 37	Anabolic agents	(D)	(D)	-	(D)	(D)	(D)	-	(D)
28341 39	Other hormone preparations	167,427	(D)	(D)	(D)	154,393	(D)	(D)	(D)
	Antineoplastic agents:								
28341 43	Radioactive isotopes for internal use	17,142	17,142	-	-	(D)	(D)	-	-
28341 45	Specific antineoplastic agents	918,399	918,399	-	(D)	857,066	857,066	-	(D)
28341 98	Other pharmaceutical preparations affecting neoplasms, the endocrine system, and metabolic diseases, for human use	863,749	(D)	(D)	(D)	756,399	(D)	(D)	(D)
28342 —	Pharmaceutical preparations acting on the central nervous system and the sense organs, for human use	9,065,251	6,910,439	2,089,137	65,675	8,926,766	6,604,679	2,261,082	61,005
28342 11	Parasympathomimetic cholinergic drugs	11,884	11,884	-	(D)	7,679	7,679	-	(D)
28342 13	Skeletal muscle relaxants	396,294	391,871	(D)	(D)	448,186	(D)	(D)	(D)
	Internal analgesics and antipyretics:								
	Narcotic:								
28342 19	Opium and derivatives	313,620	313,620	-	(D)	267,981	267,981	-	(D)
28342 20	Synthetic narcotics	363,713	(D)	(D)	-	329,410	(D)	(D)	(D)
	Nonnarcotic:								
	Salicylates:								
28342 22	Aspirin (acetylsalicylic acid)	143,728	(D)	(D)	1,642	231,910	2,464	229,446	2,248
28342 24	Other salicylates, such as sodium salicylate	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
28342 25	Aspirin combinations	281,719	(D)	(D)	(D)	284,971	(D)	(D)	(D)
28342 26	Acetaminophen and combinations	469,362	97,255	372,107	11,495	607,919	80,229	527,690	8,442
28342 27	Antiarthritics (nonhormonal)	862,214	672,167	^a 190,047	(D)	¹ 1,113,919	¹ 998,765	115,154	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28342 —	Pharmaceutical preparations acting on the central nervous system—Con.								
28342 28	Internal analgesics and antipyretics—Con.								
	Other internal analgesics and antipyretics, including effervescent types and suppositories ²	287,437	174,425	113,012	861	397,580	(D)	(D)	1,061
28342 41	Anticonvulsants (except phenobarbital)	444,836	(D)	(D)	(D)	412,939	(D)	(D)	(D)
	Psychotherapeutic agents:								
28342 51	Antidepressants	1,686,381	1,686,381	-	(D)	1,326,658	1,326,658	-	(D)
	Tranquilizers:								
28342 55	Phenothiazine derivatives	342,509	342,509	-	(D)	303,064	303,064	-	(D)
28342 57	Other tranquilizers	390,217	390,217	-	-	397,747	397,747	-	318
28342 59	Other psychotherapeutic agents	115,152	115,152	-	(D)	76,862	76,862	-	(D)
	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)	^a 51,838	^a 50,998	840	(D)	^r 67,180	^r 65,750	1,430	(D)
28342 69	Other CNS stimulants	191,340	(D)	(D)	(D)	126,546	(D)	(D)	(D)
	Sedatives and hypnotics:								
	Prescription:								
28342 71	Barbiturates	29,518	29,518	(X)	(D)	26,307	26,307	(X)	(D)
28342 75	Non-barbiturates	50,454	50,454	(X)	(D)	68,793	68,793	(X)	(D)
	Non-prescription:								
28342 77	Sleep inducers	71,437	(X)	71,437	(D)	^r 143,808	(X)	^r 143,808	(D)
28342 79	Calming agents	(D)	(X)	(D)	-	(D)	(X)	(D)	-
	Anesthetics (except urinary tract anesthetics) and skin preparations used as antipruritics:								
28342 81	Local and topical	221,125	213,872	7,253	-	205,467	199,577	5,890	-
28342 85	General	106,097	(D)	(D)	(D)	^r 238,918	(D)	(D)	(D)
	Eye and ear preparations, excluding anti-infectives, corticoids, and antibacterials and antiseptics:								
28342 91	Mydriatics and miotics	257,789	(D)	(D)	-	(D)	(D)	(D)	-
28342 93	Contact lens solutions	625,512	(D)	(D)	-	587,164	(D)	(D)	-
28342 94	Other eye and ear preparations	419,479	(D)	(D)	(D)	^r 262,419	^r 90,999	171,420	(D)
28342 98	Other pharmaceutical preparations acting on the central nervous system and the sense organs, for human use	842,088	800,722	41,366	5,132	686,823	(D)	(D)	2,321
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use	5,546,669	5,348,951	12,335	185,383	5,234,235	5,027,742	36,775	169,718
28343 11	Anticoagulants	568,574	(D)	(D)	(D)	^r 527,048	(D)	(D)	(D)
28343 21	Hemostatics	55,225	(D)	(D)	-	60,172	(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: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28343 —	Pharmaceutical preparations acting on the cardiovascular system—Con.								
	Hypotensives:								
28343 43	Rauwolfia-alkaloid preparations	^a 36,470	(D)	(D)	-	^r 38,986	(D)	(D)	-
28343 47	Beta receptor blocking agents.....	143,089	143,089	-	(D)	166,002	166,002	-	(D)
28343 48	Other hypotensives	522,325	522,325	-	(D)	583,870	583,870	-	(D)
	Vasodilators:								
28343 51	Coronary	374,940	374,940	-	16,900	391,325	391,325	-	(D)
28343 55	Peripheral	(D)	(D)	-	(D)	(D)	(D)	-	-
28343 61	Anti-arrhythmics, such as propanolol and quinidine	199,732	199,732	-	-	216,396	216,396	-	(D)
28343 71	Calcium channel blockers, such as isoptin, calan, procordia, cardizem, and adalat	710,263	710,263	-	(D)	691,569	691,569	-	(D)
28343 81	Ace inhibitors, such as vasotec, capoten, prinvil, 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	695,999	(D)	(D)	(D)	^r 780,916	(D)	(D)	(D)
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use	5,674,876	3,471,342	2,160,187	43,347	5,509,797	3,117,184	2,359,197	33,416
28344 11	Antihistamines (except cold preparations and antiemetics).....	904,521	666,721	237,800	(D)	^r 724,138	567,956	156,182	1,499
28344 15	Bronchial dilators, including antiasthmatics	819,286	767,228	52,058	413	^r 1,029,473	^r 971,105	58,368	(D)
	Cough and cold preparations (prescription):								
	Cough preparations and expectorants (containing antitussive or other ingredients intended primarily to treat cough only):								
28344 21	Narcotic	^a 140,182	^a 140,182	(X)	(D)	92,625	92,625	(X)	(D)
28344 25	Nonnarcotic.....	92,241	92,241	(X)	576	^r 127,598	^r 127,598	(X)	(D)
	Cold preparations containing combinations of the following ingredients (but not antitussive): nasal decongestant, antihistamine, analgesic, bioflavonoid, or antibiotic:								
28344 31	Nasal decongestants.....	^a 15,468	^a 15,468	(X)	(D)	48,595	48,595	(X)	(D)
28344 35	Antihistamine cold preparations	5,084	5,084	(X)	-	^r 6,773	^r 6,773	(X)	(D)
28344 39	Other prescription cold preparations	110,903	110,903	(X)	(D)	^r 61,430	^r 61,430	(X)	(D)
28344 41	Cough and cold combinations (prescription).....	55,820	55,820	(X)	1,243	59,449	59,449	(X)	2,389
	Cough and cold preparations (nonprescription):								
	Decongestants:								
28344 51	Nasal sprays	196,547	(X)	196,547	(D)	150,372	(X)	150,372	(D)
28344 55	Nose drops	(D)	(X)	(D)	-	(D)	(X)	(D)	-
28344 59	Other decongestants	(D)	(X)	(D)	(D)	322,659	(X)	322,659	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28344 —	Pharmaceutical preparations acting on the respiratory system—Con.								
	Cough and cold preparations (nonprescription):—Con.								
28344 61	Cough syrups	434,877	(X)	434,877	-	559,841	(X)	559,841	-
28344 63	Capsules and tablets	517,393	(X)	517,393	(D)	498,806	(X)	498,806	(D)
28344 65	Lozenges	49,917	(X)	49,917	(D)	(D)	(X)	(D)	(D)
28344 67	Topical preparations	(D)	(X)	(D)	-	(D)	(X)	(D)	-
28344 71	Cough drops	104,003	(X)	104,003	-	102,202	(X)	102,202	-
28344 79	Other nonprescription cough and cold preparations	^a 304,107	(X)	^a 304,107	(D)	254,175	(X)	254,175	(D)
28344 81	Beta agonists such as proventil and ventolin	1,050,491	(D)	(D)	(D)	825,061	(D)	(D)	(D)
28344 98	Other pharmaceutical preparations acting on the respiratory system, for human use	655,503	648,078	7,425	(D)	^f 555,259	(D)	(D)	(D)
28345 —	Pharmaceutical preparations acting on the digestive or the genito-urinary systems, for human use	8,827,184	7,367,313	1,411,023	48,848	7,995,706	6,467,476	1,496,271	31,959
	Digestive system preparations:								
28345 11	Enzymes	81,121	69,209	^a 11,912	(D)	^f 83,788	^f 66,725	17,063	(D)
28345 15	Antacids, including acid neutralizing products with coating functions, but excluding effervescent salicylate products classified as analgesics	434,328	16,949	417,379	70	424,859	10,848	414,011	2,868
28345 19	Antidiarrheals	238,002	18,507	219,495	(D)	329,345	38,639	290,706	(D)
	Laxatives:								
28345 21	Irritants	75,899	(D)	(D)	(D)	82,605	1,713	80,892	(D)
28345 23	Bulk producing	^a 317,331	(D)	(D)	560	322,848	(D)	(D)	(D)
28345 25	Fecal softeners	114,531	(D)	(D)	12,816	115,096	(D)	(D)	7,788
28345 27	Emollients	24,163	(D)	(D)	-	23,407	(D)	(D)	-
28345 28	Saline	14,548	(D)	(D)	-	10,785	(D)	(D)	-
28345 29	Enema specialties	37,058	(D)	(D)	(D)	33,956	(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	(D)	(D)	19,032	(D)	(D)	(D)	4,822	(D)
28345 37	Lipotropics and cholesterol reducers	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28345 39	Diet aids containing local anesthetics such as benzocaine	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)
	Antispasmodics and anticholinergics:								
28345 41	Synthetics	(S)	(S)	-	-	16,493	16,493	-	-
28345 43	Ataractic combinations	608	608	-	-	(D)	(D)	-	-
28345 45	Belladonna and derivatives	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28345 47	H ₂ blocking agents such as zantac, tagamet, carafate, and pepcid	4,018,239	4,018,239	-	-	3,124,711	3,124,711	-	-
28345 49	Other antispasmodics and anticholinergics	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28345 58	Other digestive system preparations, including emetics	62,500	59,828	2,672	(D)	54,191	47,463	6,728	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28345 —	Pharmaceutical preparations acting on the digestive or the genito-urinary system—Con.								
28345 61	Genito-urinary preparations: Urinary antibacterials and antiseptics	120,018	(D)	(D)	(D)	95,680	(D)	(D)	(D)
	Diuretics, excluding aminophylline, xanthine, and rauwolfia-diuretic combinations (see cardiovascular preparations):								
28345 71	Thiazides and related agents	110,127	110,127	-	-	116,366	(D)	(D)	-
28345 73	Other diuretics	222,356	(D)	(D)	-	214,103	(D)	(D)	-
28345 81	Oxytocics	(D)	(D)	-	-	(D)	(D)	-	-
28345 83	Contraceptive agents (except oral contraceptives; i.e., aerosols, jels, sponges, and creams)	81,077	58,336	(D)	-	151,453	(D)	(D)	-
28345 85	Premenstrual tension preparations	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
28345 87	Vaginal cleaners	(D)	(D)	108,475	(D)	118,347	(D)	(D)	(D)
28345 98	Other pharmaceutical preparations acting on the genito-urinary system, including urinary tract anesthetics, for human use	262,046	(D)	(D)	2,405	147,883	(D)	(D)	1,252
28346 —	Pharmaceutical preparations acting on the skin, for human use	2,218,858	630,913	1,575,374	12,571	1,979,746	638,024	1,333,256	8,466
	Dermatological preparations:								
28346 11	Emollients and protectives, including burn remedies and ointment bases	581,889	(D)	(D)	(D)	492,826	(D)	(D)	(D)
28346 13	Antipruritics and local anesthetic skin preparations	162,059	34,020	128,039	(D)	132,830	32,171	100,659	-
28346 15	Coal tar, sulfur and resorcinol preparations	14,287	(D)	(D)	-	8,529	(D)	(D)	(D)
28346 16	Antiacne preparations	241,618	73,205	168,413	(D)	375,353	106,685	268,668	(D)
28346 18	Antidandruff and antiseborrheic preparations (except dandruff shampoos)	35,836	(D)	(D)	-	9,734	(D)	(D)	-
28346 19	Other dermatological preparations	208,767	141,062	67,705	(D)	186,249	129,618	56,631	(D)
28346 21	Hemorrhoidal preparations	141,014	(D)	(D)	-	120,831	(D)	(D)	-
	External analgesics and counterirritants:								
28346 31	Ointments, jellies, pastes, creams, cerates, and salves	349,155	(D)	(D)	(D)	245,320	(D)	(D)	(D)
28346 35	Liquid, excluding rubbing alcohol, but including liniments	57,333	(D)	(D)	(D)	50,904	(D)	(D)	(D)
28346 37	Rubbing alcohol	138,175	-	138,175	-	65,246	-	65,246	-
28346 39	Other external analgesics and counterirritants	66,508	(D)	(D)	(D)	64,917	(D)	(D)	(D)
28346 98	Other pharmaceutical preparations acting on the skin, for human use	209,646	(D)	(D)	(D)	218,541	109,780	108,761	(D)
28347 —	Vitamin, nutrient, and hematinic preparations, for human use	4,408,084	1,696,020	2,249,586	462,478	3,559,784	1,282,911	1,904,801	372,072
	Vitamins:								
28347 11	Multivitamins, plain and with minerals, (except B complex vitamins and fish liver oils)	1,083,836	26,003	1,057,833	136,023	919,172	25,758	893,414	82,221

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28347 —	Vitamin, nutrient, and hematinic preparations—Con.								
28347 13	Vitamins —Con. Pediatric vitamin preparations (drops, suspensions, and chewable tablets)	83,366	(D)	(D)	856	82,306	(D)	(D)	514
28347 14	Prenatal vitamin preparations	41,886	32,401	9,485	2,042	41,456	32,766	8,690	4,123
28347 15	B complex preparations	^a 141,265	16,116	^a 125,149	6,822	142,787	18,675	124,112	6,238
28347 17	Fluoride preparations	5,276	(D)	(D)	-	(D)	1,902	(D)	(D)
28347 19	All other vitamin preparations	468,262	5,002	463,260	188,217	^r 408,123	^r 3,619	^r 404,504	162,074
28347 21	Fish liver oils (cod, etc.)	^a 19,513	-	^a 19,513	(D)	19,398	-	19,398	(D)
28347 31	Nutrients, excluding therapeutic dietary foods and infant formulas.	232,422	44,250	188,172	35,800	203,261	50,807	152,454	25,680
28347 41	Tonics and alteratives	18,476	-	18,476	(D)	(D)	-	(D)	(D)
	Hematinics:								
	With B ₁₂ :								
28347 51	Oral	28,975	17,773	11,202	106	25,343	13,585	11,758	72
28347 53	Parenteral	(D)	(D)	-	-	(D)	(D)	-	-
	Other hematinics:								
28347 55	Oral	23,143	(D)	(D)	(D)	24,083	(D)	(D)	(D)
28347 57	Parenteral	(D)	(D)	-	-	46,495	(D)	(D)	-
28347 61	Hospital solutions, including dextran, etc., but excluding biologicals such as blood plasma	1,379,763	(D)	(D)	(D)	^r 967,277	(D)	(D)	(D)
28347 98	Other vitamin, nutrient, and hematinic preparations, for human use	377,241	114,124	263,117	63,944	^r 266,121	^r 111,397	^r 154,724	61,784
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use	8,188,506	7,330,046	695,213	163,247	7,233,615	6,389,488	732,572	111,555
	Anti-infective agents, excluding corticoid-anti-infective combinations (see product code 28341 15):								
28348 11	Amebicides and trichomonocides.	113,040	(D)	(D)	(D)	97,901	(D)	(D)	-
28348 15	Anthelmintics.	12,188	(D)	(D)	(D)	11,224	(D)	(D)	(D)
	Systemic antibiotic preparations:								
	Broad and medium spectrum (single or in combinations with other antibiotics):								
28348 20	Tetracyclines, including chlortetracycline and congeners	115,919	115,919	-	-	175,816	175,816	-	-
28348 22	Cephalosporins, such as cefamandole nafate and cephalexin.	2,922,053	2,922,053	-	59,157	2,234,675	2,234,675	-	(D)
28348 24	Erythromycins, such as erythromycin ethylsuccinate and erythromycin stearate	180,377	180,377	-	(D)	195,616	(D)	(D)	-
	Penicillins (single):								
	Semisynthetic penicillins, such as amoxicillins and ampicillin:								
28348 26	Injectable	49,072	49,072	-	-	50,207	50,207	-	-
28348 28	Other forms.	1,622,879	1,622,879	-	(D)	1,396,135	1,396,135	-	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases—Con. Anti-infective agents, excluding corticoid-anti-infective combinations (see product code 28341 15):—Con. Systemic antibiotic preparations: Broad and medium spectrum (single or in combinations with other antibiotics):—Con. Penicillins (single):—Con. Other penicillins (except semisynthetic), such as penicillin V and penicillin G:								
28348 30	Injectable	(D)	(D)	-	-	(D)	(D)	-	-
28348 32	Other forms	10,556	10,556	-	(D)	20,123	20,123	-	-
28348 34	Other broad and medium spectrum antibiotics (except sulfa-antibiotic combinations)	571,774	(D)	(D)	(D)	628,875	(D)	(D)	(D)
28348 36	Antibiotics in combination with sulfonamides	(D)	(D)	-	-	(D)	(D)	-	-
28348 38	Other systemic antibiotic preparations, including narrow-spectrum antibiotics and streptomycins	121,535	121,535	-	(D)	164,345	164,345	-	(D)
28348 41	Topical antibiotic preparations	134,928	109,776	25,152	(D)	207,841	(D)	(D)	(D)
28348 51	Tuberculostatic agents: Isoniazid (isonicotinic acid hydrazide) preparations	^a 4,231	^a 4,231	-	(D)	4,320	4,320	-	-
28348 55	Other antituberculars	(D)	(D)	-	-	(D)	(D)	-	-
28348 61	Antimalarials (plasmodicides)	^a 8,650	(D)	(D)	(D)	5,668	4,487	1,181	(D)
28348 63	Sulfonamides (except antibiotic)—sulfonamide combinations	70,838	70,838	-	(D)	88,341	88,341	-	-
28348 65	Antifungal preparations	482,334	311,173	171,161	(D)	^f 449,247	265,338	^f 183,909	-
28348 67	Antivirals, systemic, such as zovirax, and retrovir	(D)	(D)	-	(D)	(D)	(D)	-	(D)
28348 69	Other anti-infective agents	236,524	(D)	(D)	-	188,635	(D)	(D)	-
28348 71	Antibacterials and antiseptics: General	67,846	3,105	64,741	(D)	^f 39,438	(D)	(D)	(D)
28348 75	Mouth and throat preparations	398,817	(D)	(D)	(D)	377,124	(D)	(D)	(D)
28348 98	Other pharmaceutical preparations affecting parasitic and infective diseases, for human use	60,089	(D)	(D)	(D)	^f 50,688	(D)	(D)	(D)
28349 —	Pharmaceutical preparations for veterinary use...	1,314,935	455,348	805,691	53,896	1,352,494	488,967	783,450	80,077
28349 11	Anesthetics	(D)	(D)	(D)	-	26,009	(D)	(D)	-
28349 21	Anthelmintics	(S)	(S)	82,356	1,923	^f 151,332	69,952	^f 81,380	2,649
28349 22	Antibiotics: Tetracyclines	159,738	(D)	(D)	(D)	163,052	(D)	(D)	(D)
28349 24	Penicillins	85,523	39,111	46,412	5,691	60,676	38,606	22,070	5,678
28349 26	Other antibiotics	170,106	86,671	83,435	(D)	170,465	85,814	84,651	(D)

See footnotes at end of table.

Table 25. Value of Shipments of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993—Con.

[In thousands of dollars]

Product code	Product description	1994				1993			
		Total	Prescription legend	Non-prescription	Bulk shipments ¹	Total	Prescription legend	Non-prescription	Bulk shipments ¹
28349 —	Pharmaceutical preparations for veterinary use—Con.								
28349 27	Antiseptics, wound dressings, and fungicides ..	85,933	(D)	(D)	(D)	83,627	(D)	(D)	(D)
28349 31	Hematinics ³	5,257	1,430	3,827	-	4,671	(D)	(D)	(D)
28349 33	Hemostatics	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
	Hormones:								
28349 34	Insulin preparations	-	-	-	-	-	-	-	-
28349 36	ACTH (corticotropin) preparations	(D)	(D)	(D)	-	(D)	220	-	-
28349 38	Other hormone preparations	73,362	(D)	(D)	(D)	73,321	(D)	(D)	(D)
28349 39	Intravenous solutions and electrolytes.....	(S)	(S)	4,629	(D)	12,311	6,438	5,873	(D)
28349 41	Nitrofurans	608	-	608	(D)	1,047	-	1,047	(D)
28349 43	Nutrients and tonics.....	17,969	(D)	(D)	7,089	13,721	(D)	(D)	8,481
28349 45	Parasitocides, external.....	164,925	(D)	(D)	(D)	152,766	(D)	(D)	(D)
28349 47	Sulfonamides	33,346	^a 23,212	10,134	(D)	36,507	23,164	13,343	(D)
28349 51	Tranquilizers and ataractics	10,299	(D)	(D)	-	7,986	(D)	(D)	(D)
28349 55	Vitamins and minerals.....	^a 186,276	(D)	(D)	(D)	181,963	18,852	163,111	(D)
28349 98	Other pharmaceutical preparations for veterinary use.....	78,951	15,811	63,140	(D)	^r 122,662	^r 55,502	67,160	(D)

¹Data 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.

²Product code 28242 24 combined with product code 28342 28.

³Product code 28349 31 combined with product code 28349 33.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ^rRevised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a20 percent or more of this item is estimated.

Table 26. **Domestic Value of Shipments, Exports, Imports, and Apparent Consumption of Pharmaceutical Preparations, Except Biologicals: 1994 and 1993**

[Thousand of dollars]

Product code	Product description	Manu- facturers' shipments (value f.o.b. plant)	Exports of domestic merchan- dise ¹	Percent exports to manu- facturers' shipments	Imports for consump- tion ² (value)	Apparent consump- tion ³ (value)	Percent imports to apparent consumption
1994							
	Pharmaceutical preparations	49,376,606	1,615,383	3.3	1,936,182	49,697,405	3.9
28341 —	Pharmaceutical preparations affecting neoplasms, endo- crine system, and metabolic diseases, for human use	4,132,243	237,753	5.8	394,614	4,289,104	9.2
28342 —	Pharmaceutical preparations acting on the central nervous system and sense organs, for human use	9,065,251	112,668	1.2	245,628	9,198,211	2.7
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use	5,546,669	161,745	2.9	152,741	5,537,665	2.8
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use	5,674,876	133,259	2.3	183,216	5,724,833	3.2
28345 —	Pharmaceutical preparations acting on the digestive or genito-urinary system, for human use	8,827,184	126,184	1.4	93,573	8,794,573	1.1
28346 —	Pharmaceutical preparations acting on the skin, for human use	2,218,858	25,011	1.1	36,285	2,230,131	1.6
28347 —	Vitamin, nutrient, and hematinic preparations, for human use	4,408,084	131,387	3.0	27,642	4,304,339	0.6
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use	8,188,506	626,634	7.7	702,783	8,264,655	8.5
28349 —	Pharmaceutical preparations for veterinary use	1,314,935	60,741	4.6	99,699	1,353,893	7.4
1993							
	Pharmaceutical preparations	45,612,472	1,239,398	2.7	1,470,338	45,843,411	3.2
28341 —	Pharmaceutical preparations affecting neoplasms, endo- crine system, and metabolic diseases, for human use	3,820,329	253,647	6.6	297,163	3,863,845	7.7
28342 —	Pharmaceutical preparations acting on the central nervous system and sense organs, for human use	8,926,766	110,437	1.2	213,038	9,029,367	2.4
28343 —	Pharmaceutical preparations acting on the cardiovascular system, for human use	5,234,235	144,831	2.8	180,090	5,269,494	3.4
28344 —	Pharmaceutical preparations acting on the respiratory system, for human use	5,509,797	148,271	2.7	168,974	5,530,500	3.1
28345 —	Pharmaceutical preparations acting on the digestive or genito-urinary system, for human use	7,995,706	137,342	1.7	44,846	7,903,210	0.6
28346 —	Pharmaceutical preparations acting on the skin, for human use	1,979,746	22,892	1.2	34,967	1,991,821	1.8
28347 —	Vitamin, nutrient, and hematinic preparations, for human use	3,559,784	124,093	3.5	12,252	3,447,943	0.4
28348 —	Pharmaceutical preparations affecting parasitic and infective diseases, for human use	7,233,615	238,428	3.3	479,597	7,474,783	6.4
28349 —	Pharmaceutical preparations for veterinary use	1,352,494	59,457	4.4	39,411	1,332,448	3.0

¹Source: Bureau of the Census report EM545, *U.S. Exports*.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

³"Apparent consumption" represents new domestic supply and is derived by subtracting "Exports" from the 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 the 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

5.1 FLAT GLASS

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 7.7 percent to 5.3 billion square feet in 1994, from 5.0 billion square feet in 1993. The quantity of flat glass shipments increased 10.0 percent to 5.6 billion square feet in 1994, from 5.1 billion square feet in 1993. Also, the value of flat glass shipments increased 14.8 percent to \$1.9 billion in 1994, from \$1.6 billion in 1993.

By type, sheet, plate, and float glass up to .107 inch accounted for approximately 46 percent of the total production and total quantity of shipments in 1994 and 46 percent of the total production and total quantity of shipments in 1993. By color, clear glass accounted for approximately 61 percent of total production and total quantity of shipments in 1994 and 1993.

In 1994, outside customer sales accounted for 63.5 percent of total production, 68.7 percent of total quantity of shipments, and 70.8 percent of total value of shipments. This compares with 62.0 percent of total production, 67.6 percent of total quantity of shipments, and 68.7 percent of total value of shipments in 1993.

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: 1992 to 1994

Year and quarter	Production		Total shipments			Quantity produced and consumed within each company ² (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 ¹ (\$1,000)			
1994								
Total	4,288,390	5,349,865	5,578,868	1,863,444	1,677,514	1,743,969	(X)	(X)
Fourth quarter	1,119,448	1,377,332	1,399,291	482,768	432,373	436,137	457,825	112.2
Third quarter	1,097,391	1,379,567	1,449,596	489,757	428,147	429,268	479,784	110.0
Second quarter	1,049,248	1,300,991	1,403,755	461,784	431,832	430,667	549,813	105.3
First quarter	1,022,303	1,291,975	1,326,226	429,135	385,162	447,897	652,577	100.3
1993								
Total	4,004,019	4,963,582	5,073,498	1,622,705	1,677,514	1,642,840	(X)	(X)
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
1992								
Total	3,892,472	4,661,286	4,600,376	1,462,943	1,552,088	1,174,141	(X)	(X)
Fourth quarter	947,047	1,137,462	1,122,612	352,377	361,412	270,733	768,116	97.5
Third quarter	985,613	1,202,895	1,226,707	374,278	389,062	299,320	753,266	96.2
Second quarter	1,024,538	1,226,823	1,184,518	374,276	407,264	326,141	777,078	91.9
First quarter	935,274	1,094,106	1,066,539	362,012	394,349	277,947	734,773	91.8

¹Adjustments for price changes were made to the data using the producer price index for flat glass as published by the Bureau of Labor Statistics (BLS).

²Starting with first quarter 1989, the quantity of "produced and consumed" is collected at the company level and included with the quantity of shipments.

X Not applicable.

Table 2. 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.) ¹
			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	Flat glass	(X)	4,288,390	5,349,865	5,578,868	1,863,444	1,743,969	(X)
	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	(D)	(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)

¹Total ending inventories for 1994 are those shown for the fourth quarter.

D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

Note: Figures 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, does 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: 1993

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.) ¹
			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	Flat glass	(X)	4,004,019	4,963,582	5,073,498	1,622,705	1,642,840	(X)
	Fourth quarter	6	1,088,842	1,345,491	1,328,204	425,455	417,985	686,828
	Third quarter	6	1,038,758	1,269,171	1,290,146	412,306	392,874	669,541
	Second quarter	6	948,129	1,203,420	1,290,013	413,263	432,216	690,504
	First quarter	6	928,290	1,145,500	1,165,135	371,681	399,765	777,246
	By type:							
32115 12	Sheet, plate, and float glass up to .107 inch	(X)	1,300,912	2,298,060	2,338,508	(X)	647,920	(X)
	Fourth quarter	6	367,324	640,970	624,219	(X)	157,012	297,876
	Third quarter	6	326,105	571,319	602,699	(X)	152,552	281,125
	Second quarter	6	316,758	567,059	587,867	(X)	175,283	312,517
	First quarter	6	290,725	518,712	523,723	(X)	163,073	333,411
32115 13	.108 inch through .134 inch	(X)	1,018,815	1,180,518	1,191,276	(X)	480,704	(X)
	Fourth quarter	6	277,836	347,305	343,366	(X)	136,174	156,449
	Third quarter	6	273,446	291,902	286,603	(X)	120,185	152,510
	Second quarter	6	235,010	251,210	279,645	(X)	116,406	147,210
	First quarter	6	232,523	290,101	281,662	(X)	107,939	175,665
32115 14	.135 inch through .199 inch	(X)	936,537	979,421	1,008,820	(X)	460,660	(X)
	Fourth quarter	6	234,247	218,464	218,078	(X)	110,464	153,389
	Third quarter	6	238,359	268,612	263,817	(X)	107,290	153,003
	Second quarter	6	240,263	274,620	290,816	(X)	127,696	148,185
	First quarter	6	223,668	217,725	236,109	(X)	115,210	164,420
32115 15	.200 inch and thicker	(X)	747,755	505,583	534,894	(X)	53,556	(X)
	Fourth quarter	6	209,435	138,752	142,541	(X)	14,335	79,114
	Third quarter	6	200,848	137,338	137,027	(X)	12,847	82,903
	Second quarter	6	156,098	110,531	131,685	(X)	12,831	82,592
	First quarter	6	181,374	118,962	123,641	(X)	13,543	103,750
	By color:							
32110 14	Pyrolytically coated	(X)	164,883	200,276	221,254	(X)	61,258	44,358
	Fourth quarter	4	(X)	(X)	52,539	(X)	15,761	(X)
	Third quarter	4	(X)	(X)	55,192	(X)	13,802	(X)
	Second quarter	4	(X)	(X)	59,498	(X)	15,502	(X)
	First quarter	4	(X)	(X)	54,025	(X)	16,193	(X)
	Nonpyrolytically coated:							
32110 15	Clear	(X)	2,471,564	3,006,925	3,102,276	(X)	717,640	343,909
	Fourth quarter	6	(X)	(X)	845,234	(X)	190,563	(X)
	Third quarter	6	(X)	(X)	811,385	(X)	180,797	(X)
	Second quarter	6	(X)	(X)	765,867	(X)	178,926	(X)
	First quarter	6	(X)	(X)	679,790	(X)	167,354	(X)
32110 16	Green	(X)	1,047,647	1,419,355	1,384,945	(X)	730,954	211,430
	Fourth quarter	4	(X)	(X)	338,162	(X)	172,327	(X)
	Third quarter	4	(X)	(X)	331,844	(X)	163,127	(X)
	Second quarter	4	(X)	(X)	370,193	(X)	207,068	(X)
	First quarter	4	(X)	(X)	344,746	(X)	188,432	(X)
32110 17	Bronze	(X)	106,820	92,096	101,281	(X)	(D)	26,278
	Fourth quarter	4	(X)	(X)	23,311	(X)	(D)	(X)
	Third quarter	4	(X)	(X)	23,746	(X)	(D)	(X)
	Second quarter	4	(X)	(X)	24,842	(X)	(D)	(X)
	First quarter	4	(X)	(X)	29,382	(X)	(D)	(X)
32110 18	Other	(X)	213,105	244,930	263,742	(X)	(D)	60,853
	Fourth quarter	4	(X)	(X)	68,958	(X)	(D)	(X)
	Third quarter	4	(X)	(X)	67,979	(X)	(D)	(X)
	Second quarter	4	(X)	(X)	69,613	(X)	(D)	(X)
	First quarter	4	(X)	(X)	57,192	(X)	(D)	(X)
32110 04	Outside customer sales	(X)	2,511,160	3,078,587	3,431,856	1,115,196	(X)	(X)
	Fourth quarter	6	(X)	(X)	910,333	296,134	(X)	(X)
	Third quarter	6	(X)	(X)	898,497	291,294	(X)	(X)
	Second quarter	6	(X)	(X)	857,797	279,972	(X)	(X)
	First quarter	6	(X)	(X)	765,229	247,796	(X)	(X)
32110 21	Glass tempered by primary producers of flat glass	(X)	407,787	475,330	463,604	(X)	395,709	(D)
	Fourth quarter	5	(X)	(X)	115,345	(X)	96,394	(X)
	Third quarter	5	(X)	(X)	111,344	(X)	94,145	(X)
	Second quarter	5	(X)	(X)	130,659	(X)	114,293	(X)
	First quarter	5	(X)	(X)	106,256	(X)	90,877	(X)
32110 23	Glass used for high-speed tempered residential products	(X)	245,248	296,434	297,688	(X)	267,726	(D)
	Fourth quarter	4	(X)	(X)	76,226	(X)	67,848	(X)
	Third quarter	4	(X)	(X)	74,850	(X)	67,250	(X)
	Second quarter	4	(X)	(X)	77,765	(X)	70,625	(X)
	First quarter	4	(X)	(X)	68,847	(X)	62,003	(X)

¹Total ending inventories for 1993 are those shown for the fourth quarter.

D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

Note: Figures 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, does 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: 1992 to 1994

[Thousands of dollars]

Year and quarter	Manufacturers' shipments (f.o.b. plant) ¹	Exports of domestic merchandise ² (value at port)	Percent exports to manufacturers' shipments	Imports for consumption ³ (value at port)	Apparent consumption ⁴	Percent imports to apparent consumption
1994						
Total	1,863,444	363,835	19.5	157,154	1,656,763	9.5
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
1993						
Total	1,622,705	342,903	21.1	124,851	1,404,653	8.9
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
1992						
Total	1,462,943	317,171	21.7	97,777	1,243,549	7.9
Fourth quarter	352,377	78,046	22.1	27,452	301,783	9.1
Third quarter	374,278	83,209	22.2	24,626	315,695	7.8
Second quarter	374,276	78,125	20.9	21,921	318,072	6.9
First quarter	362,012	77,791	21.5	23,778	307,999	7.7

¹The value of "Manufacturers' shipments" is in current dollars.²Source: Bureau of the Census report EM545, *U.S. Exports*.³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.⁴"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 avail-

able 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.

5.2 CONSUMER, SCIENTIFIC, TECHNICAL, AND INDUSTRIAL GLASSWARE

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 1994, total factory shipments of consumer, scientific, technical, and industrial glassware amounted to \$4,643.8 million, an increase of 8 percent from the \$4,286.4 million reported in 1993. Establishments manufacturing glassware from glass produced in their own establishment accounted for approximately 72 percent of the total glassware shipments.

Consumer (table, kitchen, art, and novelty) glassware accounted for approximately 38 percent of the total glassware shipments and showed a 9-percent increase for the 1994 shipments of \$1,782.5 million, from the 1993 level of \$1,633.9 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: 1990 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990
32295, 32298, 32311, 32312	Table, kitchen, art, and novelty glassware ¹	1,782.5	1,633.9	1,575.5	1,433.6	1,397.3
32296, 32298, 32311, 32312	Lighting and electronic glassware ¹	1,542.3	1,370.6	1,288.6	1,187.1	1,078.7
32297, 32298, 32311, 32312	All other glassware ¹	1,309.5	1,273.1	1,241.1	1,079.1	1,105.3

¹The difference between industry 3229 and 3231 is as follows: industry 3229 represents glassware produced from glass made in the 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: 1994 and 1993

[Millions of dollars]

Product code	Product description	1994			1993		
		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	4,643.8	3,364.9	1,278.9	4,286.4	2,987.0	1,299.4
32295 —, 32298 —, 32311 —, 32312 —	Table, kitchen, art, and novelty glassware	1,782.5	1,074.4	708.1	1,633.9	969.3	664.6
32296 —, 32298 —, 32311 —, 32312 —	Lighting and electronic glassware	1,542.3	1,443.8	98.5	1,370.6	1,288.9	81.7
32297 —, 32298 —, 32311 —, 32312 —	All other glassware	1,309.5	731.9	577.6	1,273.1	722.3	550.8
32295 00, 32296 00, 32297 00, 32298 00, 32311 00, 32312 00	Consumer, scientific, technical, and industrial glassware, n.s.k.	9.5	7.0	2.5	8.8	6.5	2.3

n.s.k. Not specified by kind. ¹Revised by 5 percent or more from previously published figures.

Note: Detail may not add to the total due to independent rounding.

Table 7. Shipments of Consumer Glassware: 1994 and 1993

[Value in thousands of dollars]

Product code	Product description ¹	Unit of measure	Number of companies	Total (all industries)		Machine-made ² (SIC 3229)		Hand-made ² (SIC 3229)	
				Quantity	Value	Quantity	Value	Quantity	Value
1994									
32295 —, 32298 —, 32311 —, 32312 —	Table, kitchen, art, and novelty glassware .....	...(X)...	(X)	(X)	1,782,547	(X)	979,088	(X)	95,264
3229X 21, 3231X 21	Tumblers (one piece, excluding packers' tumblers) .....	.M dozen.	23	46,072	264,472	44,281	257,966	(D)	(D)
3229X 22, 3231X 22	Stemware .....	...do...	25	14,027	172,459	(D)	(D)	(D)	(D)
3229X 23, 3231X 23	Tableware	M pieces.	26	118,369	268,031	98,793	104,548	(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...	59	(X)	(³)	(X)	(³)	(X)	(³)
3229X 38, 3231X 38	Other table, kitchen, art, and novelty glassware .....	...(X)...	29	(X)	(³)	(X)	(³)	(X)	(³)
3229X 39, 3231X 39	Interplant transfers of shipments of partially made glassware to other glassware establishments ⁴ .....	...(X)...	(X)	(X)	³ 820,843	(X)	³ 418,101	(X)	³ 60,541
1993									
32295 —, 32298 —, 32311 —, 32312 —	Table, kitchen, art, and novelty glassware .....	...(X)...	(X)	(X)	1,633,885	(X)	¹ 883,518	(X)	85,762
3229X 21, 3231X 21	Tumblers (one piece, excluding packers' tumblers) .....	.M dozen.	24	45,649	243,369	42,324	235,479	112	969
3229X 22, 3231X 22	Stemware .....	...do...	24	13,922	171,067	(D)	(D)	(D)	(D)
3229X 23, 3231X 23	Tableware	M pieces.	26	132,453	¹ 242,079	¹ 93,422	90,650	(D)	(D)
3229X 25, 3231X 25, 3229X 27, 3231X 27	Cookware, ovenware, and kitchenware, including microwave specialty pieces ...	...do...	(NA)	99,122	262,072	(D)	(D)	-	-
3229X 28, 3231X 28	Ornamental, decorative, and novelty glassware, and smokers' accessories ...	...do...	51	(X)	(³)	(X)	(³)	(X)	(³)
3229X 38, 3231X 38	Other table, kitchen, art, and novelty glassware .....	...(X)...	26	(X)	(³)	(X)	(³)	(X)	(³)
3229X 39, 3231X 39	Interplant transfers of shipments of partially made glassware to other glassware establishments ⁴ .....	...(X)...	(X)	(X)	³ 715,298	(X)	³ 352,922	(X)	³ 53,253

¹See text for specific definitions of individual products.²Shipments by establishments manufacturing glassware primarily from glass produced in the same establishment.³Data for 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 figures.⁴The processing establishments report the finished product on the appropriate lines, in order to avoid duplicate reporting of the same product by separate establishments.- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available. ¹Revised by 5 percent or more from previously published figures. X Not applicable.

Table 8. Value of Shipments of Scientific, Technical, and Industrial Glassware: 1994 and 1993

[Value in thousands of dollars]

Product code	Product description ¹	Number of companies	1994		1993	
			Total (all industries)	Machine-made ² (SIC 3229)	Total (all industries)	Machine-made ² (SIC 3229)
32296 —, 32298 —, 32311 —, 32312 —	Lighting and electronic glassware.....	(X)	1,542,350	1,443,776	1,370,609	1,288,855
3229Y 41, 3231Y 41	Automotive lighting glassware.....	6	(D)	(D)	(D)	(D)
3229Y 43, 3231Y 43	Searchlight and other lenses.....	6	10,461	(D)	10,124	(D)
3229Y 45, 3231Y 45	Electric light bulb blanks.....	5	139,590	139,590	129,101	129,101
3229Y 47, 3231Y 47	Tubing and cane for electric light bulbs and fluorescent and neon lighting.....	7	(D)	(D)	(D)	(D)
3229Y 51, 3231Y 51	Electric tube blanks (except television).....	7	12,612	(D)	11,359	(D)
3229Y 55, 3231Y 55	Television tube blanks and parts; tubing, cane, and glass parts for electronic tubes and devices.....	18	883,322	843,780	747,500	717,515
3229Y 57, 3231Y 57	Bowls and enclosing globes, lamp chimneys, lamp parts, shades, reflectors, and torchieres: Interior.....	24	83,260	81,682	79,958	78,380
3229Y 59, 3231Y 59	Exterior.....	9	10,425	(D)	9,667	(D)
3229Y 65, 3231Y 65	Other lighting and electronic glassware.....	9	(D)	(D)	(D)	(D)
3229Y 69, 3231Y 69	Interplant transfers and shipments of partially made glassware to other glassware establishments ³	(X)	133,728	128,582	128,363	123,384
32297—, 32298—, 32311—, 32312—	All other glassware.....	(X)	1,309,494	731,945	1,273,103	722,278
3229Z 71, 3231Z 71	Tubing, rods, canes, all types (except electrical and electronic).....	22	(D)	(D)	(D)	(D)
3229Z 72, 3231Z 72	Scientific and laboratory glassware.....	(X)	441,749	199,082	458,699	216,276
3229Z 74, 3231Z 74	Reusable.....	59	226,513	98,913	238,107	112,228
3229Z 75, 3231Z 75	Disposable.....	22	215,236	100,169	220,592	104,048
3229Z 77, 3231Z 77	Technical and industrial glassware.....	49	348,583	138,818	281,040	106,600
3229Z 79, 3231Z 79	Ophthalmic lens blanks and optical instruments' lens blanks.....	17	106,341	96,550	107,879	97,672
3229Z 89, 3231Z 89	Other glassware (e.g., radomes, nose cones, nursery bottles, and vials).....	27	327,517	218,273	326,160	207,825
32295 00, 32296 00, 32297 00, 32298 00, 32311 00, 32312 00	Interplant transfers and shipments of partially made glassware to other glassware establishments ³	7	(D)	(D)	(D)	(D)
32295 00, 32296 00, 32297 00, 32298 00, 32311 00, 32312 00	Consumer, scientific, technical, and industrial glassware, n.s.k. ⁴	(X)	9,535	7,040	8,804	6,483

¹See text for specific definitions of individual products.

²Shipments by establishments manufacturing glassware primarily from glass produced in the same establishment.

³The processing establishments report the finished product on the appropriate lines, in order to avoid duplicate reporting of the same product by separate establishments.

⁴Not specified by kind (n.s.k.) represents the 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. The value of shipments has been estimated for series MA32E based on the year-to-year rate of change for reporting establishments applied to the previous year's n.s.k. value.

D Data withheld to avoid disclosing figures for individual companies. n.s.k. Not specified by kind. †Revised by 5 percent or more from previously published figures. X Not applicable.

Table 9. Value of Shipments, Exports, Imports, and Apparent Consumption of Consumer, Scientific, Technical, and Industrial Glassware: 1994 and 1993

[Thousands of dollars]

Product description	Manu- facturers' shipments	Exports of domestic merchandise ^{1 2}	Percent exports to manufac- turers' shipments	Imports for consumption ^{1 3}	Apparent consumption ⁴	Percent imports to apparent consumption
1994						
Table, kitchen, art, and novelty glassware	1,782,547	194,227	10.9	735,739	2,324,059	31.7
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 TV tube blanks and parts	895,934	28,236	3.2	8,087	875,785	0.9
Lamp chimneys, bowls, shades, globes, parts, and other glassware, interior and exterior.	93,685	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	441,749	109,038	24.7	27,623	360,334	7.7
Ophthalmic lens blanks and optical lens blanks. . .	106,341	39,403	37.1	15,547	82,485	18.8
1993						
Table, kitchen, art, and novelty glassware	1,633,885	167,939	10.3	651,738	2,117,684	30.8
Searchlight and other lenses	10,124	9,489	93.7	1,688	2,323	72.7
Lighting glassware	129,101	22,136	17.1	8,430	115,395	7.3
Electronic tube blanks, including TV blanks and parts	758,859	24,004	3.2	120,032	854,887	14.0
Lamp chimneys, bowls, shades, globes, parts, and other glassware, interior and exterior.	89,625	(NA)	(NA)	79,837	(NA)	(NA)
Glass tubing, rods, and canes, all types (except electrical and electronic)	(D)	44,402	(D)	76,685	(D)	(D)
Scientific and laboratory glassware, reusable and disposable	458,699	94,495	20.6	28,375	392,579	7.2
Ophthalmic lens blanks and optical lens blanks. . .	107,879	38,896	36.1	12,654	81,637	15.5

¹For 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.

²Source: Bureau of the Census data relating to EM545, *U.S. Exports*.

³Source: Bureau of the Census data relating to IM146, *U.S. Imports for Consumption and General Imports*.

⁴"Apparent consumption" is derived by subtracting "Exports" from the total of "Shipments," plus "Imports," including duty.

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

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, con-tact Joyce Pomeroy, 301-457-4840.

5.3 GLASS CONTAINERS

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 1994, production of glass containers amounted to 288.6 million gross, while shipments were 284.7 million gross. This compares with 1993 production of 291.6 million gross and shipments of 289.5 million gross. In 1994, shipments of narrow neck containers amounted to 196.5 million gross, and shipments of wide mouth containers were 88.2 million gross. Stocks on hand at the end of 1994 totaled 45.3 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: 1994 and 1993

[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
1994									
Total	284,667	'196,466	'88,201	288,570	199,541	89,029	(X)	(X)	(X)
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
1993									
Total	289,501	212,390	77,111	291,624	214,014	77,610	(X)	(X)	(X)
December	21,241	15,875	5,366	20,476	15,012	5,464	43,265	28,315	14,950
November	22,121	15,927	6,194	22,682	16,230	6,452	44,670	29,722	14,948
October	23,969	16,477	7,492	25,053	17,661	7,392	44,408	29,646	14,762
September	24,809	17,296	7,513	23,907	17,144	6,763	43,413	28,580	14,833
August	26,416	18,800	7,616	25,366	18,551	6,815	44,563	28,874	15,689
July	26,201	19,094	7,107	26,433	18,677	7,756	45,552	29,261	16,291
June	26,856	20,001	6,855	25,166	18,787	6,379	45,538	29,976	15,562
May	25,071	19,283	5,788	24,868	18,755	6,113	47,607	31,729	15,878
April	25,284	19,413	5,871	28,219	21,717	6,502	47,727	32,277	15,450
March	25,490	19,303	6,187	25,774	19,444	6,330	47,357	32,163	15,194
February	21,338	15,845	5,493	22,679	16,850	5,829	47,522	32,376	15,146
January	20,705	15,076	5,629	21,001	15,186	5,815	46,404	31,615	14,789

'Revised by 5 percent or more from previously published figures. X Not applicable.

Table 11. Shipments and Production of Glass Containers, by Type of Containers: 1989 to 1994

[Thousands of gross]

Product code	Product description	1994	1993	1992	1991	1990	1989
SHIPMENTS							
	All types	284,667	289,501	282,703	278,575	284,986	285,586
	Narrow neck containers ¹	¹ 196,466	212,390	210,437	203,892	213,019	215,582
	Wide mouth containers	¹ 88,201	77,111	72,266	74,683	71,967	70,004
	By end use:						
	Food:						
32210 11	Narrow neck	23,566	31,846	26,516	23,477	23,546	22,010
32210 31, 37	Wide mouth, including dairy	88,201	77,111	72,266	74,683	71,967	70,004
32210 19, 50	Beverages (refillable and nonrefillable) . . .	30,713	45,602	53,865	57,141	60,261	63,813
32210 23, 60	Beer (refillable and nonrefillable)	104,372	94,747	88,825	84,304	88,551	88,556
32210 27	Liquor	10,547	11,434	11,312	10,565	11,185	11,268
32210 29	Wine	13,567	14,151	14,591	13,473	15,112	14,791
	Other (narrow neck and wide mouth):						
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth)	7,911	8,629	9,056	8,872	9,180	9,577
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth)	1,122	1,161	1,236	1,198	1,174	1,318
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth)	4,668	4,820	5,036	4,862	4,010	4,249
PRODUCTION							
	All types	288,570	291,624	286,046	282,048	289,704	287,511
	Narrow neck containers ¹	199,541	214,014	212,646	207,944	216,501	216,306
	Wide mouth containers	89,029	77,610	73,400	74,104	73,203	71,205
	By end use:						
	Food:						
32210 11	Narrow neck	23,774	33,279	28,282	24,641	24,309	22,192
32210 31, 37	Wide mouth, including dairy	89,029	77,610	73,400	74,104	73,203	71,205
32210 19, 50	Beverages (refillable and nonrefillable) . . .	31,599	44,316	49,900	57,119	59,412	62,031
32210 23, 60	Beer (refillable and nonrefillable)	106,290	95,843	91,229	84,601	90,581	88,523
32210 27	Liquor	10,976	11,227	11,663	11,261	11,354	11,030
32210 29	Wine	13,665	13,975	13,726	13,906	15,626	14,850
	Other (narrow neck and wide mouth):						
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth)	7,452	8,627	11,138	10,140	9,736	11,683
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth)	1,107	1,103	1,352	1,246	1,234	1,434
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth)	4,678	5,644	5,356	5,030	4,249	4,563

¹Includes data for wide mouth containers in the following categories: Medicinal and health; Chemical, household, and industrial; and Toiletries and cosmetics, to avoid disclosure of individual company data.

[†]Revised by 5 percent or more from previously published figures.

Table 12. Shipments, Production, and Stocks of Glass Containers: 1994

Product code	Product description	Total	January	February	March	April	May	June	July	August	September	October	November	December
	NET PACKED WEIGHT¹ (Thousands of pounds)													
	All types	22,596,698	1,718,138	1,794,069	2,018,406	'2,017,442	1,924,930	1,939,243	'2,020,122	1,975,843	1,841,804	'2,077,313	1,782,095	1,487,273
	Narrow neck containers ²	15,092,618	1,128,812	1,209,793	'1,329,026	1,342,499	'1,284,669	1,286,833	1,388,533	'1,317,524	'1,194,277	1,364,802	'1,198,270	1,047,580
	Wide mouth containers	7,504,080	'589,326	'584,296	'689,380	'674,943	'640,261	'652,410	'631,589	'658,319	'647,527	'712,511	'583,825	'439,693
	By end use:													
	Food:													
32210 11	Narrow neck	1,695,857	'134,658	'138,060	'165,607	'161,793	'166,248	'144,421	'161,558	'148,796	'120,881	'120,376	'124,366	'109,093
32210 31, 37	Wide mouth, including dairy	7,504,080	'589,326	'584,296	'689,380	'674,943	'640,261	'652,410	'631,589	'658,319	'647,527	'712,511	'583,825	'439,693
32210 19, 50	Beverages (refillable and nonrefillable) . . .	2,057,430	142,750	170,094	208,500	216,581	163,530	180,497	194,071	164,552	173,434	180,074	138,325	125,022
32210 23, 60	Beer (refillable and nonrefillable)	7,502,707	568,426	585,391	631,083	'642,929	631,230	672,790	'705,288	683,219	605,396	'662,356	594,621	519,978
32210 27	Liquor	1,486,296	'91,633	116,558	112,191	'122,830	107,565	101,387	'142,684	127,757	115,933	'179,073	145,585	'123,100
32210 29	Wine	1,946,823	153,535	162,186	175,241	166,011	176,095	156,950	154,030	157,912	153,549	184,864	164,311	142,139
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth)	223,574	20,243	25,745	18,679	'18,512	24,581	16,791	15,859	16,231	13,690	25,224	15,207	12,812
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth)	70,733	8,563	2,781	7,020	4,788	6,301	4,818	5,708	9,893	2,845	3,090	7,326	7,600
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth)	109,198	9,004	8,978	10,705	9,055	9,119	9,179	9,335	9,164	8,549	9,745	8,529	7,836
	SHIPMENTS (Thousands of gross)													
	All types	284,667	21,607	22,004	26,092	'25,511	26,143	26,419	'25,330	25,605	22,671	'23,201	20,395	19,689
	Narrow neck containers ²	'196,466	14,928	15,150	'18,109	17,625	'17,964	'18,045	17,561	'17,464	15,403	15,570	14,401	14,246
	Wide mouth containers	'88,201	'6,679	'6,854	'7,983	'7,886	'8,179	'8,374	'7,769	'8,141	'7,268	'7,631	5,994	'5,443
	By end use:													
	Food:													
32210 11	Narrow neck	23,566	'1,752	'1,882	'2,317	'2,213	'2,424	'2,141	'2,297	'2,216	'1,740	'1,613	'1,580	'1,391
32210 31, 37	Wide mouth, including dairy	88,201	'6,679	'6,854	'7,983	'7,886	'8,179	'8,374	'7,769	'8,141	'7,268	'7,631	5,994	'5,443
32210 19, 50	Beverages (refillable and nonrefillable) . . .	30,713	2,253	2,416	3,450	3,141	2,750	2,982	2,724	2,620	2,515	2,032	1,858	1,972
32210 23, 60	Beer (refillable and nonrefillable)	104,372	8,006	7,960	8,866	'8,812	9,396	9,429	'9,316	9,350	8,366	'8,705	8,017	8,149
32210 27	Liquor	10,547	'711	737	855	'1,023	836	907	'854	883	838	'1,152	947	'804
32210 29	Wine	13,567	1,021	1,025	1,357	1,249	1,332	1,411	1,339	1,259	819	922	942	891
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth)	7,911	698	666	744	693	730	668	566	654	650	679	594	569
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth)	1,122	'93	'93	'95	'94	'96	'84	'95	'92	'88	'92	'88	112
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth)	4,668	'394	'371	'425	'400	'400	'423	'370	390	'387	'375	'375	'358

See footnotes at end of table.

Table 12. Shipments, Production, and Stocks of Glass Containers: 1994—Con.

Product code	Product description	Total	January	February	March	April	May	June	July	August	September	October	November	December
	PRODUCTION (Thousands of gross)													
	All types	288,570	21,548	22,923	25,597	'25,277	25,224	26,288	26,176	24,865	23,123	'25,910	22,771	18,868
	Narrow neck containers ²	199,541	14,828	15,939	'17,550	17,311	'17,493	'18,408	18,513	'17,177	'15,805	17,490	'15,511	13,516
	Wide mouth containers	89,029	'6,720	'6,984	'8,047	'7,966	'7,731	'7,880	'7,663	'7,688	'7,318	'8,420	'7,260	'5,352
	By end use:													
	Food:													
32210 11	Narrow neck	23,774	'1,763	'1,930	'2,347	'2,159	'2,369	'2,116	'2,311	'2,013	'1,758	'1,710	'1,764	'1,534
32210 31, 37	Wide mouth, including dairy	89,029	'6,720	'6,984	'8,047	'7,966	'7,731	'7,880	'7,663	'7,688	'7,318	'8,420	'7,260	'5,352
32210 19, 50	Beverages (refillable and nonrefillable)	31,599	2,249	2,660	2,988	2,994	2,673	3,878	2,806	2,321	2,577	2,634	1,987	1,832
32210 23, 60	Beer (refillable and nonrefillable)	106,290	7,919	8,155	8,851	'8,814	9,065	9,335	'10,091	9,779	8,662	'9,575	8,647	7,397
32210 27	Liquor	10,976	'669	890	855	'973	852	813	'1,047	924	795	'1,276	1,031	'851
32210 29	Wine	13,665	1,003	1,109	1,383	1,260	1,364	1,184	1,157	1,081	1,035	1,127	1,021	941
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth)	7,452	700	741	615	635	676	593	613	554	545	714	567	499
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
	STOCKS, END OF MONTH³ (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 ²	(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

¹Weight is based on production of glass containers.²Includes data for wide mouth containers in the following categories: Medicinal and health; Chemical, household, and industrial; and Toiletries and cosmetics, to avoid disclosing figures for individual companies.³Figures are limited to inventories at manufacturing establishments. The sum of the inventories at the beginning of the month may not equal inventories at the end of the month. This is due to breakage and inventory adjustment.

'Revised by 5 percent or more from previously published figures. X Not applicable.

Table 13. Shipments, Production, and Stocks of Glass Containers: 1993

Product code	Product description	Total	January	February	March	April	May	June	July	August	September	October	November	December
	NET PACKED WEIGHT¹ (Thousands of pounds)													
	All types.....	22,910,687	1,674,801	1,813,659	2,035,830	2,186,782	1,948,555	1,955,348	2,070,125	2,011,279	1,863,075	1,985,095	1,785,155	1,580,983
	Narrow neck containers ²	16,247,686	1,171,227	1,293,897	1,463,881	1,623,071	1,441,120	1,418,121	1,412,179	1,411,754	1,306,076	1,363,968	1,232,724	1,109,668
	Wide mouth containers.....	6,663,001	503,574	519,762	571,949	563,711	507,435	537,227	657,946	599,525	556,999	621,127	552,431	471,315
	By end use:													
	Food:													
32210 11	Narrow neck.....	2,377,465	144,269	170,993	242,839	281,451	227,189	211,380	220,030	214,465	179,385	171,671	166,194	147,599
32210 31, 37	Wide mouth, including dairy.....	6,663,001	503,574	519,762	571,949	563,711	507,435	537,227	657,946	599,525	556,999	621,127	552,431	471,315
32210 19, 50	Beverages (refillable and nonrefillable)...	3,015,508	231,597	256,028	272,224	269,687	258,968	254,751	302,514	269,187	256,688	254,633	204,851	184,380
32210 23, 60	Beer (refillable and nonrefillable).....	6,852,120	477,148	498,314	561,744	689,167	584,376	612,534	586,984	603,276	547,737	604,795	563,614	522,431
32210 27	Liquor.....	1,528,348	110,302	140,693	138,849	157,763	150,372	120,661	105,311	118,847	128,081	134,614	113,850	109,005
32210 29	Wine.....	2,017,353	171,004	184,160	202,807	182,505	180,076	182,494	163,787	171,444	154,838	159,927	148,063	116,248
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth).....	279,204	20,592	28,879	30,215	26,031	25,839	21,466	19,228	21,382	25,117	20,460	22,234	17,761
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth).....	59,129	6,413	5,241	3,617	5,679	4,664	5,176	4,480	3,938	3,955	7,712	4,383	3,871
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth).....	118,559	9,902	9,589	11,586	10,788	9,636	9,659	9,845	9,215	10,275	10,156	9,535	8,373
	SHIPMENTS (Thousands of gross)													
	All types.....	289,501	20,705	21,338	25,490	25,284	25,071	26,856	26,201	26,416	24,809	23,969	22,121	21,241
	Narrow neck containers ²	212,390	15,076	15,845	19,303	19,413	19,283	20,001	19,094	18,800	17,296	16,477	15,927	15,875
	Wide mouth containers.....	77,111	5,629	5,493	6,187	5,871	5,788	6,855	7,107	7,616	7,513	7,492	6,194	5,366
	By end use:													
	Food:													
32210 11	Narrow neck.....	31,846	2,012	2,412	3,270	3,459	2,970	3,065	3,118	3,093	2,577	2,242	1,892	1,736
32210 31, 37	Wide mouth, including dairy.....	77,111	5,629	5,493	6,187	5,871	5,788	6,855	7,107	7,616	7,513	7,492	6,194	5,366
32210 19, 50	Beverages (refillable and nonrefillable)...	45,602	3,374	3,398	4,062	4,234	4,418	4,738	4,414	4,106	3,853	3,064	2,879	3,062
32210 23, 60	Beer (refillable and nonrefillable).....	94,747	6,530	6,908	8,330	8,188	8,258	8,604	8,298	8,198	7,707	7,988	7,807	7,931
32210 27	Liquor.....	11,434	921	898	1,011	930	1,018	921	792	794	990	1,062	1,081	1,016
32210 29	Wine.....	14,151	1,033	1,030	1,345	1,314	1,332	1,467	1,327	1,352	999	947	1,026	979
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth).....	8,629	698	706	776	771	788	703	640	770	696	674	731	676
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth).....	1,161	112	98	105	95	90	93	88	91	90	98	93	108
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth).....	4,820	396	395	404	422	409	410	417	396	384	402	418	367

See footnotes at end of table.

Table 13. Shipments, Production, and Stocks of Glass Containers: 1993—Con.

Product code	Product description	Total	January	February	March	April	May	June	July	August	September	October	November	December
	PRODUCTION (Thousands of gross)													
	All types.....	291,624	21,001	22,679	25,774	28,219	24,868	25,166	26,433	25,366	23,907	25,053	22,682	20,476
	Narrow neck containers ²	214,014	15,186	16,850	19,444	21,717	18,755	18,787	18,677	18,551	17,144	17,661	16,230	15,012
	Wide mouth containers.....	77,610	5,815	5,829	6,330	6,502	6,113	6,379	7,756	6,815	6,763	7,392	6,452	5,464
	By end use:													
	Food:													
32210 11	Narrow neck.....	33,279	2,014	2,360	3,469	4,008	3,120	3,095	3,012	2,976	2,406	2,364	2,272	2,183
32210 31, 37	Wide mouth, including dairy.....	77,610	5,815	5,829	6,330	6,502	6,113	6,379	7,756	6,815	6,763	7,392	6,452	5,464
32210 19, 50	Beverages (refillable and nonrefillable)...	44,316	3,482	3,741	4,046	4,035	3,810	3,698	4,374	3,861	3,736	3,744	3,080	2,709
32210 23, 60	Beer (refillable and nonrefillable).....	95,843	6,662	7,022	7,950	9,606	8,041	8,560	8,161	8,297	7,805	8,419	7,850	7,470
32210 27	Liquor.....	11,227	785	1,139	1,051	1,277	1,171	885	789	911	864	895	786	674
32210 29	Wine.....	13,975	1,052	1,257	1,468	1,374	1,224	1,311	1,201	1,153	1,054	972	1,011	898
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth).....	8,627	621	780	874	808	825	682	587	795	730	683	681	561
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth).....	1,103	107	87	83	108	87	86	85	91	86	112	86	85
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth).....	5,644	463	464	503	501	477	470	468	467	463	472	464	432
	STOCKS, END OF MONTH³ (Thousands of gross)													
	All types.....	(X)	46,404	47,522	47,357	47,727	47,607	45,538	45,552	44,563	43,413	44,408	44,670	43,265
	Narrow neck containers ²	(X)	31,615	32,376	32,163	32,277	31,729	29,976	29,261	28,874	28,580	29,646	29,722	28,315
	Wide mouth containers.....	(X)	14,789	15,146	15,194	15,450	15,878	15,562	16,291	15,689	14,833	14,762	14,948	14,950
	By end use:													
	Food:													
32210 11	Narrow neck.....	(X)	4,825	4,705	4,820	4,904	5,041	4,780	4,556	4,394	4,170	4,238	4,671	5,038
32210 31, 37	Wide mouth, including dairy.....	(X)	14,789	15,146	15,194	15,450	15,878	15,562	16,291	15,689	14,833	14,762	14,948	14,950
32210 19, 50	Beverages (refillable and nonrefillable)...	(X)	7,251	7,591	7,508	6,954	6,345	5,277	5,192	4,900	4,785	5,498	5,614	5,194
32210 23, 60	Beer (refillable and nonrefillable).....	(X)	9,605	9,655	9,245	9,414	9,242	9,075	8,894	8,962	9,042	9,484	9,439	8,757
32210 27	Liquor.....	(X)	2,831	2,988	2,889	3,117	3,212	3,115	3,099	3,172	3,038	2,861	2,550	2,203
32210 29	Wine.....	(X)	2,720	2,984	3,146	3,235	3,193	3,054	2,959	2,785	2,842	2,849	2,824	2,621
	Other (narrow neck and wide mouth):													
32210 13, 32	Medicinal and health supplies (narrow neck and wide mouth).....	(X)	2,723	2,815	2,879	2,879	2,990	2,903	2,815	2,993	3,020	2,998	2,924	2,807
32210 15, 33	Chemical, household, and industrial (narrow neck and wide mouth).....	(X)	399	379	363	371	367	363	359	349	345	359	354	332
32210 17, 34	Toiletries and cosmetics (narrow neck and wide mouth).....	(X)	1,261	1,259	1,313	1,403	1,339	1,409	1,387	1,319	1,338	1,359	1,346	1,363

¹Weight is based on production of glass containers.²Includes data for wide mouth containers in the following categories: Medicinal and health; Chemical, household, and industrial; and Toiletries and cosmetics, to avoid disclosing figures for individual companies.³Figures are limited to inventories at manufacturing establishments. For some time, the sum of the inventories at the beginning of the month does not equal inventories at the end of the month. This is due to breakage and inventory adjustment.

X Not applicable.

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 Brenda Lukenich, 301-457-4747.

Chapter 6. Primary Metals

6.1 IRON AND STEEL CASTINGS

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 1994 collected on Bureau of the Census form MA33A, Iron and Steel Foundries. The annual survey panel consists of approximately 727 selected establishments, taken from a list of about 1,440 producers from the 1992 Census of Manufacturing 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 1994, the total ferrous castings shipments were 16.7 million short tons, a 14-percent increase from the 14.6 million short tons shipped in 1993.

The shipments of ductile iron castings in 1994 were 4.3 million short tons, a 16-percent increase from the 3.7 million shipped in 1993. Gray iron castings increased 13 percent, from 9.1 million short tons in 1993 to 10.4 million short tons in 1994. Shipments of malleable castings increased 2 percent, from the 292 thousand short tons in 1993 to 299 thousand short tons shipped in 1994. Steel castings increased 13 percent, from 1.5 million short tons in 1993 to 1.8 million short tons in 1994. Steel investment castings increased by 15 percent in 1994 to 95.2 million pounds, from 82.6 million pounds in 1993.

EXPLANATION OF TERMS

Shipments for Sale. Represents commercial sales only (castings shipped to the trade). Intra-company 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 those fittings that do not require 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, niobium, molybdenum, nickel, titanium, tungsten, vanadium, zirconium, or any other alloying element. Any amount specified or known to have been added to obtain a desired 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: 1994 and 1993**

[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
1994.....	4,217	3,759	458	10,377	8,534	1,843	299	143	156	1,785	1,672	113
1993.....	3,749	3,307	442	9,128	7,233	1,895	292	142	150	1,461	1,364	97

Table 2. **Value of Shipments of Iron and Steel Castings: 1994 and 1993**

[Millions of dollars]

Product description	1994	1993
Ductile iron castings	3,345.2	2,914.4
Gray iron castings.....	7,280.7	6,109.9
Malleable iron castings.....	272.2	269.8
Steel castings.....	2,225.6	1,934.7
Steel investment castings	4,213.0	3,894.7

Note: Dollar value represents the value of castings for sale.

Table 3. Shipments of Iron and Steel Castings, by Type of Castings: 1994 and 1993

[Quantity in short tons]

Product code	Product description	1994		1993	
		Number of companies	Quantity	Number of companies	Quantity
	Iron and steel castings (except investment castings)	(NA)	16,678,022	(NA)	14,629,612
	For sale	(NA)	14,107,388	(NA)	12,045,554
	For own use	(NA)	2,570,634	(NA)	2,584,058
	Ductile (nodular) iron castings	352	4,216,523	349	3,748,915
	For sale	339	3,758,285	336	3,306,726
	For own use	55	458,238	52	442,189
	Ductile iron pressure pipe:				
	Under 14 inches (inside diameter)	14	1,285,229	14	1,179,083
33211 32	14 inches to 24 inches (inside diameter)	8	1,395,557	5	1,288,940
33211 33	30 inches and over (inside diameter)	4	(¹)	6	(¹)
33211 35	Ductile iron fittings:				
	Under 14 inches (inside diameter)	30	90,969	30	87,243
33211 36	14 inches to 24 inches (inside diameter)	11	22,537	6	21,574
33211 37	30 inches and over (inside diameter)	12	9,491	13	(¹)
33211 39	Automotive uses	68	898,332	67	711,499
33212 22	Construction and utility castings	43	17,235	41	17,868
33212 24	Machinery uses	140	320,381	137	270,641
33212 33	Other ductile iron castings (except pressure pipe and fittings):				
33212 79	For sale	227	718,554	223	627,538
	For own use	37	136,263	35	155,785
	Gray iron castings	497	10,376,819	496	9,127,504
	For sale	476	8,533,611	470	7,232,697
	For own use	84	1,843,208	83	1,894,807
33216 00	Molds and stools for heavy steel ingots	11	239,251	11	292,080
	Gray iron pressure pipe fittings ² :				
	Under 14 inches (inside diameter)	30	50,699	28	51,615
33217 44	14 inches and over (inside diameter)	12	7,460	12	7,668
33217 45	Gray iron soil pipe	6	222,314	6	218,275
33218 00	Gray iron soil pipe fittings ²	10	58,702	10	60,766
33218 04	Automotive uses	74	1,276,883	71	1,083,000
33219 39	Construction and utility castings	95	494,747	90	444,765
33219 41	Other gray iron castings, including white iron castings:				
33219 97	For sale	421	6,249,899	416	5,128,010
	For own use	71	420,832	68	383,650
	Malleable iron castings	27	299,280	29	292,078
	For sale	26	143,054	25	142,140
	For own use	6	156,226	6	149,938
33221 00	Standard malleable	22	213,023	21	184,868
33222 00	Pearlitic malleable	15	86,257	15	107,210
	Steel castings (except investment)	232	1,785,400	228	1,461,115
	For sale	215	1,672,438	212	1,363,991
	For own use	43	112,962	42	97,124
	Carbon steel	98	861,873	96	730,284
	Railroad specialties	31	632,532	29	517,945
33252 02	Side frames, bolsters, couplers, yokes, draft gear, snubbers (self-contained unit type), hopper doors and frames, and break beams	15	248,655	14	167,059
33252 29	Other carbon steel railway and transit rolling stock castings	22	383,877	21	350,886
33252 39	Other carbon steel castings, including rolls for rolling mills:				
	For sale	124	219,961	123	203,705
	For own use	20	9,380	20	8,634
	Alloy (except high alloy) steel castings	200	763,700	225	562,236
33255 51	Railway specialties	28	42,634	26	38,898
33255 57	Other alloy steel castings, including rolls for rolling mills	93	721,066	92	523,338
33254 00	High alloy steel castings:				
	For sale	137	151,499	134	162,372
	For own use	16	8,328	15	6,223
	Steel investment castings ³	126	95,273	124	82,634
	For sale ³	118	89,487	116	78,924
	For own use ³	13	5,787	13	3,710
33240 63	Carbon, including low alloy ³	98	31,837	97	25,728
33240 68	Alloy, including stainless ³	7	63,437	7	56,905

¹Product codes 33211 35 and 33211 39 are combined with product code 33211 33 to avoid disclosing figures for individual companies.²Does not include machined, threaded, or assembled fittings.³Shipments are in thousands of pounds.

NA Not available.

Table 4. **Manufacturers' Shipments, Exports, and Imports of Iron and Steel Castings: 1994**

[Quantity in short tons]

Product code	Product description ¹	Manufacturers' shipments	Exports of domestic merchandise ^{1 2}	Imports for consumption ^{1 3}
33211 32, 33, 35	Ductile iron pressure pipe	1,680,786	18,908	4,488
33211 36, 37, 39	Ductile iron fittings.....	122,997	1,720	-
33216 00	Molds for heavy steel ingot	239,251	7,704	18,713
33217 44, 45	Gray iron pressure pipe fittings.....	58,159	6,409	21,353
33218 00	Gray iron soil pipe.....	222,314	30,471	-
33218 04	Gray iron soil pipe fittings	58,702	73	4,799
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.....	12,713,080	88,164	180,296

¹For 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.

²Source: Bureau of the Census report FT446, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

- Represents zero. n.e.c. Not elsewhere classified.

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.

6.2 STEEL MILL PRODUCTS

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 1994 totaled 97.2 million **metric** tons, a 6-percent increase from the 91.4 million **metric** tons shipped in 1993.

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: 1989 to 1994

[Value in thousands of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989
	Total.....	62,327,425	55,785,677	52,455,326	50,662,849	56,309,703	57,817,691
33122	Steel ingot and semifinished shapes.....	4,009,525	4,009,430	3,415,196	3,631,923	3,809,753	4,210,738
33123	Hot rolled sheet and strip, including tin mill products ¹	21,050,473	18,309,957	16,975,734	16,936,408	18,774,861	19,896,024
33124	Hot rolled bars and shapes, plates, structural shapes, and piling.....	11,807,326	10,167,332	10,240,582	9,407,166	11,152,996	10,672,076
33155	Steel wire.....	2,076,642	1,994,117	1,890,995	1,855,641	1,955,873	1,937,630
3315-	Other wire products.....	2,008,855	1,958,214	1,774,025	1,666,042	1,523,532	1,626,444
33170	Steel pipe and tube.....	7,735,256	6,864,754	6,578,797	6,480,766	7,067,239	6,637,784
33167	Cold rolled steel sheet and strip.....	11,260,031	10,193,244	9,503,015	8,763,633	9,820,759	10,551,788
33168	Cold finished steel bars and bar shapes.....	2,055,811	1,880,106	1,700,129	1,586,208	1,868,804	1,919,048
3312C	Other steel mill products (except wire products).....	323,506	408,523	376,853	335,062	335,886	366,159

¹Galvanized, metallic coated, and electrical sheet and strip are included in product code 33123, "Hot rolled sheet and strip."[†]Revised by 5 percent or more from previously published figures.

Table 6. Production of Raw Steel: 1992 to 1994

[Thousands of metric tons]

Product description	1994	1993	1992
Total.....	90,054	87,960	84,881
By grade of steel:			
Carbon.....	79,422	76,926	74,867
Alloy.....	8,796	9,291	8,164
Stainless.....	1,836	1,743	1,849
By type of furnace:			
Electric.....	33,022	32,400	31,064
Basic oxygen, open hearth, and other types of furnaces.....	57,032	55,560	53,816

Table 7. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1994

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Number of companies	Receipts ^{2 3} (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments ⁴ (quantity)
					Quantity	Value f.o.b. plant	
	Steel	(NA)	24,409,901	14,595,168	107,034,929	62,327,425	97,220,196
33122 11	Carbon steel	307	21,905,563	13,939,735	96,182,667	50,719,333	88,216,839
	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	2,156,358	4,894,740	2,011,051	694,288	4,749,433
33122 19	Wire rods	23	2,563,156	1,466,425	4,415,461	1,768,673	3,318,730
33122 20	Slabs	9	1,160,217	1,118,207	752,274	199,365	710,264
33124 13	Finished products: Plates - cut lengths	17	(D)	(D)	4,301,241	2,025,938	4,306,727
33124 14	Plates in coils	7	(D)	(D)	451,133	181,489	458,348
33123 11	Sheet: Hot rolled, including hot rolled bands	27	11,010,228	3,390,218	21,049,461	8,122,618	13,429,451
33167 11	Cold rolled	26	1,318,763	528,119	13,827,923	6,975,455	13,037,279
33123 13	Sheet and strip: Galvanized: Hot dipped	17	152,797	11,463	8,189,310	5,259,259	8,047,976
33123 15	Electrolytic	15	18,477	3,106	2,152,777	1,550,267	2,137,405
33123 17	Electrical	4	(D)	(D)	(D)	(D)	(D)
33123 18	All other metallic coated, including long ternes ..	10	17,060	11,023	1,058,779	793,785	1,052,742
33123 19	Strip: Hot rolled	20	(D)	(D)	1,125,389	1,018,953	1,104,334
33167 15	Cold rolled	28	293,309	269,155	1,696,876	1,329,227	1,672,722
33123 24	Tin mill products: Black plate	10	(D)	(D)	369,203	214,290	361,308
33123 26	Electrolytic and hot dipped tinplate	10	(D)	(D)	2,699,166	1,806,601	2,664,654
33123 28	Tin free steel	7	(D)	(D)	447,519	280,406	442,652
33123 29	All other tin mill products, including short ternes and foil	4	(D)	(D)	(D)	(D)	(D)
33124 15	Structural shapes (heavy): 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	4	(D)	(D)	(D)	(D)	(D)
33124 22	Bars: Hot rolled bars (except concrete reinforcing)	37	871,039	117,567	6,328,488	2,818,546	5,575,016
33124 24	Light structurals (under 3 inches)	11	(D)	(D)	1,234,383	505,046	1,232,469
33124 26	Concrete reinforcing bars	20	(D)	(D)	4,428,376	1,472,786	4,420,335
33168 11	Cold finished bars	37	(D)	(D)	1,366,618	1,145,454	1,222,893
3312C —	Rails, wheels, and track accessories ⁵	13	119,878	124,394	476,113	323,506	480,629
33170 14	Pipe and tubes: ⁶ Line pipe: 16 inches od and under	21	(D)	(D)	895,887	525,381	897,079
33170 15	Over 16 inches od	8	-	-	502,390	334,869	502,390
33170 19	Oil country goods	13	(D)	(D)	671,708	405,213	680,150
33170 21	Pressure tubing: Seamless	8	(D)	(D)	86,385	87,350	77,332
33170 22	Welded	16	(D)	(D)	272,881	315,645	273,608
33170 23	Mechanical tubing: Seamless	14	(D)	(D)	94,349	115,646	92,606
33170 24	Welded	60	98,152	10,479	2,120,749	2,124,085	2,033,076
33170 27	Structurals	27	(D)	(D)	1,237,904	786,912	1,237,537
33170 29	Miscellaneous, including standard pipe	32	3,929	4,112	1,410,624	1,062,963	1,410,807
33155 01	Wire: Plain wire: Flat wire	9	(D)	(D)	36,191	37,111	33,434
33155 02	Round wire: Thermally treated: 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	22	87,569	56,914	183,767	151,458	153,112
33155 04	Other round wire: Under 1.5 mm in diameter	13	(D)	(D)	189,421	230,919	210,816
33155 05	1.5 mm or above in diameter	38	195,613	304,240	1,161,092	647,837	1,269,719
33155 06	Other shape wire	9	(D)	(D)	266,866	132,378	266,492

See footnotes at end of table.

Table 7. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1994—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Number of companies	Receipts ^{2 3} (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments ⁴ (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	13	(D)	(D)	51,956	43,654	49,458
33155 14	1.5 mm or above in diameter	21	93,966	14,351	304,549	209,041	224,934
33155 15	Other shape wire, including flat	9	(D)	(D)	85,791	62,845	64,797
	Other coated wire:						
33155 17	Flat wire	3	(D)	(D)	(D)	(D)	(D)
33155 18	Round wire	17	(D)	(D)	58,210	67,501	40,109
33155 21	Other shape wire	6	-	-	54,177	54,932	54,177
	Wire products: ⁶						
33152 21	Nails and staples	23	(D)	(D)	472,389	646,470	470,993
33159 51	Barbed and twisted wire	6	(D)	(D)	91,178	75,381	91,165
33156 21	Wire fence, woven and welded	12	(D)	(D)	412,115	285,755	415,791
33159 55	Bale ties	7	-	-	35,670	29,076	35,670
33151 13	Wire rope and cable	13	(D)	(D)	172,224	345,794	172,224
	Wire strand:						
33151 33	For prestressed concrete	8	(D)	(D)	210,818	137,272	206,331
33151 35	Other	16	(D)	(D)	320,049	395,373	310,253
33157 71	Woven wire netting	11	(D)	(D)	100,469	93,734	99,490
	Alloy steel	88	1,433,702	533,237	8,548,473	6,154,256	7,648,008
33122 31	Ingots	10	(D)	(D)	282,758	153,723	377,603
	Semifinished products:						
33122 37	Blooms, billets, sheet bars, rounds, and skelp ⁷	20	888,984	215,482	1,290,698	675,368	617,197
33122 39	Wire rods	4	(7)	(7)	(7)	(7)	(7)
33122 41	Slabs	2	(7)	(7)	(7)	(7)	(7)
	Finished products:						
33124 33	Plates - cut lengths ⁸	10	16,916	14,582	781,876	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	10	(D)	(D)	1,020,450	478,860	1,000,036
33167 31	Cold rolled	12	(D)	(D)	253,110	176,612	251,852
	Sheet and strip:						
	Galvanized:						
33123 35	Hot dipped	4	-	-	173,278	124,894	173,278
33123 37	All other metallic coated, including electrolytic	6	-	-	185,845	205,927	185,845
	Strip:						
33123 39	Hot rolled	6	(D)	(D)	(D)	(D)	(D)
33167 35	Cold finished	14	(D)	(D)	259,934	385,512	253,385
	Bars:						
33124 41	Hot rolled, including structural shapes under 3 inches	20	(D)	(D)	2,299,164	1,367,334	2,234,434
33168 31	Cold finished	23	(D)	(D)	504,626	399,602	473,001
	Tool steel:						
33124 48	High speed	6	(D)	(D)	(D)	(D)	(D)
33124 49	Other than high speed	6	(D)	(D)	44,865	155,523	44,334
	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)	(D)	(D)	(D)
33170 45	Mechanical tubing	12	(D)	(D)	507,699	673,175	369,917
33170 48	Miscellaneous, including standard and structural	6	(D)	(D)	(D)	(D)	(D)
33155 37	Wire (plain and coated)	15	(D)	(D)	51,222	94,588	47,562

See footnotes at end of table.

Table 7. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1994—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Number of companies	Receipts ^{2 3} (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments ⁴ (quantity)
					Quantity	Value f.o.b. plant	
	Steel—Con.						
33122 51	Stainless steel.....	86	1,070,636	122,195	2,303,789	5,453,836	1,355,349
	Ingots	7	(D)	(D)	18,692	19,763	11,515
33122 56	Semifinished products:						
	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	13	(D)	(D)	247,472	338,011	(D)
33122 59	Wire rods	4	(D)	(D)	28,687	77,609	15,213
33124 53	Finished products:						
	Plates and structurals	6	(D)	(D)	150,505	395,392	148,473
	Sheet and strip:						
33123 57	Hot rolled	6	566,847	30,702	(D)	(D)	(D)
33167 57	Cold rolled	17	138,279	51,887	993,873	2,393,225	907,480
	Bars:						
33124 61	Hot rolled	8	(D)	(D)	60,611	205,538	40,387
33168 51	Cold finished	16	(D)	(D)	136,683	510,755	110,899
	Pipe and tubes:						
	Pressure tubing:						
33170 61	Seamless	7	(D)	(D)	6,968	62,249	5,872
33170 62	Welded	13	(D)	(D)	53,469	239,925	48,682
	Mechanical tubing:						
33170 63	Seamless	4	(D)	(D)	(D)	(D)	(D)
33170 64	Welded	18	(D)	(D)	63,436	292,137	63,342
33170 65	Other pipe and tube	7	(D)	(D)	6,444	36,223	6,493
	Wire:						
	Round wire:						
33155 52	Under 0.75 mm in diameter	12	(D)	(D)	6,728	55,140	5,848
33155 53	0.75 mm to under 1.5 mm in diameter	9	214	125	5,383	31,011	5,294
33155 54	1.5 mm and above in diameter	14	1,576	978	36,777	148,668	36,179
33155 57	Other shape wire, including flat wire	9	(D)	(D)	(D)	(D)	(D)

¹Product codes in the 33155 series also include products in the 33125 series; the same applies for 33167 and 33127; 33168 and 33128; and 33170 and 33126.

²Excludes 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.

³Import receipts of steel mill products for 1994 are as follows: total, 6,654,607 metric tons; carbon, 6,313,369 metric tons; alloy, 208,921 metric tons; stainless 132,317 metric tons.

⁴Net shipments are derived by subtracting domestic receipts from total quantity shipments, plus steel consumed in producing plants.

⁵Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

⁶Represents 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.

⁷The data for product codes 33122 37, 33122 39, and 33122 41 are combined to avoid disclosing figures for individual companies.

⁸The data for product codes 33124 33, 33124 36, and 33124 38 are combined to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures 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.

Note: Quantity data converted to metric tons; therefore, the detail may not add to total due to rounding.

Table 8. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1993

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Number of companies	Receipts ^{2 3} (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments ⁴ (quantity)
					Quantity	Value f.o.b. plant	
	Steel	(NA)	24,445,395	14,167,828	101,649,381	55,785,677	91,371,814
33122 11	Carbon steel	310	22,176,796	13,601,386	91,843,744	45,382,523	83,268,334
	Ingots	10	(D)	(D)	239,733	70,443	303,544
33122 13	Semifinished products:						
	Blooms, billets, sheet bars, tin mill bars, tube rounds, and skelp	38	1,905,947	3,941,342	2,227,058	672,634	4,262,453
33122 19	Wire rods	23	2,455,310	1,445,493	4,503,167	1,654,708	3,493,350
33122 20	Slabs	12	2,634,514	1,175,866	2,291,411	541,197	832,763
33124 13	Finished products:						
	Plates - cut lengths	18	(D)	(D)	4,117,620	1,873,750	4,126,351
33124 14	Plates in coils	7	(D)	(D)	273,129	117,745	281,013
33123 11	Sheet:						
	Hot rolled, including hot rolled bands	27	9,935,042	2,951,474	20,469,742	6,914,978	13,486,174
33167 11	Cold rolled	24	1,579,955	1,620,422	12,002,894	6,308,550	12,043,361
33123 13	Sheet and strip:						
	Galvanized:						
	Hot dipped	17	(D)	(D)	7,380,646	4,405,542	7,374,607
33123 15	Electrolytic	13	(D)	(D)	1,815,106	1,287,523	1,802,907
33123 17	Electrical	4	(D)	(D)	(D)	(D)	(D)
33123 18	All other metallic coated, including long ternes ..	11	(D)	(D)	1,008,212	722,796	999,299
33123 19	Strip:						
	Hot rolled	17	(D)	(D)	1,008,200	728,871	944,225
33167 15	Cold rolled	28	250,888	210,230	1,606,828	1,197,481	1,566,170
33123 24	Tin mill products:						
	Black plate	12	(D)	(D)	368,125	215,746	361,466
33123 26	Electrolytic and hot dipped tin plate	10	(D)	(D)	2,384,772	1,604,829	2,366,181
33123 28	Tin free steel	7	(D)	(D)	529,963	337,902	529,963
33123 29	All other tin mill products, including short ternes and foil	2	-	-	(D)	(D)	(D)
33124 15	Structural shapes (heavy):						
	Wide flange	6	(D)	(D)	2,409,503	949,561	2,409,589
33124 17	Standard heavy shapes	8	(D)	(D)	1,842,375	731,337	1,842,299
33124 18	Sheet piling and bearing piles	4	(D)	(D)	(D)	(D)	(D)
33124 22	Bars:						
	Hot rolled bars (except concrete reinforcing)	38	834,496	172,273	5,710,843	2,507,677	5,048,621
33124 24	Light structurals (under 3 inches)	12	(D)	(D)	1,305,607	469,474	1,304,442
33124 26	Concrete reinforcing bars	21	(D)	(D)	4,196,307	1,218,946	4,194,113
33168 11	Cold finished bars	36	(D)	(D)	1,343,886	1,100,456	1,199,728
3312C —	Rails, wheels, and track accessories ⁵	13	122,636	115,032	667,871	408,523	660,267
33170 14	Pipe and tubes:						
	Line pipe:						
	16 inches od and under	20	(D)	(D)	809,373	457,347	794,439
33170 15	Over 16 inches od	9	-	-	307,217	206,426	307,217
33170 19	Oil country goods	15	(D)	(D)	810,791	472,475	733,054
33170 21	Pressure tubing:						
	Seamless	7	(D)	(D)	58,055	78,529	47,548
33170 22	Welded	15	(D)	(D)	296,021	321,576	296,913
33170 23	Mechanical tubing:						
	Seamless	15	(D)	(D)	99,044	107,012	97,849
33170 24	Welded	64	88,370	13,683	1,867,531	1,776,017	1,792,845
33170 27	Structurals	25	(D)	(D)	1,114,967	645,457	1,110,662
33170 29	Miscellaneous, including standard pipe	31	7,402	1,681	1,517,766	1,072,468	1,512,044
33155 01	Wire:						
	Plain wire:						
	Flat wire	9	(D)	(D)	61,999	55,531	33,602
	Round wire:						
	Thermally treated:						
	Under 1.5 mm in diameter	16	49,874	14,549	41,549	58,200	6,224
33155 03	1.5 mm or above in diameter	25	73,529	51,436	174,309	142,916	152,216
33155 04	Other round wire:						
	Under 1.5 mm in diameter	14	(D)	(D)	189,840	205,864	215,696
33155 05	1.5 mm or above in diameter	39	237,265	309,811	1,095,010	586,512	1,167,555
33155 06	Other shape wire	9	(D)	(D)	253,135	114,318	253,135

See footnotes at end of table.

Table 8. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1993—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Number of companies	Receipts ^{2 3} (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments ⁴ (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	13	20,652	18,102	'63,596	'54,833	'61,046
33155 14	1.5 mm or above in diameter	25	96,575	19,332	'241,206	'174,152	'163,963
33155 15	Other shape wire, including flat	9	(D)	(D)	'77,228	'54,100	'62,032
	Other coated wire:						
33155 17	Flat wire	5	(D)	(D)	(D)	(D)	(D)
33155 18	Round wire	16	(D)	(D)	53,635	63,180	'37,496
33155 21	Other shape wire	6	(D)	(D)	48,279	49,236	48,218
	Wire products: ⁶						
33152 21	Nails and staples	26	(D)	(D)	'510,097	620,876	'509,441
33159 51	Barbed and twisted wire	9	(D)	(D)	'201,457	'157,032	'201,450
33156 21	Wire fence, woven and welded	13	(D)	(D)	'442,615	'299,706	'441,439
33159 55	Bale ties	7	-	-	35,680	25,026	35,680
33151 13	Wire rope and cable	14	(D)	(D)	'165,846	'323,061	'165,583
	Wire strand:						
33151 33	For prestressed concrete	8	(D)	(D)	'214,744	'142,575	'211,580
33151 35	Other	15	(D)	(D)	'232,055	274,995	'222,899
33157 71	Woven wire netting	13	(D)	(D)	'116,737	114,943	'115,069
	Alloy steel	87	'1,317,177	'453,475	7,511,988	5,197,618	6,648,286
33122 31	Ingots	11	(D)	(D)	209,086	129,581	287,573
	Semifinished products:						
33122 37	Blooms, billets, sheet bars, rounds, and skelp ⁷ ...	17	843,069	174,663	1,190,902	604,645	522,496
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 ⁸	11	14,298	12,628	447,703	329,131	446,032
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	10	(D)	(D)	1,151,676	522,191	1,143,511
33167 31	Cold rolled	12	(D)	(D)	218,303	145,800	'217,368
	Sheet and strip:						
	Galvanized:						
33123 35	Hot dipped	4	-	-	155,154	105,993	155,154
33123 37	All other metallic coated, including electrolytic ..	6	(D)	(D)	(D)	(D)	(D)
	Strip:						
33123 39	Hot rolled	5	(D)	(D)	(D)	(D)	(D)
33167 35	Cold finished	13	(D)	(D)	255,581	337,528	250,447
	Bars:						
33124 41	Hot rolled, including structural shapes under 3 inches	20	(D)	(D)	2,010,755	1,074,722	'1,947,095
33168 31	Cold finished	24	(D)	(D)	446,442	342,901	'433,978
	Tool steel:						
33124 48	High speed	7	(D)	(D)	(D)	(D)	(D)
33124 49	Other than high speed	6	(D)	(D)	38,055	131,869	37,547
	Pipe and tubes:						
33170 32	Oil country goods and line pipe	8	(D)	(D)	593,275	430,570	557,205
33170 43	Pressure tubing	8	(D)	(D)	(D)	(D)	(D)
33170 45	Mechanical tubing	13	(D)	(D)	425,701	551,729	304,465
33170 48	Miscellaneous, including standard and structural	5	(D)	(D)	(D)	(D)	(D)
33155 37	Wire (plain and coated)	14	4,845	-	'43,458	'81,168	'38,612

See footnotes at end of table.

Table 8. Receipts, Consumption, Shipments, and Net Shipments of Steel Mill Products: 1993—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Number of companies	Receipts ^{2 3} (quantity)	Steel consumed in producing plants (quantity)	Total shipments		Net shipments ⁴ (quantity)
					Quantity	Value f.o.b. plant	
	Steel—Con.						
33122 51	Stainless steel	82	951,421	'112,967	2,293,648	5,205,536	1,455,194
	Ingots	8	(D)	(D)	'13,232	'26,395	'10,296
33122 56	Semifinished products: Blooms, billets, slabs, sheet bars, tube rounds, and skelp	12	(D)	(D)	182,435	252,905	(D)
33122 59	Wire rods	4	(D)	(D)	'19,808	'56,922	'13,230
33124 53	Finished products: Plates and structurals.	7	(D)	(D)	141,489	359,792	139,257
33123 57	Sheet and strip: Hot rolled	7	475,531	23,552	(D)	(D)	(D)
33167 57	Cold rolled	16	126,076	'37,554	955,266	2,203,885	866,743
33124 61	Bars: Hot rolled	9	(D)	(D)	'66,645	'182,118	'47,570
33168 51	Cold finished	16	(D)	(D)	'117,948	'436,749	'102,068
33170 61	Pipe and tubes: Pressure tubing: Seamless	6	(D)	(D)	6,567	65,865	5,481
33170 62	Welded	12	(D)	(D)	50,790	239,762	45,983
33170 63	Mechanical tubing: Seamless	5	(D)	(D)	'1,371	'33,271	'422
33170 64	Welded	19	(D)	(D)	54,509	257,545	54,580
33170 65	Other pipe and tube	6	-	-	'5,857	'30,413	'5,857
33155 52	Wire: Round wire: Under 0.75 mm in diameter	11	(D)	(D)	5,322	43,695	4,668
33155 53	0.75 mm to under 1.5 mm in diameter	8	(D)	(D)	4,786	28,121	4,727
33155 54	1.5 mm and above in diameter	14	'1,134	'609	32,105	139,324	31,580
33155 57	Other shape wire, including flat wire	10	(D)	(D)	(D)	(D)	(D)

¹Product codes in the 33155 series also include products in the 33125 series; the same applies for 33167 and 33127; 33168 and 33128; and 33170 and 33126.

²Excludes 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.

³Import receipts of steel mill products for 1993 are as follows: total, 4,143,316 metric tons; carbon, 3,892,766 metric tons; alloy, 152,318 metric tons; stainless 98,232 metric tons.

⁴Net shipments are derived from subtracting domestic receipts from total quantity shipments, plus steel consumed in producing plants.

⁵Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

⁶Represents 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.

⁷The data for product codes 33122 37, 33122 39, and 33122 41 are combined to avoid disclosing figures for individual companies.

⁸The data for product codes 33124 33, 33124 36, and 33124 38 are combined to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures 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 figures.

Note: Quantity data converted to metric tons; therefore, the detail may not add to total due to rounding.

Table 9. Mini-Mill Shipments of Selected Steel Mill Products: 1994 and 1993

[Quantity in metric tons]

Product code ¹	Product description	1994				1993			
		Number of mini-mill companies	Industry (total)	Mini-mills (total)	Percent of mini-mills (total)	Number of mini-mill companies	Industry (total)	Mini-mills (total)	Percent of mini-mills (total)
33122 11	Carbon steel ²	25	40,810,012	15,193,629	37.2	27	41,104,836	14,707,365	35.8
	Ingots	2	273,318	(D)	(D)	3	239,733	(D)	(D)
33122 13, 20	Semifinished products: Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp ²	18	2,763,325	1,029,178	37.2	18	4,518,469	1,291,714	28.6
33122 19	Wire rods	5	4,415,461	1,869,616	42.3	5	4,503,167	1,826,577	40.6
33124 13, 14	Finished products: Plates, all lengths	3	4,752,374	(D)	(D)	4	4,390,749	(D)	(D)
33123 19	Hot rolled strip	3	1,125,389	(D)	(D)	3	1,008,200	(D)	(D)
33124 15	Structural shapes (heavy): ³ Wide flange	3	2,688,716	935,722	34.8	3	2,409,503	877,621	36.4
33124 17	Standard heavy shapes	6	1,990,961	1,775,737	89.2	6	1,842,375	1,687,055	91.6
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	6,328,488	3,633,820	57.4	16	5,710,843	3,070,266	53.8
33124 24	Light structurals (under 3 inches)	6	1,234,383	841,529	68.2	7	1,305,607	946,124	72.5
33124 26	Concrete reinforcing bars	13	4,428,376	3,327,145	75.1	13	4,196,307	3,158,177	75.3
33168 11	Cold finished bars	1	1,366,618	(D)	(D)	1	1,343,886	(D)	(D)
3312C —	Rails, wheels, and track accessories ³	2	476,113	(D)	(D)	2	667,871	(D)	(D)
33170 14	Pipe and tubes: Line pipe, 16 inches od and under	2	895,887	(D)	(D)	2	809,373	(D)	(D)
33170 19	Oil country goods	2	671,708	(D)	(D)	2	810,791	(D)	(D)
33170 23	Mechanical tubing, seamless	1	94,349	(D)	(D)	1	99,044	(D)	(D)
33170 27	Structurals	2	1,237,904	(D)	(D)	2	1,114,967	(D)	(D)
33170 29	Miscellaneous, including standard pipe	2	1,410,624	(D)	(D)	2	1,517,766	(D)	(D)
33155 00	Wire ⁴	3	(D)	(D)	(D)	3	(D)	186,722	(D)
3315- 00	Wire products ⁵	1	1,814,912	(D)	(D)	1	1,919,231	(D)	(D)

¹Product codes in the 33155 series also include products in the 33125 series; the same applies for 33167 and 33127; 33168 and 33128; and 33170 and 33126.

²The total data are for selected product codes only.

³Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

⁴Product code 33155 00 combines product codes 33155 01 through 33155 21.

⁵Product code 3315- 00 combines product codes 33152 21, 33159 51, 33156 21, 33159 55, 33151 13, 33151 33, 33151 35, and 33157 71.

D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

Note: Quantity data converted to metric tons; therefore, the detail may not add to the total due to rounding.

Table 10. Net Shipments, Exports, Imports and Apparent Consumption of Steel Mill Products: 1994

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Manufacturers' net shipments ²		Exports of domestic merchandise ^{1 4}		Imports for consumption ^{1 5}		Apparent consumption ^{2 7}	
		Quantity ³	Value f.o.b. plant	Quantity	Value at port	Quantity	Value c.i.f. ⁶	Quantity	Value
	Net shipments	97,220,196	62,327,425	3,527,467	3,005,843	26,674,887	12,628,044	120,367,616	71,949,626
	Carbon steel	88,216,839	50,719,333	2,906,108	2,131,615	24,342,526	10,407,294	109,653,257	58,995,012
33122 11	Ingots	381,365	82,725	21,598	15,594	114,776	29,782	474,543	96,913
33122 13	Blooms, billets, sheet bars, tin mill bars, tube rounds, and skelp ⁸	5,459,697	893,653	72,813	28,401	6,777,059	1,799,818	12,163,944	2,665,070
33122 20	Slabs	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)
33122 19	Wire rods	3,318,730	1,768,673	9,757	4,072	1,394,692	540,184	4,703,665	2,304,785
33124 13	Plates - cut lengths ⁹	4,765,075	2,207,427	207,692	107,211	1,799,054	638,709	6,356,437	2,738,925
33124 14	Plates - in coils	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)
33123 11, 19	Hot rolled sheet and strip, including hot rolled bands ¹⁰	14,533,785	9,141,571	223,373	125,897	3,982,134	1,480,294	18,292,545	10,495,968
33123 19	Sheet, hot rolled	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)	(¹⁰)
33167 11	Sheet, cold rolled	13,037,279	6,975,455	367,510	206,710	2,691,984	1,227,038	15,361,753	7,995,783
33123 13	Sheet and strip, galvanized by hot dipping	8,047,976	5,259,259	129,891	101,444	1,371,787	780,869	9,289,872	5,938,684
33123 15	Sheet and strip, galvanized by electrolytic method	2,137,405	1,550,267	53,813	41,954	195,555	118,206	2,279,147	1,626,519
33123 17	Sheet and strip, galvanized by electrical method ¹¹	(D)	(D)	136,964	139,264	403,342	304,615	(D)	(D)
33123 18	Sheet and strip, all other metallic coated, including long ternes	(¹¹)	(¹¹)	(¹¹)	(¹¹)	(¹¹)	(¹¹)	(¹¹)	(¹¹)
33167 15	Strip, cold rolled	1,672,722	1,329,227	61,626	54,446	86,488	108,459	1,697,584	1,383,240
	Tin mill products:								
33123 24	Black plate	361,308	214,290	4,675	1,974	148,098	93,241	504,731	305,557
33123 26	Electrolytic and hot dipped tin plate	2,664,654	1,806,601	189,250	102,873	334,400	230,747	2,809,804	1,934,475
33123 28	Tin free steel	442,652	280,406	(NA)	(NA)	(NA)	(NA)	442,652	280,406
33123 29	All other tin mill products, including short ternes and foil	(D)	(D)	(NA)	(NA)	(NA)	(NA)	(D)	(D)
	Structural shapes (heavy):								
33124 15	Wide flange ¹²	4,681,218	1,915,708	311,685	182,839	631,630	272,121	5,001,164	2,004,990
33124 17	Standard heavy shapes	(¹²)	(¹²)	(¹²)	(¹²)	(¹²)	(¹²)	(¹²)	(¹²)
33124 18	Sheet piling and bearing piles	(D)	(D)	10,995	8,702	62,074	33,254	(D)	(D)
	Bars:								
33124 22	Hot rolled bars (except concrete reinforcing)	5,575,016	2,818,546	157,454	94,669	683,708	313,560	6,101,269	3,037,437
33124 24	Light structurals (under 3 inches)	1,232,469	505,046	72,323	41,227	103,714	40,440	1,263,861	504,259
33124 26	Concrete reinforcing bars	4,420,335	1,472,786	96,493	35,489	298,245	88,587	4,622,088	1,525,884
33168 11	Cold finished bars	1,222,893	1,145,454	60,603	55,168	161,888	123,781	1,324,178	1,214,067
33124 —	Rails, wheels, and track accessories ¹³	480,629	323,506	33,612	24,223	185,573	110,292	632,591	409,575
33170 14	Line pipe, 16 inches od and under ¹⁴	1,399,469	860,250	248,570	221,582	537,231	287,899	1,688,129	926,567
33170 15	Line pipe, over 16 inches od	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)
33170 19	Pipe and tubes, oil country goods	680,150	405,213	116,671	112,847	170,910	113,273	734,389	405,639
33170 27	Pipe and tubes, structurals	1,237,537	786,912	33,259	35,930	396,515	233,069	1,600,792	984,051
33170 21	Pressure tubing, seamless ¹⁵	3,887,429	3,705,689	167,808	212,897	860,320	562,261	4,579,941	4,055,053
33170 22	Pressure tubing, welded	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
33170 23	Mechanical tubing, seamless	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
33170 24	Mechanical tubing, welded	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
33170 29	Pipe and tubes, miscellaneous, including standard pipe	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
33155 —	Wire ¹⁶	(D)	(D)	71,119	95,997	464,867	379,512	(D)	(D)
33152 21	Wire nails and staples	470,993	646,470	16,976	29,970	319,457	272,467	773,474	888,967
33159 51	Barbed and twisted wire	91,165	75,381	2,335	3,552	13,517	9,103	102,347	80,932
33156 21	Wire fence, woven and welded ¹⁷	515,281	379,489	15,067	19,679	49,900	51,961	550,114	411,771
33157 71	Woven wire netting	(¹⁷)	(¹⁷)	(¹⁷)	(¹⁷)	(¹⁷)	(¹⁷)	(¹⁷)	(¹⁷)
33159 55	Wire bale ties	35,670	29,076	(NA)	(NA)	(NA)	(NA)	35,670	29,076
33151 13	Wire rope and cable	172,224	345,794	6,577	21,493	78,950	148,544	244,597	472,845
33151 33	Wire strand for prestressed concrete	206,331	137,272	5,599	5,511	24,658	15,208	225,391	146,969
33151 35	Wire strand (except for prestressed concrete)	310,253	395,373	(NA)	(NA)	(NA)	(NA)	310,253	395,373
	Alloy steel	7,648,008	6,154,256	565,021	711,467	2,020,343	1,545,818	9,103,330	6,988,607
33122 31	Ingots	377,603	153,723	20,805	15,635	64,114	27,356	420,912	165,444
33122 37	Blooms, billets, sheet bars, tube rounds, and skelp ¹⁸	599,241	652,023	20,025	33,501	134,766	58,477	713,982	676,999
33122 41	Slabs	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)
33124 33	Plates - cut lengths ¹⁹	2,646,567	1,885,171	127,238	142,448	828,604	539,901	3,347,934	2,282,624
33124 36	Plates - in coils	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)
33123 31, 33167 31	Sheet, hot and cold rolled	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)
33123 35	Sheet and strip, galvanized by hot dipping	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)
33123 37	Sheet and strip, all other metallic coated, including electrolytic	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)
33123 39	Strip, hot rolled	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)
33167 35	Strip, cold finished	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)	(¹⁹)

See footnotes at end of table.

Table 10. Net Shipments, Exports, Imports and Apparent Consumption of Steel Mill Products: 1994—Con.

[Quantity in metric tons. Value in thousands of dollars]

Product code ¹	Product description	Manufacturers' net shipments ²		Exports of domestic merchandise ^{1 4}		Imports for consumption ^{1 5}		Apparent consumption ^{2 7}	
		Quantity ³	Value f.o.b. plant	Quantity	Value at port	Quantity	Value c.i.f. ⁶	Quantity	Value
	Net shipments—Con.								
	Alloy steel—Con.								
33122 39	Wire rods ²⁰	2,760,623	1,821,297	165,334	143,082	576,569	378,514	3,171,859	2,056,729
33124 38	Structural shapes (3 inches and under)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)
	Bars:								
33124 41	Hot rolled bars, including structural shapes under 3 inches	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)
33168 31	Cold finished bars	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)	(²⁰)
33124 48	Tool steel, high-speed	(D)	(D)	735	5,983	1,791	11,041	(D)	(D)
33124 49	Tool steel (except high speed)	44,334	155,523	3,771	12,294	27,398	43,695	67,961	186,924
33170 —	Pipe and tubes ²¹	1,283,389	1,977,192	210,236	323,089	334,498	416,574	1,407,651	2,070,677
33155 37	Wire, plain and coated	47,562	94,588	16,877	35,435	52,603	70,260	83,287	129,413
	Stainless steel	1,355,349	5,453,836	56,338	162,761	312,018	674,932	1,611,029	5,966,007
33122 51	Ingots	11,515	19,763	2,882	16,073	2,888	4,555	11,521	8,245
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	(D)	338,011	5,482	26,167	133,961	177,509	(D)	489,353
33122 59	Wire rods ²²	55,600	283,147	4,101	14,104	68,230	148,650	119,729	417,693
33124 61	Bars, hot rolled	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)	(²²)
33124 53	Plates and structurals	148,473	395,392	19,110	50,492	120,419	197,922	249,781	542,822
33123 57	Sheet and strip, hot rolled	(D)	(D)	4,097	11,479	29,934	48,820	(D)	(D)
33167 57	Sheet and strip, cold rolled	907,480	2,393,225	42,965	114,826	173,327	378,245	1,037,842	2,656,644
33168 51	Bars, cold finished	110,899	510,755	5,176	22,352	40,528	99,217	146,251	587,620
33170 —	Pipe and tubes	(²¹)	(²¹)	(²¹)	(²¹)	(²¹)	(²¹)	(²¹)	(²¹)
33155 —	Wire ²³	(D)	(D)	2,553	14,617	24,087	98,627	(D)	(D)

¹For 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.
²Excludes 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 the manufacture of fabricated products and as maintenance, repair, and operating supplies (MRO).

³Includes quantities of steel consumed in steel producing plants in the manufacture of fabricated products and maintenance, repair, and operating supplies (MRO), while excluding receipts. See table 7 for the net shipments detail.

⁴Source: Bureau of the Census report EM545, *U.S. Exports*.

⁵Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

⁶This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus U.S. import duties.

⁷Apparent consumption is derived by subtracting "Exports" from the total "Manufacturers' shipments" plus "Imports."

⁸Data for product codes 33122 13 and 33122 20 are combined.

⁹Data for product codes 33124 13 and 33124 14 are combined.

¹⁰Data for product codes 33123 11 and 33123 19 are combined.

¹¹Data for product codes 33123 17 and 33123 18 are combined.

¹²Data for product codes 33124 15 and 33124 17 are combined.

¹³Product code 3312C — combines product codes 3312C 11, 3312C 13, 3312C 15, 3312C 17, 3312C 19, 3312C 21, and 3312C 23.

¹⁴Data for product codes 33170 14 and 33170 15 are combined.

¹⁵Data for product codes 33170 21, 33170 22, 33170 23, 33170 24, and 33170 29 are combined.

¹⁶Product code 33155 — combines data for "Carbon and steel wire." See table 7 for product code detail.

¹⁷Data for product codes 33156 21 and 33157 71 are combined.

¹⁸Data for product codes 33122 37 and 33122 41 are combined.

¹⁹Data for product codes 33124 33, 33124 36, 33123 31, 33167 31, 33123 35, 33123 37, 33123 39, and 33167 35 are combined.

²⁰Data for product codes 33122 39, 33124 38, 33124 41, and 33168 31 are combined.

²¹Product code 33170 — combines data for "Alloy steel pipe and tube" with data for "Stainless steel pipe and tube."

²²Data for product codes 33122 59 and 33124 61 are combined.

²³Product code 33155 — combines data for "Stainless steel wire." See table 7 for product code detail.

D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Note: Quantity data converted to metric tons; therefore, the detail may not add to total due to 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.

6.3 ALUMINUM INGOT AND MILL PRODUCTS

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 21,666 million pounds in 1994, a 32-percent increase from the 16,294 million pounds in 1993. The aluminum ingot net shipments for 1994 totaled 6,595 million pounds, an 84-percent increase from the corresponding 1993 net shipments of 3,568 million pounds. Net shipments of aluminum mill products in 1994 amounted to 15,072 million pounds, which was an 18-percent increase from the 12,726 million pounds reported in 1993.

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 remelt scrap ingot (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 inches 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 inches 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: 1990 to 1994

[Thousands of pounds]

Month and year	Net shipments of aluminum			Month-end aluminum inventories ¹
	Ingot and mill products	Mill products	Ingot	
1994				
Total	21,666,397	15,071,827	6,594,570	(X)
January	1,832,549	1,241,608	590,941	4,646,016
February	1,892,508	1,272,912	619,596	4,758,697
March	1,785,501	1,321,038	464,463	4,778,273
April	1,779,236	1,326,584	452,652	4,784,587
May	1,960,303	1,365,633	594,670	4,790,941
June	1,708,141	1,241,796	466,345	4,725,133
July	1,792,135	1,323,556	468,579	4,659,792
August	1,917,939	1,287,808	630,131	4,637,298
September	1,708,251	1,228,690	479,561	4,605,843
October	2,038,653	1,307,466	731,187	4,540,441
November	1,639,979	1,089,308	550,671	4,551,649
December	1,611,202	1,065,428	545,774	4,572,784
1993				
Total	16,294,499	12,726,636	3,567,863	(X)
January	1,251,475	965,423	286,052	4,092,826
February	1,290,806	968,129	322,677	4,124,182
March	1,485,560	1,111,398	374,162	4,179,323
April	1,408,133	1,091,336	316,797	4,249,617
May	1,377,145	1,061,759	315,386	4,273,746
June	1,439,653	1,100,993	338,660	4,326,866
July	1,295,597	1,063,321	232,276	4,397,900
August	1,409,709	1,112,896	296,813	4,416,927
September	1,381,995	1,096,261	285,734	4,387,436
October	1,305,853	1,058,484	247,369	4,360,460
November	1,364,352	1,034,666	329,686	4,294,075
December	1,284,221	1,061,970	222,251	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
1990, total	14,761,243	11,963,710	2,797,533	4,012,892

¹Use December inventory figures for annual total inventory.

X Not applicable.

Table 12. Shipments and Receipts of Aluminum Ingot and Mill Products, by Type of Producer: 1994 —Con.

[Thousands of pounds]

Product description	June				July				August			
	Gross shipments	Domestic receipts ¹	Net shipments ²	Import receipts	Gross shipments	Domestic receipts ¹	Net shipments ²	Import receipts	Gross shipments	Domestic receipts ¹	Net shipments ²	Import receipts
Aluminum ingot and mill products	2,549,244	757,109	1,792,135	113,573	2,404,805	696,664	1,708,141	112,455	2,693,498	733,195	1,960,303	123,380
Integrated	1,202,336	188,265	1,014,071	(D)	1,160,838	192,367	968,471	(D)	1,283,839	219,220	1,064,619	(D)
Smelters	192,775	29,803	162,972	-	158,124	26,979	131,145	-	210,436	27,519	182,917	-
All other	1,154,133	539,041	615,092	(D)	1,085,843	477,318	608,525	(D)	1,199,223	486,456	712,767	(D)
Imports (ingot only)	401,789	-	401,789	-	449,199	-	449,199	-	475,228	-	475,228	-
Nonintegrated	752,344	539,041	213,303	(D)	636,644	477,318	159,326	(D)	723,995	486,456	237,539	(D)
Mill products	1,428,893	105,337	1,323,556	33,676	1,341,081	99,285	1,241,796	29,389	1,468,882	103,249	1,365,633	26,304
By type of producer:												
Integrated	847,357	20,151	827,206	(D)	852,957	19,454	833,503	(D)	917,693	21,421	896,272	(D)
Nonintegrated	581,536	85,186	496,350	(D)	488,124	79,831	408,293	(D)	551,189	81,828	469,361	(D)
Ingot	1,120,351	651,772	468,579	79,897	1,063,724	597,379	466,345	83,066	1,224,616	629,946	594,670	97,076
By type of producer:												
Integrated	354,979	168,114	186,865	(D)	307,881	172,913	134,968	(D)	366,146	197,799	168,347	(D)
Smelters ³	192,775	29,803	162,972	-	158,124	26,979	131,145	-	210,436	27,519	182,917	-
All other	572,597	453,855	118,742	(D)	597,719	397,487	200,232	(D)	648,034	404,628	243,406	(D)
Imports ⁴	401,789	-	401,789	-	449,199	-	449,199	-	475,228	-	475,228	-
Nonintegrated	170,808	453,855	-283,047	(D)	148,520	397,487	-248,967	(D)	172,806	404,628	-231,822	(D)
By type of ingot:												
Extrusion ingot	253,491	220,226	33,265	9,089	248,739	199,984	48,755	9,591	247,495	199,439	48,056	8,224
Integrated	(D)	(D)	97,279	(D)	(D)	(D)	107,767	(D)	(D)	(D)	104,530	(D)
Smelters ³	(D)	(D)	21,431	-	(D)	(D)	20,977	-	(D)	(D)	25,759	-
All other	(D)	(D)	-85,445	(D)	(D)	(D)	-79,989	(D)	(D)	(D)	-82,233	(D)
Imports ⁴	43,563	-	43,563	-	35,152	-	35,152	-	41,513	-	41,513	-
Nonintegrated	(D)	(D)	-129,008	(D)	(D)	(D)	-115,141	(D)	(D)	(D)	-123,746	(D)
Other ingot (primary and secondary)	866,860	431,546	435,314	70,808	814,985	397,395	417,590	73,475	977,121	430,507	546,614	88,852
Integrated	(D)	(D)	89,586	(D)	(D)	(D)	27,201	(D)	(D)	(D)	63,817	(D)
Smelters ³	(D)	(D)	141,541	-	(D)	(D)	110,168	-	(D)	(D)	157,158	-
All other	(D)	(D)	204,187	(D)	(D)	(D)	280,221	(D)	(D)	(D)	325,639	(D)
Imports ⁴	358,226	-	358,226	-	414,047	-	414,047	-	433,715	-	433,715	-
Nonintegrated	(D)	(D)	-154,039	(D)	(D)	(D)	-133,826	(D)	(D)	(D)	-108,076	(D)
	September				October							
	Gross shipments	Domestic receipts ¹	Net shipments ²	Import receipts	Gross shipments	Domestic receipts ¹	Net shipments ²	Imports receipts				
Aluminum ingot and mill products	2,535,910	756,674	1,779,236	137,281	2,533,547	748,046	1,785,501	119,744				
Integrated	1,342,575	208,396	1,134,179	(D)	1,283,806	196,531	1,087,275	(D)				
Smelters	205,250	23,027	182,223	-	201,523	28,885	172,638	-				
All other	988,085	525,251	462,834	(D)	1,048,218	522,630	525,588	(D)				
Imports (ingot only)	342,237	-	342,237	-	407,866	-	407,866	-				
Nonintegrated	645,848	525,251	120,597	(D)	640,352	522,630	117,722	(D)				
Mill products	1,439,999	113,415	1,326,584	34,975	1,435,400	114,362	1,321,038	25,062				
By type of producer:												
Integrated	971,983	27,016	944,967	(D)	958,468	24,202	934,266	(D)				
Nonintegrated	468,016	86,399	381,617	(D)	476,932	90,160	386,772	(D)				
Ingot	1,095,911	643,259	452,652	102,306	1,098,147	633,684	464,463	94,682				
By type of producer:												
Integrated	370,592	181,380	189,212	(D)	325,338	172,329	153,009	(D)				
Smelters ³	205,250	23,027	182,223	-	201,523	28,885	172,638	-				
All other	520,069	438,852	81,217	(D)	571,286	432,470	138,816	(D)				
Imports ⁴	342,237	-	342,237	-	407,866	-	407,866	-				
Nonintegrated	177,832	438,852	-261,020	(D)	163,420	432,470	-269,050	(D)				
By type of ingot:												
Extrusion ingot	261,568	221,679	39,889	10,761	247,818	209,803	38,015	9,096				
Integrated	(D)	(D)	111,493	(D)	(D)	(D)	102,930	(D)				
Smelters ³	(D)	(D)	23,084	-	(D)	(D)	25,632	-				
All other	(D)	(D)	-94,688	(D)	(D)	(D)	-90,547	(D)				
Imports ⁴	37,780	-	37,780	-	34,325	-	34,325	-				
Nonintegrated	(D)	(D)	-132,468	(D)	(D)	(D)	-124,872	(D)				
Other ingot (primary and secondary)	834,343	421,580	412,763	91,545	850,329	423,881	426,448	85,586				
Integrated	(D)	(D)	77,719	(D)	(D)	(D)	50,079	(D)				
Smelters ³	(D)	(D)	159,139	-	(D)	(D)	147,006	-				
All other	(D)	(D)	175,905	(D)	(D)	(D)	229,363	(D)				
Imports ⁴	304,457	-	304,457	-	373,541	-	373,541	-				
Nonintegrated	(D)	(D)	-128,552	(D)	(D)	(D)	-144,178	(D)				

See footnotes at end of table.

Table 12. Shipments and Receipts of Aluminum Ingot and Mill Products, by Type of Producer: 1994—Con.

[Thousands of pounds]

Product description	November				December			
	Gross shipments	Domestic receipts ¹	Net shipments ²	Import receipts	Gross shipments	Domestic receipts ¹	Net shipments ²	Import receipts
Aluminum ingot and mill products	2,603,779	711,271	1,892,508	114,240	2,580,777	748,228	1,832,549	103,656
Integrated	1,253,326	202,818	1,050,508	(D)	1,298,381	213,264	1,085,117	(D)
Smelters	208,383	23,158	185,225	-	206,245	26,394	179,851	-
All other	1,142,070	485,295	656,775	(D)	1,076,151	508,570	567,581	(D)
Imports (ingot only)	533,069	-	533,069	-	492,728	-	492,728	-
Nonintegrated	609,001	485,295	123,706	(D)	583,423	508,570	74,853	(D)
Mill products	1,365,670	92,758	1,272,912	24,258	1,331,106	89,498	1,241,608	21,985
By type of producer:								
Integrated	927,965	24,590	903,375	(D)	925,504	13,728	911,776	(D)
Nonintegrated	437,705	68,168	369,537	(D)	405,602	75,770	329,832	(D)
Ingot	1,238,109	618,513	619,596	89,982	1,249,671	658,730	590,941	81,671
By type of producer:								
Integrated	325,361	178,228	147,133	(D)	372,877	199,536	173,341	(D)
Smelters ³	208,383	23,158	185,225	-	206,245	26,394	179,851	-
All other	704,365	417,127	287,238	(D)	670,549	432,800	237,749	(D)
Imports	533,069	-	533,069	-	492,728	-	492,728	-
Nonintegrated	171,296	417,127	-245,831	(D)	177,821	432,800	-254,979	(D)
By type of ingot:								
Extrusion ingot	251,051	204,312	46,739	11,197	232,756	212,668	20,088	9,996
Integrated	(D)	(D)	111,699	(D)	(D)	(D)	107,226	(D)
Smelters ³	(D)	(D)	24,979	-	(D)	(D)	21,480	-
All other	(D)	(D)	-89,939	(D)	(D)	(D)	-108,618	(D)
Imports ⁴	37,980	-	37,980	-	26,307	-	26,307	-
Nonintegrated	(D)	(D)	-127,919	(D)	(D)	(D)	-134,925	(D)
Other ingot (primary and secondary)	987,058	414,201	572,857	78,785	1,016,915	446,062	570,853	71,675
Integrated	(D)	(D)	35,434	(D)	(D)	(D)	66,115	(D)
Smelters ³	(D)	(D)	160,246	-	(D)	(D)	158,371	-
All other	(D)	(D)	377,177	(D)	(D)	(D)	346,367	(D)
Imports ⁴	495,089	-	495,089	-	466,421	-	466,421	-
Nonintegrated	(D)	(D)	-117,912	(D)	(D)	(D)	-120,054	(D)

¹Domestic receipts excludes scrap. The 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.

²Net shipments are derived by subtracting domestic receipts from gross shipments.

³The number of secondary smelter operators shipping ingot is 24.

⁴Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. For 1994, 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.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 13. Shipments and Receipts of Aluminum Ingot and Mill Products, by Type of Producer: 1993—Con.

[Thousands of pounds]

Product description	June			July			August		
	Gross shipments	Total receipts	Net shipments	Gross shipments	Total receipts	Net shipments	Gross shipments	Total receipts	Net shipments
Aluminum ingot and mill products . . .	2,258,481	818,828	1,439,653	2,088,577	792,980	1,295,597	2,213,982	804,273	1,409,709
Integrated	1,149,589	224,544	925,045	1,112,204	224,023	888,181	1,109,453	218,122	891,331
Smelters	170,247	58,388	111,859	140,466	57,077	83,389	162,316	59,347	102,969
All other	938,645	535,896	402,749	835,907	511,880	324,027	942,213	526,804	415,409
Imports (ingot only)	337,701	-	337,701	277,391	-	277,391	359,279	-	359,279
Nonintegrated	600,944	535,896	65,048	558,516	511,880	46,636	582,934	526,804	56,130
Mill products	1,236,696	135,703	1,100,993	1,194,118	130,797	1,063,321	1,245,603	132,707	1,112,896
By type of producer:									
Integrated	792,348	49,718	742,630	782,231	51,605	730,626	811,457	53,813	757,644
Nonintegrated	444,348	85,985	358,363	411,887	79,192	332,695	434,146	78,894	355,252
Ingot	1,021,785	683,125	338,660	894,459	662,183	232,276	968,379	671,566	296,813
By type of producer:									
Integrated	357,241	174,826	182,415	329,973	172,418	157,555	297,996	164,309	133,687
Smelters ¹	170,247	58,388	111,859	140,466	57,077	83,389	162,316	59,347	102,969
All other	494,297	449,911	44,386	424,020	432,688	-8,668	508,067	447,910	60,157
Imports ²	337,701	-	337,701	277,391	-	277,391	359,279	-	359,279
Nonintegrated	156,596	449,911	-293,315	146,629	432,688	-286,059	148,788	447,910	-299,122
By type of ingot:									
Extrusion ingot	204,646	206,049	-1,403	191,183	193,334	-2,151	209,986	207,335	2,651
Integrated	90,023	6,833	83,190	75,107	6,208	68,899	85,931	6,072	79,859
Smelters ¹	(D)	(D)	11,313	(D)	(D)	12,152	(D)	(D)	18,525
All other	(D)	(D)	-95,906	(D)	(D)	-83,202	(D)	(D)	-95,733
Imports ²	28,642	-	28,642	31,035	-	31,035	33,931	-	33,931
Nonintegrated	(D)	(D)	-124,548	(D)	(D)	-114,237	(D)	(D)	-129,664
Other ingot (primary and secondary)	817,367	477,076	340,063	703,276	468,849	234,427	758,393	464,231	294,162
Integrated	267,218	167,993	99,225	254,866	166,210	88,656	212,065	158,237	53,828
Smelters ¹	(D)	(D)	100,546	(D)	(D)	71,237	(D)	(D)	84,444
All other	(D)	(D)	140,292	(D)	(D)	74,534	(D)	(D)	155,890
Imports ²	309,059	-	309,059	246,356	-	246,356	325,348	-	325,348
Nonintegrated	(D)	(D)	-168,767	(D)	(D)	-171,822	(D)	(D)	-169,458
	September			October					
	Gross shipments	Total receipts	Net shipments	Gross shipments	Total receipts	Net shipments			
Aluminum ingot and mill products . . .	2,247,813	865,818	1,381,995	2,136,864	831,011	1,305,853			
Integrated	1,124,572	239,474	885,098	1,066,370	229,054	837,316			
Smelters	157,924	63,694	94,230	163,950	65,076	98,874			
All other	965,317	562,650	402,667	906,544	536,881	369,663			
Imports (ingot only)	387,019	-	387,019	332,204	-	332,204			
Nonintegrated	578,298	562,650	15,648	574,340	536,881	37,459			
Mill products	1,252,676	156,415	1,096,261	1,212,222	153,738	1,058,484			
By type of producer:									
Integrated	827,880	58,360	769,520	790,948	63,251	727,697			
Nonintegrated	424,796	98,055	326,741	421,274	90,487	330,787			
Ingot	995,137	709,403	285,734	924,642	677,273	247,369			
By type of producer:									
Integrated	296,692	181,114	115,578	275,422	165,803	109,619			
Smelters ¹	157,924	63,694	94,230	163,950	65,076	98,874			
All other	540,521	464,595	75,926	485,270	446,394	38,876			
Imports ²	387,019	-	387,019	332,204	-	332,204			
Nonintegrated	153,502	464,595	-311,093	153,066	446,394	-293,328			
By type of ingot:									
Extrusion ingot	224,097	218,525	5,572	202,731	202,038	693			
Integrated	91,590	6,264	85,326	77,458	7,399	70,059			
Smelters ¹	(D)	(D)	16,828	(D)	(D)	16,702			
All other	(D)	(D)	-96,582	(D)	(D)	-86,068			
Imports ²	32,250	-	32,250	30,138	-	30,138			
Nonintegrated	(D)	(D)	-128,832	(D)	(D)	-116,206			
Other ingot (primary and secondary)	771,040	490,878	280,162	721,911	475,235	246,676			
Integrated	205,102	174,850	30,252	197,964	158,404	39,560			
Smelters ¹	(D)	(D)	77,402	(D)	(D)	82,172			
All other	(D)	(D)	172,508	(D)	(D)	124,944			
Imports ²	354,769	-	354,769	302,066	-	302,066			
Nonintegrated	(D)	(D)	-182,261	(D)	(D)	-177,122			

See footnotes at end of table.

Table 13. Shipments and Receipts of Aluminum Ingot and Mill Products, by Type of Producer: 1993—Con.

[Thousands of pounds]

Product description	November			December		
	Gross shipments	Total receipts	Net shipments	Gross shipments	Total receipts	Net shipments
Aluminum ingot and mill products	2,168,624	804,272	1,364,352	2,070,482	786,261	1,284,221
Integrated	1,052,317	232,550	819,767	1,063,426	218,627	844,799
Smelters	156,258	59,520	96,738	153,923	57,136	96,787
All other	960,049	512,202	447,847	853,133	510,498	342,635
Imports (ingot only)	408,552	-	408,552	344,075	-	344,075
Nonintegrated	551,497	512,202	39,295	509,058	510,498	-1,440
Mill products	1,202,672	168,006	1,034,666	1,194,708	132,738	1,061,970
By type of producer:						
Integrated	793,420	54,190	739,230	799,586	39,755	759,831
Nonintegrated	409,252	113,816	295,436	395,122	92,983	302,139
Ingot	965,952	636,266	329,686	875,774	653,523	222,251
By type of producer:						
Integrated	258,897	178,360	80,537	263,840	178,872	84,968
Smelters ¹	156,258	59,520	96,738	153,923	57,136	96,787
All other	550,797	398,386	152,411	458,011	417,515	40,496
Imports ²	408,552	-	408,552	344,075	-	344,075
Nonintegrated	142,245	398,386	-256,141	113,936	417,515	-303,579
By type of ingot:						
Extrusion ingot	193,038	187,232	5,806	171,932	171,840	92
Integrated	79,640	6,503	73,137	80,291	7,769	72,522
Smelters ¹	(D)	(D)	15,676	(D)	(D)	15,171
All other	(D)	(D)	-83,007	(D)	(D)	-87,601
Imports ²	22,244	-	22,244	23,065	-	23,065
Nonintegrated	(D)	(D)	-105,251	(D)	(D)	-110,666
Other ingot (primary and secondary)	772,914	449,034	323,880	703,842	481,683	222,159
Integrated	179,257	171,857	7,400	183,549	171,103	12,446
Smelters ¹	(D)	(D)	81,062	(D)	(D)	81,616
All other	(D)	(D)	235,418	(D)	(D)	128,097
Imports ²	386,308	-	386,308	321,010	-	321,010
Nonintegrated	(D)	(D)	-150,890	(D)	(D)	-192,913

¹The number of secondary smelter operators shipping ingot is 36.²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. For 1993, 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.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies.

Table 14. Inventories of Aluminum Ingot, Mill Products, and Scrap, By Type of Producer: 1994 and 1993

[Thousands of pounds]

Type of inventory	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
1994												
Total	4,646,016	4,758,697	4,778,273	4,784,587	4,790,941	4,725,133	4,659,792	4,637,298	4,605,843	4,540,441	4,551,649	4,572,784
Integrated	3,113,333	3,234,095	3,250,500	3,263,781	3,270,206	3,189,068	3,228,721	3,212,247	3,184,785	3,132,179	3,097,746	3,070,490
Nonintegrated	1,353,571	1,348,877	1,343,461	1,331,324	1,328,268	1,341,130	1,220,185	1,207,030	1,216,902	1,201,706	1,237,444	1,257,144
Smelters ¹	179,112	175,725	184,312	189,482	192,467	194,935	210,886	218,021	204,156	206,556	216,459	245,150
Ingot	1,829,124	1,858,365	1,846,098	1,814,722	1,873,606	1,846,560	1,839,239	1,791,898	1,730,027	1,668,397	1,677,891	1,742,008
Integrated ¹	1,309,057	1,356,559	1,335,402	1,298,771	1,363,788	1,338,974	1,371,087	1,319,749	1,266,424	1,206,892	1,187,927	1,246,865
Nonintegrated ¹	433,856	420,602	429,699	433,073	425,830	427,076	377,649	380,949	384,509	378,386	399,331	400,710
Smelters ¹	86,211	81,204	80,997	82,878	83,988	80,510	90,503	91,200	79,094	83,119	90,633	94,433
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 ¹	338,202	345,834	370,250	378,342	344,475	373,614	401,224	415,290	429,683	442,546	432,153	389,816
Nonintegrated ¹	335,940	317,442	318,367	309,291	316,438	345,002	324,232	316,116	325,183	321,231	328,631	334,510
Smelters ¹	92,901	94,521	103,315	106,604	108,479	114,425	120,383	126,821	125,062	123,437	125,826	150,717
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 ¹	1,466,074	1,531,702	1,544,848	1,586,668	1,561,943	1,476,480	1,456,410	1,477,208	1,488,678	1,482,741	1,477,666	1,433,809
Nonintegrated ^{1 2}	583,775	610,833	595,395	588,960	586,000	569,052	518,304	509,965	507,210	502,089	509,482	521,924
Smelters ¹	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
1993												
Total	4,092,826	4,124,182	4,179,323	4,249,617	4,273,746	4,326,866	4,397,900	4,416,927	4,387,436	4,360,460	4,294,075	4,372,022
Integrated	2,810,217	2,832,485	2,906,803	2,946,757	2,956,821	3,002,973	3,039,867	3,062,780	3,031,789	3,011,207	2,958,722	3,020,456
Nonintegrated	1,108,328	1,122,323	1,103,578	1,134,779	1,145,714	1,160,786	1,178,129	1,172,388	1,177,497	1,172,624	1,170,950	1,177,880
Smelters ¹	174,281	169,374	168,942	168,081	171,211	163,107	179,904	181,759	178,150	176,629	164,403	173,686
Ingot	1,544,348	1,496,446	1,508,403	1,526,806	1,505,589	1,617,367	1,659,785	1,720,047	1,683,779	1,700,309	1,759,712	1,834,745
Integrated ¹	1,061,458	1,012,127	1,037,944	1,035,012	1,025,309	1,134,874	1,183,014	1,250,877	1,205,152	1,225,536	1,296,835	1,355,975
Nonintegrated ¹	382,295	386,549	372,520	395,984	384,425	391,345	383,612	378,190	383,946	377,802	368,922	388,399
Smelters ¹	100,595	97,770	97,939	95,810	95,855	91,148	93,159	90,980	94,681	96,971	93,955	90,371
Scrap	645,277	659,197	680,505	698,125	688,624	713,069	769,729	789,232	780,220	742,005	705,944	700,450
Integrated ¹	358,665	364,681	376,902	388,524	360,345	372,338	391,396	387,064	411,526	380,725	344,861	330,431
Nonintegrated ¹	212,926	222,912	232,600	237,330	252,923	268,772	291,588	311,389	285,225	281,622	290,635	286,704
Smelters ¹	73,686	71,604	71,003	72,271	75,356	71,959	86,745	90,779	83,469	79,658	70,448	83,315
All other	1,903,201	1,968,539	1,990,415	2,024,686	2,079,533	1,996,430	1,968,386	1,907,648	1,923,437	1,918,146	1,828,419	1,836,827
Integrated ¹	1,390,094	1,455,677	1,491,957	1,523,221	1,571,167	1,495,761	1,465,457	1,424,839	1,415,111	1,404,946	1,317,026	1,334,050
Nonintegrated ^{1 2}	513,107	512,862	498,458	501,465	508,366	500,669	502,929	482,809	508,326	513,200	511,393	502,777
Smelters ¹	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)

¹The number of companies reporting aluminum inventory data for December 1994 only are: Ingot integrated 12; Ingot nonintegrated 129; Ingot smelters 26; Scrap integrated 12; Scrap nonintegrated 141; Scrap smelters 25; Other integrated 11; Other nonintegrated 161; Other smelters 3.

²Data for "All other smelters" are combined with "All other nonintegrated smelters" to avoid disclosing figures for individual companies.

Table 15. **Gross Shipments of Aluminum Mill Products, by Type of Producer and Month: 1994**

[Thousands of pounds]

Product description	Total			January			February		
	Total	Integrated	Nonintegrated	Total	Integrated	Nonintegrated	Total	Integrated	Nonintegrated
Total	16,259,867	10,796,973	5,462,894	1,155,994	738,643	417,351	1,179,051	759,579	419,472
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 ¹	361,704	189,761	171,943	27,630	14,374	13,256	27,156	13,937	13,219
	March			April			May		
Total	1,404,819	922,525	482,294	1,320,483	848,906	471,577	1,388,489	899,839	488,650
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 ¹	32,053	15,611	16,442	32,628	16,333	16,295	32,373	16,257	16,116
	June			July			August		
Total	1,428,893	921,507	507,386	1,341,081	924,522	416,559	1,468,882	997,532	471,350
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 ¹	32,506	16,174	16,332	28,329	14,204	14,125	32,506	17,762	14,744
	September			October					
	Total	Integrated	Nonintegrated	Total	Integrated	Nonintegrated			
Total	1,439,999	971,983	468,016	1,435,400	958,468	476,932			
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 ¹	30,469	16,770	13,699	31,151	16,536	14,615			
	November			December					
Total	1,365,670	927,965	437,705	1,331,106	925,504	405,602			
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 ¹	27,189	15,434	11,755	27,714	16,369	11,345			

¹Data 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: 1993

[Thousands of pounds]

Product description	Total			January			February		
	Total	Integrated	Nonintegrated	Total	Integrated	Nonintegrated	Total	Integrated	Nonintegrated
Total	14,474,778	9,468,365	5,006,413	1,104,231	712,544	391,687	1,112,421	727,150	385,271
Sheet and plate and foil	10,080,502	7,739,872	2,340,630	751,946	573,895	178,051	768,114	586,016	182,098
Drawing stock, wire, and cable	1,031,571	685,749	345,822	82,771	53,092	29,679	83,094	54,686	28,408
Rod and bare wire	447,745	366,544	81,201	35,333	29,040	6,293	38,413	32,015	6,398
Cable and insulated wire	583,826	319,205	264,621	47,438	24,052	23,386	44,681	22,671	22,010
Rod, bar, pipe, tube, and shapes	3,051,165	884,934	2,166,231	245,800	73,101	172,699	236,856	74,256	162,600
All other ¹	311,540	157,810	153,730	23,714	12,456	11,258	24,357	12,192	12,165
	March			April			May		
Total	1,260,588	820,823	439,765	1,251,154	815,316	435,838	1,207,689	794,662	413,027
Sheet and plate and foil	869,545	660,917	208,628	880,912	669,596	211,316	843,111	646,747	196,364
Drawing stock, wire, and cable	92,202	62,462	29,740	88,904	55,445	33,459	82,803	56,850	25,953
Rod and bare wire	44,348	36,784	7,564	37,457	30,755	6,702	37,175	30,657	6,518
Cable and insulated wire	47,854	25,678	22,176	51,447	24,690	26,757	45,628	26,193	19,435
Rod, bar, pipe, tube, and shapes	271,678	84,095	187,583	255,416	77,241	178,175	254,781	77,392	177,389
All other ¹	27,163	13,349	13,814	25,922	13,034	12,888	26,994	13,673	13,321
	June			July			August		
Total	1,236,696	792,348	444,348	1,194,118	782,231	411,887	1,245,603	811,457	434,146
Sheet and plate and foil	866,187	659,425	206,762	839,981	643,074	196,907	867,247	663,835	203,412
Drawing stock, wire, and cable	85,854	58,061	27,793	80,938	53,150	27,788	86,213	58,700	27,513
Rod and bare wire	36,860	29,724	7,136	33,808	27,434	6,374	35,222	28,608	6,614
Cable and insulated wire	48,994	28,337	20,657	47,130	25,716	21,414	50,991	30,092	20,899
Rod, bar, pipe, tube, and shapes	257,763	61,009	196,754	247,262	73,736	173,526	266,183	76,231	189,952
All other ¹	26,892	13,853	13,039	25,937	12,271	13,666	25,960	12,691	13,269
	September			October					
	Total	Integrated	Nonintegrated	Total	Integrated	Nonintegrated			
Total	1,252,676	827,880	424,796	1,212,222	790,948	421,274			
Sheet and plate and foil	870,982	677,248	193,734	826,895	643,874	183,021			
Drawing stock, wire, and cable	87,789	57,492	30,297	92,696	59,235	33,461			
Rod and bare wire	37,716	30,133	7,583	37,695	30,754	6,941			
Cable and insulated wire	50,073	27,359	22,714	55,001	28,481	26,520			
Rod, bar, pipe, tube, and shapes	266,715	78,611	188,104	265,360	74,798	190,562			
All other ¹	27,190	14,529	12,661	27,271	13,041	14,230			
	November			December					
Total	1,202,672	793,420	409,252	1,194,708	799,586	395,122			
Sheet and plate and foil	842,147	652,446	189,701	853,435	662,799	190,636			
Drawing stock, wire, and cable	83,882	57,987	25,895	84,425	58,589	25,836			
Rod and bare wire	37,600	30,792	6,808	36,118	29,848	6,270			
Cable and insulated wire	46,282	27,195	19,087	48,307	28,741	19,566			
Rod, bar, pipe, tube, and shapes	250,324	69,150	181,174	233,027	65,314	167,713			
All other ¹	26,319	13,837	12,482	23,821	12,884	10,937			

¹Data for shipments of "All other" include "Powder and paste" and "Forgings and impacts."

Table 17. Shipments and Receipts of Aluminum Mill Products: 1994 and 1993

[Thousands of pounds]

Product code	Product description	1994					1993			
		Number of companies	Gross shipments	Domestic receipts	Net shipments ¹	Import receipts	Number of companies	Gross shipments	Domestic receipts	Net shipments ¹
	Aluminum mill products	(NA)	16,259,867	1,188,040	15,071,827	325,695	(NA)	14,474,778	1,748,142	12,726,636
	Sheet, plate, and foil	(NA)	11,418,043	593,573	10,824,470	325,695	(NA)	10,080,502	1,186,121	8,894,381
	Sheet and plate	(NA)	10,362,372	593,573	9,768,799	325,695	(NA)	9,005,077	1,186,121	7,818,956
	Sheet	(NA)	10,058,901	593,573	9,465,328	325,695	(NA)	8,749,281	1,186,121	7,563,160
33532 22	Nonheat-treatable	24	9,817,875	² 593,573	9,224,302	³ 325,695	25	8,575,953	² 1,186,121	7,389,832
33532 24	Heat-treatable	10	241,026	(²)	241,026	(³)	11	173,328	(²)	173,328
	Plate	(NA)	303,471	-	303,471	-	(NA)	255,796	-	255,796
33531 15	Nonheat-treatable	6	110,114	-	110,114	-	7	78,652	-	78,652
33531 13	Heat-treatable	4	193,357	-	193,357	-	4	177,144	-	177,144
33533 00	Foil	15	1,055,671	-	1,055,671	-	16	1,075,425	-	1,075,425
	Rod, wire, and cable	(NA)	1,101,483	336,564	764,919	(³)	(NA)	1,031,571	376,941	654,630
	Rod and bare wire	(NA)	486,812	336,564	150,248	(³)	(NA)	447,745	376,941	70,804
33552 20	Drawing stock (redraw rod)	5	364,367	315,497	48,870	(³)	6	347,265	373,267	-26,002
33501 31	Bare wire	18	122,445	⁴ 21,067	101,378	(³)	19	100,480	⁴ 3,674	96,806
	Cable and insulated wire	(NA)	614,671	(⁴)	614,671	-	(NA)	583,826	(⁴)	583,826
33501 63	ACSR and aluminum cable, bare	5	225,101	(⁴)	225,101	-	5	229,160	(⁴)	229,160
33570 99	Wire and cable, insulated or covered	12	389,570	(⁴)	389,570	-	13	354,666	(⁴)	354,666
	Rod, bar, pipe, tube, and shapes	(NA)	3,378,637	257,903	3,120,734	(³)	(NA)	3,051,165	185,080	2,866,085
	Rod and bar (rolled and extruded)	(NA)	346,469	257,903	88,566	(³)	(NA)	311,161	185,080	126,081
33500 20	Alloys other than 2,000 and 7,000 series AND	14					14			
33541 18	Alloys in 2,000 and 7,000 series	4	346,469	⁵ 257,903	88,566	(³)	5	311,161	⁵ 185,080	126,081
	Pipe and tube (extruded and drawn)	(NA)	300,326	(⁵)	300,326	-	(NA)	286,457	(⁵)	286,457
33542 63	Alloys other than 2,000 and 7,000 series AND	23					25			
33542 61	Alloys in 2,000 and 7,000 series	4	300,326	(⁵)	300,326	-	4	286,457	(⁵)	286,457
	Extruded shapes	(NA)	2,731,842	-	2,731,842	-	(NA)	2,453,547	-	2,453,547
33541 25	Alloys other than 2,000 and 7,000 series	93	2,661,205	-	2,661,205	-	96	2,390,986	-	2,390,986
33541 28	Alloys in 2,000 and 7,000 series	10	70,637	-	70,637	-	15	62,561	-	62,561
	All other	(NA)	361,704	(⁵)	361,704	-	(NA)	311,540	(⁵)	311,540
	Powder and paste	(NA)	145,106	(⁵)	145,106	-	(NA)	130,155	(⁵)	130,155
33991 13	Atomized	7	73,791	-	73,791	-	7	72,072	-	72,072
33991 16	Other flake, powder and paste	9	71,315	(⁵)	71,315	-	9	58,083	(⁵)	58,083
	Forgings and impacts	(NA)	216,598	(⁵)	216,598	-	(NA)	181,385	(⁵)	181,385
34635 21	Forgings	26	160,349	-	160,349	-	27	133,696	-	133,696
34635 41	Impacts	10	56,249	(⁵)	56,249	-	11	47,689	(⁵)	47,689

¹See table 12, footnote 2.²Receipts for "Heat-treatable sheet" are combined with "Nonheat-treatable sheet" to avoid disclosing figures for individual companies.³Import receipts for "All mill products" are combined with "Nonheat-treatable sheet" to avoid disclosing figures for individual companies.⁴Data for "Cable and insulated wire" are included in "Bare wire" to avoid disclosing figures for individual companies.⁵Receipts for "Alloys in 2,000 and 7,000 series" are included in "Alloys other than 2,000 and 7,000 series" to avoid disclosing figures for individual companies. Receipts for "Powder and paste" are included in "Alloys other than 2,000 and 7,000 series" to avoid disclosing figures for individual companies.

- Represents zero. NA Not available.

Note: Import receipts data collected beginning with the January 1994 reporting period.

Table 18. Net Shipments of Aluminum Mill Products, by Month: 1994 and 1993

[Thousands of pounds]

Product description	Total	January	February	March	April	May	June	July	August	Sep- tember	October	No- vember	December
1994													
Aluminum mill products	15,071,827	1,065,428	1,089,308	1,307,466	1,228,690	1,287,808	1,323,556	1,241,796	1,365,633	1,326,584	1,321,038	1,272,912	1,241,608
Total domestic receipts	1,188,040	90,566	89,743	97,353	91,793	100,681	105,337	99,285	103,249	113,415	114,362	92,758	89,498
Total import receipts ¹	325,695	26,902	20,169	31,322	29,076	22,577	33,676	29,389	26,304	34,975	25,062	24,258	21,985
Sheet, plate, and foil	10,824,470	749,747	765,714	927,876	879,382	924,610	943,636	894,821	979,963	961,305	954,118	923,264	920,034
Sheet, plate, and foil, domestic receipts	593,573	37,780	40,308	47,537	37,570	53,573	52,631	49,366	51,477	62,911	59,773	49,738	50,909
Sheet and plate	9,768,799	671,001	688,947	834,549	792,053	835,472	851,264	811,235	884,702	868,340	860,603	833,269	837,364
Sheet	9,465,328	648,643	666,826	805,440	767,884	811,726	825,135	786,479	857,208	841,998	834,566	807,388	812,035
Nonheat-treatable	9,224,302	631,748	650,273	783,406	747,865	795,498	806,821	767,711	833,745	816,680	809,929	787,448	793,178
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	764,919	53,004	58,857	73,017	62,842	62,695	66,681	59,947	67,998	68,603	65,168	64,547	61,560
Rod and bare wire	150,248	6,571	10,152	21,391	9,315	13,343	9,463	10,439	11,365	13,111	11,884	14,675	18,539
Drawing stock (redraw rod)	48,870	429	5,193	13,254	1,527	3,988	99	1,648	1,477	2,834	2,392	6,117	9,912
Drawing stock (redraw rod), domestic receipts	315,497	26,942	23,674	25,179	29,110	26,813	31,308	26,399	30,541	27,880	27,857	21,940	17,854
Bare wire	101,378	6,142	4,959	8,137	7,788	9,355	9,364	8,791	9,888	10,277	9,492	8,558	8,627
Bare wire, domestic receipts	21,067	3,056	4,033	3,242	2,276	1,078	1,035	1,038	1,079	1,007	1,026	1,108	1,089
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	3,120,734	235,047	237,581	274,520	253,838	268,130	280,733	258,699	285,166	266,207	270,601	257,912	232,300
Rod, bar, pipe, tube, and shapes, domestic receipts	257,903	22,788	21,728	21,395	22,837	19,217	20,363	22,482	20,152	21,617	25,706	19,972	19,646
Rod and bar (rolled and extruded)	88,566	4,349	3,259	9,282	4,672	9,579	8,879	9,970	16,245	6,305	2,776	6,974	6,276
Pipe and tube (extruded and drawn)	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
Extruded shapes	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	361,704	27,630	27,156	32,053	32,628	32,373	32,506	28,329	32,506	30,469	31,151	27,189	27,714
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	216,598	17,294	17,682	19,741	18,744	18,463	18,502	15,816	19,157	17,714	18,962	17,603	16,920
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	56,249	4,426	4,716	5,507	5,098	5,116	4,765	4,713	4,658	4,246	5,143	3,962	3,899
Scrap receipts ¹	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

See footnotes at end of table.

Table 18. Net Shipments of Aluminum Mill Products, by Month: 1994 and 1993—Con.

[Thousands of pounds]

Product description	Total	January	February	March	April	May	June	July	August	Sep- tember	October	No- vember	December
1993													
Aluminum mill products	12,726,636	965,423	968,129	1,111,398	1,091,336	1,061,759	1,100,993	1,063,321	1,112,896	1,096,261	1,058,484	1,034,666	1,061,970
Sheet, plate, and foil	8,894,381	656,755	670,811	771,009	768,000	741,968	772,659	758,047	781,328	765,935	724,473	725,071	758,325
Sheet and plate	7,818,956	571,489	585,339	673,328	670,466	648,740	682,708	674,643	695,176	673,331	629,466	634,718	679,552
Sheet	7,563,160	547,591	563,790	648,898	648,589	627,268	661,670	655,582	674,873	651,890	609,693	614,635	658,681
Nonheat-treatable	7,389,832	529,003	547,174	633,301	632,118	611,975	646,700	643,220	662,473	638,659	596,554	602,114	646,541
Heat-treatable	173,328	18,588	16,616	15,597	16,471	15,293	14,970	12,362	12,400	13,231	13,139	12,521	12,140
Plate	255,796	23,898	21,549	24,430	21,877	21,472	21,038	19,061	20,303	21,441	19,773	20,083	20,871
Nonheat-treatable	78,652	7,647	6,118	8,162	6,251	5,735	5,943	6,855	6,738	5,666	6,089	6,318	7,130
Heat-treatable	177,144	16,251	15,431	16,268	15,626	15,737	15,095	12,206	13,565	15,775	13,684	13,765	13,741
Foil	1,075,425	85,266	85,472	97,681	97,534	93,228	89,951	83,404	86,152	92,604	95,007	90,353	78,773
Rod, wire, and cable	654,630	55,045	51,728	53,958	54,999	53,077	58,443	48,265	57,086	53,202	58,103	49,986	60,738
Rod and bare wire	70,804	7,607	7,047	6,104	3,552	7,449	9,449	1,135	6,095	3,129	3,102	3,704	12,431
Drawing stock (redraw rod)	-26,002	38	-984	-3,428	-4,490	-501	1,639	-5,709	-675	-5,076	-5,375	-5,352	3,911
Bare wire	96,806	7,569	8,031	9,532	8,042	7,950	7,810	6,844	6,770	8,205	8,477	9,056	8,520
Cable and insulated wire	583,826	47,438	44,681	47,854	51,447	45,628	48,994	47,130	50,991	50,073	55,001	46,282	48,307
ACSR and aluminum cable, bare	229,160	18,539	18,512	19,818	20,868	17,183	19,577	19,171	20,439	19,677	19,942	16,145	19,289
Wire and cable, insulated or covered	354,666	28,899	26,169	28,036	30,579	28,445	29,417	27,959	30,552	30,396	35,059	30,137	29,018
Rod, bar, pipe, tube, and shapes	2,866,085	229,909	221,233	259,268	242,415	239,720	242,999	231,072	248,522	249,934	248,637	233,290	219,086
Rod and bar (rolled and extruded)	126,081	12,076	10,138	17,837	13,747	15,048	7,039	7,878	9,374	8,668	9,194	6,582	8,500
Alloys other than 2,000 and 7,000 series AND													
Alloys in 2,000 and 7,000 series	126,081	12,076	10,138	17,837	13,747	15,048	7,039	7,878	9,374	8,668	9,194	6,582	8,500
Pipe and tube (extruded and drawn)	286,457	22,798	21,691	25,829	24,752	23,514	30,833	21,697	23,818	23,042	24,136	23,664	20,683
Alloys other than 2,000 and 7,000 series AND													
Alloys in 2,000 and 7,000 series	286,457	22,798	21,691	25,829	24,752	23,514	30,833	21,697	23,818	23,042	24,136	23,664	20,683
Extruded shapes	2,453,547	195,035	189,404	215,602	203,916	201,158	205,127	201,497	215,330	218,224	215,307	203,044	189,903
Alloys other than 2,000 and 7,000 series	2,390,986	188,257	183,509	209,081	197,392	196,056	201,705	197,164	210,653	213,594	210,858	198,505	184,212
Alloys in 2,000 and 7,000 series	62,561	6,778	5,895	6,521	6,524	5,102	3,422	4,333	4,677	4,630	4,449	4,539	5,691
All other	311,540	23,714	24,357	27,163	25,922	26,994	26,892	25,937	25,960	27,190	27,271	26,319	23,821
Powder and paste	130,155	9,758	10,030	11,902	9,973	11,622	10,989	11,614	10,608	11,200	11,392	11,068	9,999
Atomized	72,072	5,460	5,365	6,708	5,056	6,268	5,930	5,966	5,496	6,176	6,407	7,034	6,206
Other flake, powder and paste	58,083	4,298	4,665	5,194	4,917	5,354	5,059	5,648	5,112	5,024	4,985	4,034	3,793
Forgings and impacts	181,385	13,956	14,327	15,261	15,949	15,372	15,903	14,323	15,352	15,990	15,879	15,251	13,822
Forgings	133,696	10,259	10,334	11,144	11,460	11,103	11,755	10,235	10,886	12,114	11,884	11,531	10,991
Impacts	47,689	3,697	3,993	4,117	4,489	4,269	4,148	4,088	4,466	3,876	3,995	3,720	2,831

¹Data 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.

6.4 NONFERROUS CASTINGS

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 1984. It now consists of about 570 producers of nonferrous castings selected from approximately 2,500 establishments identified in the 1992 Census of Manufactures.

SUMMARY OF FINDINGS

During 1994, the total shipments of nonferrous castings were 8,074 million pounds. This represented a 12-percent increase from the 1993 total shipments of 7,231 million pounds. Shipments of aluminum castings in 1994 totaled 2,314 million pounds, showing a 15-percent increase from the 1993 total of 2,017 million pounds. Shipments of copper castings totaled 1,071 million pounds in 1994, an 8-percent increase from the 1993 total of 988 million pounds. The shipments of magnesium castings in 1994 totaled 62 million pounds, representing a 12-percent increase from the 1993 total of 54 million pounds. Shipments of zinc castings increased 10 percent during 1994 to 456 million pounds, compared with the 1993 total of 416 million pounds. Shipments of lead castings during 1994 totaled 285 million pounds, representing a 2-percent decrease, compared with the 1993 total of 292 million pounds.

EXPLANATION OF TERMS

Shipments for Sale. Represents commercial sales only (castings shipped to the trade). Intra-company 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. Casting 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. Casting 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: 1994 and 1993

[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
1994	8,073,763	4,905,192	3,168,571	2,313,633	1,070,593	61,837	456,033	284,616
1993	7,231,457	4,376,156	2,855,301	2,017,344	988,234	54,366	415,692	291,908

Table 20. **Quantity and Value of Shipments of Nonferrous Castings, by Type and Method of Castings: 1994 and 1993**

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

Product code	Product description	1994			1993		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
	Nonferrous castings	(NA)	8,073,763	6,159,444	(NA)	7,231,457	5,450,219
	For sale	(NA)	4,905,192	(NA)	(NA)	4,376,156	(NA)
	For own use	(NA)	3,168,571	(NA)	(NA)	2,855,301	(NA)
	Aluminum and aluminum-base alloy	963	2,313,633	3,779,027	971	2,017,344	3,324,151
	For sale	878	1,462,658	(NA)	885	1,298,589	(NA)
	For own use	165	850,975	(NA)	168	718,755	(NA)
33650 11	Sand	586	459,557	(NA)	592	420,359	(NA)
	For sale	537	394,137	(NA)	543	362,674	(NA)
	For own use	92	65,420	(NA)	95	57,685	(NA)
33650 31	Permanent and semipermanent mold ¹	197	545,556	(NA)	196	488,249	(NA)
33630 11	Die ¹	255	1,215,299	(NA)	258	1,017,302	(NA)
	For sale	225	633,254	(NA)	227	544,943	(NA)
	For own use	48	582,045	(NA)	42	472,359	(NA)
33650 61	All other ¹	139	93,221	(NA)	136	91,434	(NA)
	Copper and copper-base alloy	563	1,070,593	1,269,127	562	988,234	1,136,761
	For sale	492	571,215	(NA)	492	505,068	(NA)
	For own use	128	499,378	(NA)	125	483,166	(NA)
33660 26	Sand	405	334,082	(NA)	405	321,364	(NA)
	For sale	355	235,489	(NA)	356	221,971	(NA)
	For own use	85	98,593	(NA)	83	99,393	(NA)
33660 31	Permanent and semipermanent mold ¹	38	51,961	(NA)	34	45,790	(NA)
33640 11	Die ¹	26	8,259	(NA)	27	7,688	(NA)
33660 41	Centrifugal ¹	32	157,058	(NA)	36	137,303	(NA)
33660 61	All other ¹	151	519,233	(NA)	148	476,089	(NA)
	Magnesium and magnesium-base alloy	68	61,837	294,232	70	54,366	249,207
	For sale	61	61,837	(NA)	63	54,366	(NA)
	For own use	8	(¹)	(NA)	9	(¹)	(NA)
33690 15	Sand ^{1 2}	41	19,734	(NA)	45	16,342	(NA)
33640 31	Die ¹	20	42,103	(NA)	18	38,024	(NA)
33690 25	All other ²	8	(²)	(NA)	9	(²)	(NA)
	Zinc and zinc-base alloy	321	456,033	806,609	329	415,692	727,023
	For sale	285	354,766	(NA)	292	322,707	(NA)
	For own use	56	101,267	(NA)	57	92,985	(NA)
33640 21	Die ¹	267	426,599	(NA)	271	387,926	(NA)
33690 11	All other ¹	67	29,434	(NA)	72	27,766	(NA)
33640 41	Lead and lead-base alloy die ¹	31	284,616	10,449	38	291,908	13,077

¹Castings "For sale" and "For own use" are combined to avoid disclosing figures for individual companies.²"All other magnesium and magnesium-base alloy castings" are combined with "Sand magnesium and magnesium-base alloy castings" to avoid disclosing figures for individual companies.

NA Not available.

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.

6.5 INVENTORIES OF STEEL PRODUCING MILLS

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 1993.

SUMMARY OF FINDINGS

Total inventories of steel mill shapes and forms held by steel producers, and steel service centers (warehouses) increased from 19.0 million short tons at the end of December 31, 1993, to 20.5 million short tons in 1994.

Inventories held by steel service centers increased from 6.2 million short tons to 7.3 million short tons in 1994, and inventories held by steel producers increased from 12.8 to 13.2 million short tons for 1994.

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: 1994 and 1993**

[Million short tons]

Product description	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1994												
Total inventories	20.5	21.0	20.7	21.3	21.7	21.2	22.0	20.8	20.4	20.8	20.5	20.5
Steel service centers: ¹												
Inventories, end of month ¹	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
1993												
Total inventories	18.8	18.8	18.3	18.2	18.4	18.4	18.7	19.0	18.8	18.6	18.8	19.0
Steel service centers: ¹												
Inventories, end of month ¹	5.9	5.9	5.8	5.8	6.0	6.2	6.2	6.4	6.2	6.0	6.1	6.2
Producing mills:												
Inventories, end of month	12.9	12.9	12.5	12.4	12.4	12.2	12.5	12.6	12.6	12.6	12.7	12.8
Steel in process	7.4	7.4	7.1	6.9	6.9	6.8	6.9	7.0	7.0	7.0	7.1	7.2
Finished steel	5.5	5.5	5.4	5.5	5.5	5.4	5.6	5.6	5.6	5.6	5.6	5.6

¹Source: Steel Service Center Institute.

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

Table 22. Net Shipments and Imports of Steel Mill Shapes: 1994 and 1993

[Thousands of short tons]

Month and year	Manufacturers' net shipments ¹	Imports for consumption ²
1994		
Total	94,128	26,914
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
1993		
Total	88,154	18,280
December	7,382	1,684
November	7,274	1,974
October	7,490	1,951
September	7,470	1,711
August	7,445	1,456
July	6,929	1,549
June	7,790	1,624
May	7,301	1,339
April	7,344	1,082
March	7,886	1,262
February	6,867	1,247
January	6,976	1,401

¹Source: American Iron and Steel Institute (AISI).²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. Import tonnage is derived from the 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: 1989 to 1993**

[Thousands of short tons]

Product description	1993	1992	1991	1990	1989
Manufacturers' net shipments	91,372	82,895	78,255	84,931	92,320
Exports ¹	3,653	3,863	4,121	3,845	4,616
Imports ²	17,898	16,045	15,001	16,678	17,248
Apparent consumption ³	105,617	95,077	89,135	97,764	104,952

¹Source: Current Industrial Report MA33B, *Steel Mill Products*. Net shipments figures are somewhat understated because of the method used to calculate these data. These figures are derived by subtracting total domestic receipts of all mill shapes at producing mills from the 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 the net shipments calculation.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. Import tonnage is derived from the following 1993 HTSUSA numbers: 7206.10.0000—7306.90.5000.

³Apparent consumption is derived by subtracting exports from the 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. Histori-

cal 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.

6.6 INSULATED WIRE AND CABLE

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 220.

SUMMARY OF FINDINGS

In 1994, the total value of manufacturers' shipments of insulated wire and cable increased by 13 percent to \$12,444 million, from the 1993 level of \$11,006. Electronic wire and cable increased by 20 percent to \$2,348 million, from the 1993 level of \$1,949 million. Telephone and telegraph wire and cable decreased by 6 percent to \$1,679, from the 1993 level of \$1,785 million. In 1994, power wire and cable increased by 18 percent to \$1,541, from the 1993 level of \$1,301 million. Control wire and signal wire and cable increased 22 percent to \$257 million, compared with the preceding year's figure of \$211 million. Building wire and cable increased by 24 percent to \$2,291 million, from the 1993 level of \$1,849 million. In 1994, apparatus wire and cordage increased by 2 percent to \$983 million, compared with \$961 million in 1993. Other insulated wire and cable increased by 14 percent to \$715 million, compared with \$625 million in 1993. Magnet wire also increased by 37 percent in 1994 to \$1,213 million, from the 1993 level of \$884 million. Insulated optical fiber cable decreased by 2 percent to \$1,417 million, from \$1,442 million in 1993. Optical fiber increased by 8 percent to \$703 million, compared with the \$650 million in 1993.

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 fabric) 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: 1994 and 1993**

[Value in thousands of dollars]

Product code	Product description	1994	1993
	Insulated wire and cable	12,443,507	11,006,465
3357A —	Electronic wire and cable	2,347,574	1,948,573
3357B —	Telephone and telegraph wire and cable	1,678,792	1,785,245
33578 —	Power wire and cable	1,540,862	1,301,344
3357C —	Control wire and signal wire and cable	257,179	210,526
3357D —	Building wire and cable	2,291,066	1,848,789
33576 —	Apparatus wire and cable	982,823	961,334
3357E —	Other insulated wire and cable	715,158	624,841
33577 —	Magnet wire	1,212,761	883,761
33579 —	Insulated optical fiber cable	1,417,292	1,442,052
32318 —	Optical fiber cable ¹	703,353	650,459

¹Data for "Optical fiber cable" is not included in the total for "Insulated wire and cable."

Table 25. Shipments of Insulated Wire and Cable: 1994 and 1993

[Copper content in thousands of pounds. Value in thousands of dollars]

Product code	Product description	Shipments, including interplant transfers ¹					
		1994			1993		
		Number of companies	Copper content ²	Value	Number of companies	Copper content ²	Value
3357— pt.	Insulated wire (except magnet wire and optical wire) .	(NA)	2,635,851	9,387,812	(NA)	2,513,029	8,481,170
3357A —	Electronic wire and cable	98	241,334	2,347,574	99	192,151	1,948,573
	Coaxial cable, armored or unarmored:						
3357A 10	Rigid	7	^b 2,541	^a 26,353	7	1,858	^r 18,122
3357A 12	Semirigid	15	11,470	284,167	15	^r 9,067	^r 193,193
	Flexible:						
3357A 13	135 C and over	17	4,267	60,428	19	3,116	52,657
3357A 14	Under 135 C	31	26,232	327,213	31	22,992	^r 250,067
3357A 16	CATV/broadcast coaxial cable	8	⁽³⁾	⁽³⁾	10	⁽³⁾	⁽³⁾
3357A 22	Antenna lead-in wire ³	8	³ 24,115	³ 428,266	8	³ 13,272	³ 341,505
	Hook-up wire (single conductor, shielded, and nonshielded):						
3357A 23	135 C and over temperature rating	30	11,630	162,140	31	12,051	164,277
3357A 25	Under 135 C temperature rating	48	30,940	153,350	50	^r 26,985	143,113
	Multiconductor electronic wire and cable (shielded and nonshielded):						
3357A 30	Flat and ribbon cable	23	12,278	104,518	25	12,307	115,621
	Other multiconductor electronic wire and cable:						
	Shielded:						
3357A 31	135 C and over temperature rating	21	36,473	215,541	20	23,416	191,184
3357A 33	Under 135 C temperature rating	42	^b 47,935	^a 324,058	43	39,525	248,338
	Nonshielded:						
3357A 35	135 C and over temperature rating	10	3,362	33,513	11	4,021	38,630
3357A 37	Under 135 C temperature rating	34	^a 30,091	^a 228,027	33	^r 23,541	191,866
3357B —	Telephone and telegraph wire and cable	32	464,366	1,678,608	33	^r 469,117	1,783,351
3357B 41	Jumper and distributing frame wire	7	⁽⁴⁾	⁽⁴⁾	8	⁽⁴⁾	⁽⁴⁾
3357B 43	Station wire and cable ⁴	16	⁴ 20,368	⁴ 104,184	18	⁴ 19,093	⁴ 104,476
3357B 73	Telephone cord sets and cordage	8	2,228	67,071	8	2,688	90,528
3357B 52	Inside wiring cable	21	54,946	252,667	20	^r 57,873	287,292
3357B 55	Drop and bridle and duct wire	6	⁽⁵⁾	⁽⁵⁾	6	⁽⁵⁾	⁽⁵⁾
3357B 68	Rural and urban distribution wire and cable ⁵	3	⁵ 29,702	⁵ 162,053	3	⁵ 31,023	⁵ 170,300
3357B 73	Polyethylene covered exchange area and toll cable (PIC and PULP insulated)	6	309,312	947,924	6	^r 321,920	^r 979,649
3357B 90	Other telephone and telegraph wire and cable	6	^b 47,810	^b 144,709	8	36,520	151,106
33578 —	Power wire and cable	29	301,493	1,333,297	30	301,511	^r 1,220,617
33578 07	Paper insulated cable (all voltages, all types)	4	14,511	49,048	5	15,203	38,217
	Plastic and rubber insulated:						
	600 volts or less:						
33578 08	Portable welding cable	8	16,493	40,019	8	16,552	42,034
33578 09	Portable molded and nonmolded cable and cord	9	^b 19,790	^b 79,977	9	19,441	70,489
33578 17	Underground distribution cable (UD, URD)	8	7,162	163,122	9	6,777	^r 117,785
33578 19	Thermoplastic insulated power cable	13	^a 15,607	^a 42,018	16	21,531	52,001
	Thermoset insulated:						
33578 20	Armored, rubber and cross-linked	9	8,177	22,975	8	8,113	18,671
33578 21	Unarmored, rubber	7	34,915	117,354	7	38,972	126,070
33578 22	Unarmored, cross-linked	11	^a 18,468	^a 55,740	12	15,071	42,022
33578 25	Weatherproof cable	3	⁽⁶⁾	⁽⁶⁾	4	⁽⁶⁾	⁽⁶⁾
	Service drop cable:						
33578 27	Thermoset insulated	1	⁽⁶⁾	⁽⁶⁾	2	⁽⁶⁾	⁽⁶⁾
33578 28	Thermoplastic insulated ⁶	1	⁶ 7,859	⁶ 20,784	2	⁶ 10,368	⁶ 25,746
	Over 600 volts:						
33578 32	Portable molded rubber sheathed cable (mine shovel cable)	5	^c 10,281	^c 29,920	6	8,499	25,481
33578 35	Portable nonmolded cable	3	389	1,471	4	608	2,043
33578 37	Underground distribution cable (UD, URD), all insulations (jacketed and unjacketed)	6	53,270	361,046	6	47,493	302,678
33578 39	Thermoplastic insulated power cable, excluding underground	5	^c 5,848	^b 25,225	5	3,108	13,127
	Thermoset insulated power cable, excluding underground:						
	Over 600 volts to 15 kV:						
33578 41	Armored, rubber and cross-linked	9	14,361	59,478	10	16,324	75,507
33578 42	Unarmored, rubber	8	48,814	176,292	7	43,858	156,573
33578 43	Unarmored, cross-linked	11	17,208	48,200	10	18,596	49,023

See footnotes at end of table.

Table 25. Shipments of Insulated Wire and Cable: 1994 and 1993—Con.

[Copper content in thousands of pounds. Value in thousands of dollars]

Product code	Product description	Shipments, including interplant transfers ¹					
		1994			1993		
		Number of companies	Copper content ²	Value	Number of companies	Copper content ²	Value
33578	Power wire and cable—Con. Plastic and rubber insulated—Con.: Over 600 volts—Con.: Thermoset insulated power cable, excluding underground—Con.:						
33578 44	Over 15 kV (rubber and cross-linked)	4	3,350	25,507	5	5,855	41,661
33578 50	Other power wire and cable	6	^b 4,990	^b 15,121	7	5,142	21,489
3357C —	Control wire and signal wire	30	44,362	211,922	30	35,360	^f 172,085
3357C 11	Signal wire and cable	17	16,996	96,031	17	12,333	^f 72,258
3357C 14	Control wire and cable, excluding elevator cable: Thermoset insulated	12	^a 8,371	^a 46,833	11	7,728	37,844
3357C 17	Thermoplastic insulated	17	^a 18,995	^a 69,058	18	15,299	61,983
3357D —	Building wire and cable	24	1,140,461	2,217,789	24	1,113,970	1,792,852
	Building wire and cable having underwriters' labels:						
	Thermoset insulated:						
3357D 36	Rubber (R, RH, RHH, RHW, USE, etc.)	4	9,574	9,121	5	7,716	8,050
3357D 37	Cross-linked polyethylene (XHHW)	15	49,185	92,867	15	45,116	^f 70,358
3357D 38	Cross-linked polyethylene (USE)	8	16,123	39,748	8	15,531	^f 29,006
	Thermoplastic insulated:						
3357D 40	Flame-retardant nylon (THHN, THWN)	16	641,145	1,142,507	17	675,547	986,083
3357D 41	Moisture resistant (TW)	7	1,084	2,308	7	1,204	^f 1,898
3357D 48	Moisture and heat resistant (THW)	10	1,434	2,754	12	3,297	4,924
3357D 51	Service entrance cable (SER, SEU, ASE)	7	8,786	56,229	7	7,520	^f 42,621
	Nonmetallic branch-circuit and underground feeder:						
3357D 54	Type NM-B	8	320,816	622,601	8	298,571	478,360
3357D 55	Type UF and NMC (corrosion resistant)	10	36,155	83,097	9	^f 30,164	59,598
3357D 57	Metallic armored cable (all AC types)	6	39,373	121,277	5	23,623	95,747
3357D 58	Other building wire and cable	9	16,786	45,280	8	5,681	16,207
33576 —	Apparatus wire and cordage ^e	53	232,735	982,823	53	^f 211,626	^f 961,334
	Flexible cordage:						
33576 13	Thermoset insulated	12	14,869	72,197	11	14,791	70,561
33576 15	Thermoplastic, including thermoplastic elastomers	18	^b 26,741	^b 70,434	17	22,203	63,909
33576 42	Extension cord sets	11	^b 46,883	^b 241,543	11	^f 41,087	^f 214,656
33576 43	Fixed power supply cords	19	20,223	151,318	19	24,075	167,327
33576 44	Detachable power supply cords	8	⁽⁸⁾	⁽⁸⁾	8	⁽⁸⁾	⁽⁸⁾
33576 47	Retractable power cords and other ^g	8	^a 10,904	^a 84,412	8	^a 30,266	^a 143,418
	Apparatus wire:						
33576 21	Appliance fixture wire	23	^a 64,512	^a 182,188	23	41,879	139,608
	Appliance wiring material 14 gauge and larger, including motor lead and transformer lead wire:						
33576 23	Thermoset insulated	5	^c 7,928	^b 52,707	6	7,776	53,879
33576 24	Thermoplastic insulated	14	^b 18,265	^b 53,193	16	16,221	51,022
33576 28	Submersible pump cable	8	^b 10,176	^b 17,045	9	5,513	14,776
33576 29	Other apparatus wire and cable, including tool wire	19	^b 12,234	^b 57,786	18	7,815	42,178
3357E —	Other insulated wire and cable	51	211,100	615,799	49	189,294	602,358
	Automotive:						
3357E 72	Bulk automotive primary wire	13	142,438	286,138	16	117,852	258,318
3357E 74	Bulk battery cable	7	12,627	26,238	8	14,104	28,152
3357E 76	Bulk ignition wire	6	1,906	37,071	5	1,707	^f 37,893
3357E 78	Other automotive wire and cable	9	^b 11,722	^a 58,179	9	10,562	41,954
	Airframe, shipboard and ground support cable, excluding coaxial cable and ignition cable:						
3357E 79	Airframe and missile, including ground support cable	14	4,905	32,222	13	6,745	55,796
3357E 81	Shipboard cable	8	^b 3,659	32,851	9	2,735	25,965
3357E 98	Other insulated or covered wire and cable, n.e.c. . .	25	33,843	143,100	26	35,589	154,280

¹Interplant transfers for 1994 totaled \$227,558, and for 1993 totaled \$329,745. See table 29 for additional details.

²Aluminum content for 1994 totaled 390,060 thousand pounds and for 1993 totaled 325,556 thousand pounds. See table 26 for additional details.

³Product codes 3357A 16 and 3357A 22 are combined to avoid disclosing figures for individual companies.

⁴Product codes 3357B 41 and 3357B 43 are combined to avoid disclosing figures for individual companies.

⁵Product codes 3357B 55 and 3357B 68 are combined to avoid disclosing figures for individual companies.

⁶Product codes 33578 25 and 33578 27 are combined with product code 33578 28 to avoid disclosing figures for individual companies.

⁷Data 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.

⁸Product codes 33576 44 and 33576 47 are combined to avoid disclosing figures for individual companies.

NA Not available. n.e.c. Not elsewhere classified. pt. Part. ^fRevised by 5 percent or more from previously published figures.

Note: The data presented in this table are for copper insulated wire and cable. See table 26 for aluminum content information. The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item is estimated. ^b26 to 50 percent of this item is estimated. ^c51 percent or more of this item is estimated.

Table 26. Aluminum Content of Selected Insulated Wire and Cable: 1994 and 1993

[Thousands of pounds]

Product code	Product description	1994			1993		
		Number of companies	Gross weight	Value	Number of companies	Gross weight	Value
3357— pt.	Insulated wire (except magnet wire)	(X)	390,060	9,519,244	(X)	¹ 325,556	6,708,525
3357A —	Electronic wire and cable	4	(¹)	(¹)	4	(¹)	(¹)
33578 —	Power wire and cable ¹	9	¹ 329,626	¹ 5,530,674	8	¹ 278,163	¹ 3,282,335
33578 17	Underground distribution cable, all insulations—600 volts or less	4	139,945	274,036	4	¹ 120,618	212,070
33578 27	Service drop cable, thermoset insulated	4	37,988	71,740	3	27,401	47,795
33578 28	Service drop cable, thermoplastic insulated	3	(²)	(²)	2	(²)	(²)
33578 37	Underground distribution cable, all insulations— over 600 volts ²	5	² 61,991	² 397,294	4	² 71,418	² 337,299
33578 42	Thermoset insulated power cable, unarmored, rubber—over 600 volts to 15 kV	4	(³)	(³)	4	(³)	(³)
33578 43	Thermoset insulated power cable, unarmored, cross-linked—over 600 volts to 15 kV ³	4	³ 4,267	³ 224,492	3	³ 3,259	³ 208,458
3357D —	Building wire and cable ⁴	8	⁴ 60,434	⁴ 3,988,570	8	⁴ 47,393	⁴ 3,426,190
3357D 38	Thermoset insulated, cross-linked polyethylene (USE) ..	3	9,874	53,903	3	¹ 6,443	37,550
3357E —	Other insulated wire and cable	1	(⁴)	(⁴)	(NA)	(NA)	(NA)

¹Product codes 3357A and 33578 are combined to avoid disclosing figures for individual companies.²Product codes 33578 28 and 33578 37 are combined to avoid disclosing figures for individual companies.³Product codes 33578 42 and 33578 43 are combined to avoid disclosing figures for individual companies.⁴Product codes 3357D and 3357E are combined to avoid disclosing figures for individual companies.NA Not available. pt. Part. ¹Revised by 5 percent or more from previously published figures. X Not applicable.

Table 27. Copper Shipments of Magnet Wire, Including Interplant Transfers: 1994 and 1993

[Copper gross weight in thousands of pounds. Value in thousands of dollars]

Product code	Product description	Shipments, including interplant transfers ¹					
		1994			1993		
		Number of companies	Gross weight ¹	Value	Number of companies	Gross weight ¹	Value
33577 —	Magnet wire	(NA)	683,264	1,212,761	(NA)	579,654	883,761
33577 1-	Class 105	(NA)	76,352	124,545	(NA)	66,705	89,569
33577 11	7 AWG and larger round (also all square and rectangle)	6	9,351	12,695	5	6,740	8,761
33577 13	8 to 21 AWG inclusive	8	38,496	50,925	9	34,376	39,383
33577 15	22 to 32 AWG inclusive	8	26,923	56,241	7	23,967	36,416
33577 17	33 to 44 AWG inclusive	8	1,582	4,684	8	1,622	5,009
33577 2-	Classes 130 and 155	(NA)	139,830	313,182	(NA)	118,997	229,342
33577 20	7 AWG and larger round (also all square and rectangle)	1	(²)	(²)	-	-	-
33577 22	8 to 21 AWG inclusive ²	10	² 34,985	² 69,643	10	² 28,683	² 40,632
33577 24	22 to 32 AWG inclusive	12	82,300	177,698	12	70,770	133,715
33577 26	33 to 44 AWG inclusive	10	22,545	65,841	9	19,544	54,995
33577 4-	Class 180 and higher	(NA)	403,132	647,950	(NA)	342,515	481,244
33577 40	7 AWG and larger round (also all square and rectangle)	8	39,042	77,726	7	28,969	49,646
33577 42	8 to 21 AWG inclusive	12	246,775	355,873	12	217,277	266,379
33577 44	22 to 32 AWG inclusive	13	112,125	198,340	13	91,801	149,403
33577 46	33 to 44 AWG inclusive	7	5,190	16,011	8	4,468	15,816
33577 80	Miscellaneous film coated, n.e.c.	8	27,699	52,562	7	24,117	39,083
33577 pt.	Nonfilm coated (fibrous and tape)	(NA)	36,251	74,522	(NA)	27,320	¹ 44,523
33577 81, 83	Class 130 and below	6	11,235	14,680	7	9,400	11,266
33577 85, 87	Class 155 and above	7	(³)	(³)	7	(³)	(³)
33577 88	Miscellaneous non-film coated, n.e.c. ³	2	³ 25,016	³ 59,842	2	³ 17,920	³ 33,257

¹Interplant transfers for 1994 totaled 72,798 thousands of pounds of copper and for 1993 totaled 70,543 thousands of pounds of copper.²Product codes 33577 20 and 33577 22 are combined to avoid disclosing figures for individual companies.³Product codes 33577 85, 33577 87, and 33577 88 are combined to avoid disclosing figures for individual companies.- Represents zero. NA Not available. n.e.c. Not elsewhere classified. pt. Part. ¹Revised by 5 percent or more from previously published figures.

Table 28. Aluminum Shipments of Magnet Wire, Including Interplant Transfers: 1994 and 1993

[Aluminum gross weight in thousands of pounds. Value in thousands of dollars]

Product code	Product description	Shipments, including interplant transfers ¹					
		1994			1993		
		Number of companies	Gross weight	Value	Number of companies	Gross weight	Value
33577 —	Magnet wire	10	54,971	116,560	13	¹ 51,271	¹ 133,887
3577 pt.	Film coated	8	49,879	107,685	11	¹ 46,880	¹ 126,097
3577 1-	Class 105	6	⁽²⁾	⁽²⁾	8	⁽²⁾	⁽²⁾
3577 2-	Classes 130 and 155 ²	4	² 20,654	² 43,250	4	² 20,693	² 64,407
3577 4-	Class 180 and higher	6	29,225	64,435	6	¹ 26,187	61,690
3577 pt.	Other types of magnet wire (nonfilm coated; insulated magnet sheet, strip, and foil; and film coated, 45 AWG and finer)	6	5,092	8,875	6	¹ 4,391	¹ 7,790

¹Interplant transfers for 1994 totaled 9,162 thousand pounds of aluminum and for 1993 totaled 11,664 thousand pounds of aluminum.

²Product codes 3577 1- and 3577 2- are combined to avoid disclosing figures for individual companies.

pt. Part. ¹Revised by 5 percent or more from previously published figures.

Table 29. Value of Interplant Transfers of Selected Insulated Wire and Cable: 1994 and 1993

[Thousands of dollars]

Product code	Product description	1994		1993	
		Number of companies	Value	Number of companies	Value
3357 pt.	Insulated wire (except magnet wire)	13	227,558	17	329,745
3357A —	Electronic wire and cable	5	45,977	6	57,546
3357B —	Telephone and telegraph wire and cable	2	15,071	3	35,608
33578 —	Power wire and cable	3	⁽¹⁾	3	⁽¹⁾
3357C —	Control wire and signal wire and cable	-	⁽¹⁾	2	⁽¹⁾
3357D —	Building wire and cable ¹	1	¹ 96,081	1	¹ 132,650
33576 —	Apparatus wire and cordage	3	51,994	4	85,566
3357E —	Other insulated wire and cable	4	18,435	5	18,375

¹Product codes 33578 and 3357C are combined with product code 3357D to avoid disclosing figures for individual companies.

- Represents zero. pt. Part.

Table 30. Value of Shipments of Fiber Optic Cable and Optical Fiber: 1994 and 1993

[Thousands of dollars]

Product code	Product description	1994		1993	
		Number of companies	Value	Number of companies	Value
33579 —	Insulated optical fiber cable	37	1,417,292	40	¹ 1,442,052
33579 pt.	Communication applications	26	1,389,225	27	¹ 1,406,080
	Single-mode stepped-index:				
33579 12	Dispersion shifted	10	⁽¹⁾	11	⁽¹⁾
33579 13	Dispersion unshifted ¹	14	¹ 1,156,340	17	¹ 1,187,289
33579 14	Multi-mode stepped index	6	⁽²⁾	7	⁽²⁾
33579 15	Multi-mode graded index ²	18	² 232,885	17	² 218,791
33579 21	Other applications	15	28,067	17	¹ 35,972
	Optical fiber for data and nondata transmission	24	703,353	26	650,459
32318 95	Optical fiber used for data transmission	15	632,934	16	590,871
32318 97	Optical fiber used for nondata transmission	14	70,419	15	¹ 59,588

¹Product codes 33579 12 and 33579 13 are combined to avoid disclosing figures for individual companies.

²Product codes 33579 14 and 33579 15 are combined to avoid disclosing figures for individual companies.

pt. Part. ¹Revised by 5 percent or more from previously published figures.

Table 31. Shipments, Exports, Imports, and Apparent Consumption of Insulated Wire and Cable: 1994 and 1993

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) ^{1 2}	Imports for consumption ^{3 4}
1994				
	Insulated wire and cable	12,721,218	2,228,109	1,479,083
3357A —	Electronic wire and cable	2,347,574	401,447	138,979
3357B —	Telephone and telegraph wire and cable	(5)	(5)	(5)
33578 —	Power wire and cable ⁵	(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 ⁵	8,252,999	1,408,525	1,261,475
33579 —	Insulated optical fiber cable	(6)	(6)	(6)
32318 —	Optical fiber cable ⁶	2,120,645	418,137	78,629
1993				
	Insulated wire and cable	11,457,442	1,566,931	1,322,250
3357A —	Electronic wire and cable	1,948,573	295,147	126,098
3357B —	Telephone and telegraph wire and cable	(5)	(5)	(5)
33578 —	Power wire and cable ⁷	(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 ⁵	7,416,358	946,536	1,125,415
33579 —	Insulated optical fiber cable	(6)	(6)	(6)
32318 —	Optical fiber cable ⁶	2,092,511	325,248	70,737

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²This dollar value represents the c.i.f. (cost, insurance, and freight) value to port of export.³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. These figures include both import value and duty value.⁴These import data include other items such as Christmas tree lights, ignition harness sets, and ignition wiring sets.⁵Product codes 3357B, 33578, 3357C, 3357D, 3357E, 33576, and 33577 are combined to avoid disclosing figures for individual companies. See tables 26 through 30 for individual product data.⁶Product codes 33579 and 32318 are combined to avoid disclosing figures for individual companies. See tables 26 through 30 for individual product data.⁷The manufacturers' shipments for "Power wire and cable" include "Mineral and paper insulated cable," while the export figures do not.

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

7.1 COMPUTERS AND OFFICE AND ACCOUNTING MACHINES

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 791 companies are included. No estimate is derived for the small firms excluded from the scope of the survey.

SUMMARY OF FINDINGS

In 1994, manufacturer's shipments of computers were valued at \$38.1 billion, an increase of 28 percent from the 1993 total of \$29.7 billion. Computer storage devices and equipment were valued at \$5.5 billion in 1994, a decrease of 4 percent from the 1993 total of \$5.7 billion. Loaded computer processor boards and board subassemblies were valued at \$17.6 billion in 1994, an increase of 16 percent from the 1993 total of \$15.1 billion. Magnetic and optical recording media were valued at \$4.7 billion in 1994, an increase of 7 percent from the 1993 total of \$4.5 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 Computer. 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; non-printing 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 pre-processor circuitry before being presented to the micro-computer 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 non-contact 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: 1987 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987
3571X—	Electronic computers ¹	38,132.2	^r 29,659.1	28,571.2	26,274.1	25,630.1	25,076.9	23,787.4	23,212.6
35713	Large-scale processing equipment ¹	4,458.7	4,104.4	5,267.1	(NA)	(NA)	(NA)	(NA)	(NA)
35714	Medium-scale and small-scale processing equipment ¹	3,088.7	2,442.3	3,347.3	(NA)	(NA)	(NA)	(NA)	(NA)
35715	Personal computers and workstations ¹	24,494.3	^r 18,888.8	17,059.6	(NA)	(NA)	(NA)	(NA)	(NA)
35716	Portable computers ¹	4,560.1	2,575.6	1,644.2	(NA)	(NA)	(NA)	(NA)	(NA)
35717	Other general-purpose digital processing units ¹	856.1	946.2	493.5	(NA)	(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 ¹	674.3	^r 701.8	759.4	(NA)	(NA)	(NA)	(NA)	(NA)
36798	Loaded computer processor boards and board subassemblies ²	17,514.8	15,087.1	13,745.8	12,590.4	2,247.2	2,854.3	4,339.0	4,565.1
35721	Computer storage devices and equipment	5,512.1	^r 5,730.7	6,282.4	5,609.7	7,488.2	7,215.3	7,548.4	6,332.9
35722	Parts for computer storage devices and subassemblies	1,955.0	^r 1,496.4	1,357.1	780.4	955.2	686.5	831.2	554.0
35751	Computer terminals	1,240.4	1,531.3	1,707.9	1,729.5	2,066.7	2,759.2	2,672.6	2,429.2
35752	Parts for computer terminals	(³)	275.9	192.1	417.0	362.9	208.3	233.6	123.0
35771	Computer peripheral equipment, n.e.c.	10,412.2	9,810.2	8,505.6	7,763.6	7,696.6	8,271.1	7,385.0	7,695.7
35772	Parts for input/output equipment	2,566.4	2,554.3	3,053.2	4,186.9	3,705.5	3,647.1	4,345.3	4,230.7
35784	Calculating and accounting machines ⁴	1,464.2	^r 1,454.2	967.5	973.5	(D)	(D)	(D)	(D)
35789	Parts for calculating, coin, or currency handling, and accounting machines ⁵	87.4	77.7	73.4	97.4	133.3	155.9	70.1	99.9
35792	Automatic typing and word processing machines	290.3	342.9	465.2	417.1	342.5	533.1	566.7	1,197.2
35793	Duplicating machines	68.4	(D)	(D)	(D)	(D)	159.9	152.8	125.9
35795	Mailing, letter-handling, and addressing machines	967.4	1,267.8	1,152.4	1,124.8	976.9	767.3	811.7	800.9
35799	Check handling, electric stapling and dictating machines, typewriters and all other office machines, n.e.c.	570.2	(D)	(D)	517.6	545.9	712.5	674.8	571.7
3579A	Parts for office machines, n.e.c.	387.9	^r 344.7	263.3	199.2	451.6	414.2	575.7	313.9
36950	Magnetic and optical recording media	4,782.3	^r 4,483.3	4,336.8	3,894.4	3,965.4	3,672.8	3,149.7	3,226.3

¹Prior to 1992, product code separation for computers is not available.²"Computer parts," product code 35712, was considered to be "Printed circuit assemblies (loaded boards, subassemblies and modules)" and recoded to product code 36798 in 1991.³Based on discussions with respondents several companies reported products as parts for computer terminals (product class 35752) that should have been classified as electronic components, including printed circuit boards, printed circuit assemblies, loaded boards and modules, integrated microcircuits, or related electronic devices or instruments. Data for 1994 is not shown because it is not comparable to prior years.⁴Product codes 35781 and 35782 were combined into product code 35784 in 1991.⁵Product code 35783 was changed to product code 35789 in 1991.D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified. ^rRevised by 5 percent or more from previously published figures.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 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
3571—	Electronic computers (automatic data processors)	207	(X)	38,132,221	(X)	^r 29,659,050
	General-purpose digital units by (MLP) ¹	153		17,015,097	17,365,254	28,957,265
3571X 41	Under \$1,000 (MLP)	28		4,089,256	7,132,322	1,856,447
3571X 43	\$1,000 to \$4,999 (MLP)	102		12,266,910	^r 9,703,677	^r 16,261,103
3571X 45	\$5,000 to \$14,999 (MLP)	61		515,319	336,495	2,710,988
3571X 47	\$15,000 to \$49,999 (MLP)	46		113,995	166,110	3,065,491
3571X 49	\$50,000 to \$249,000 (MLP)	40		24,834	22,858	1,868,183
3571X 51	\$250,000 to \$1,000,000 (MLP)	22		3,926	3,008	1,121,318
3571X 53	Over \$1,000,000 (MLP)	9		^a 857	^a 784	2,073,735
	General-purpose digital units by type	153		17,015,097	17,365,254	28,957,265
35713 00	Large-scale processing equipment (64 megabytes in MINIMUM main memory configuration)	27		48,873	30,500	4,104,385
35714 00	Medium-scale and small-scale processing equipment (up to 64 megabytes in MINIMUM main memory configuration), excluding personal computers or workstations	45		250,703	^r 199,220	2,442,263
35715 00	Personal computers and workstations, excluding portables	90		14,035,125	14,170,746	18,888,807
35716 00	Portable computers (typically with attached display, e.g., laptops, notebooks, and palmtops)	31		2,453,812	2,694,409	2,575,593
35717 00	Other general-purpose digital processing units	16		226,584	270,379	946,217
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	71	(S)	674,256	(S)	^r 701,785
36798 XX	Printed circuit assemblies (loaded boards, sub-assemblies, and modules) ²	531	(X)	17,514,845	(X)	15,087,127
	Loaded computer processor boards and board subassemblies by (MLP):					
36798 31	Under \$1,000 (MLP) ¹	31	(X)	1,170,589	(X)	690,980
36798 33	\$1,000 to \$4,999 (MLP) ¹	37	(X)	1,104,173	(X)	577,921
36798 35	\$5,000 to \$14,999 (MLP) ¹	19	(X)	315,739	(X)	23,659
36798 37	\$15,000 to \$49,999 (MLP) ¹	10	(X)	40,308	(X)	42,140
36798 39	\$50,000 to \$249,000 (MLP) ¹	6	(X)	⁽³⁾	(X)	⁽³⁾
36798 41	\$250,000 to \$1,000,000 (MLP) ¹	2	(X)	⁽³⁾	(X)	⁽³⁾
36798 43	Over \$1,000,000 (MLP) ¹	3	(X)	⁽³⁾	(X)	⁽³⁾
36798 15	Computer processors (systems boards, array processors, etc.), not specified by MLP ¹	62	(X)	³ 2,530,718	(X)	³ 2,003,930
36798 11	Memory boards, including boards for adding memory to peripherals	127	(X)	2,682,985	(X)	1,990,755
36798 13	Peripheral controller boards (e.g., graphics boards and I/O controllers)	143	(X)	667,910	(X)	744,340
36798 17	Instrumentation boards (e.g., D/A converters and frequency counters)	91	(X)	2,765,365	(X)	2,673,278
36798 19	Communication boards (e.g., FAX, modems, and LAN adaptors)	119	(X)	1,012,069	(X)	807,429
36798 21	Other board level products for use within a computer system	38	(X)	720,268	(X)	1,449,503
36798 22	Other boards	151	(X)	2,477,373	(X)	1,971,877
36798 29	Receipts for contract work by contract assemblers, board stuffers, and related job shops	130	(X)	2,087,348	(X)	2,081,315
35721 —	Computer storage devices and equipment	103	(X)	5,512,120	(X)	^r 5,730,731
	Rigid magnetic disk drives:					
	Less than \$5,000 (MLP) each:					
35721 35	Less than 2-1/2 inches	5	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾
35721 37	2-1/2 inches up to but not including 3-1/2 inches	3	⁴ 109,166	⁴ 25,970	⁴ 69,696	⁴ 20,154
35721 39	3-1/2 inches up to but not including 5-1/4 inches	23	2,185,983	1,561,995	^r 3,787,115	^r 1,666,784
35721 41	5-1/4 inches and greater	20	250,764	281,396	344,571	560,739
35721 43	\$5,000 MLP or more	13	^b 51,761	603,737	^r 46,206	615,848
35721 45	Disk subsystems and disk arrays for multiuser computer systems	24		128,207	^a 95,415	^a 570,917

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 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
35721 —	Computer storage devices and equipment—Con.					
35721 47	Flexible magnetic disk drives	8	(S)	40,378	^b 182,697	^b 39,346
	Optical disk drives, including CD-ROM and magneto-optical equipment:					
	CD-ROM:					
35721 51	"Juke-box" capable of handling multiple disks . . .	12	(S)	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾
35721 53	Single-disk equipment	8	(S)	⁵ 102,052	⁵ 1,025,204	⁵ 268,385
35721 55	WORM (write once, read many times)	5	(D)	(D)	6,828	43,418
35721 57	Rewritable	8		22,426	(D)	(D)
35721 59	Optical subsystems for multiuser computer systems	7	(S)	^b 196,799	^b 28,029	129,065
	Auxiliary storage, not disk or tape-based, for multiuser computer systems:					
35721 61	Encased or enclosed in a housing, enclosure, or cabinet	11	(D)	(D)	(D)	(D)
35721 63	Other	1	(D)	(D)	-	-
35721 65	Other direct-access storage equipment	13		410,464	^a 93,581	^a 275,208
	Serial-access storage equipment (e.g., tape drives):					
35721 71	1/2-inch tape drives	13	(S)	638,574	^r 600,264	^r 728,216
35721 73	1/4-inch tape drives	14	(S)	319,791	1,252,613	211,518
35721 75	Helical scan tape drives	13	(S)	⁽⁶⁾	(S)	⁽⁶⁾
35721 77	Cassette tape drives	4	(S)	⁽⁶⁾	(S)	⁽⁶⁾
35721 79	Other serial-access storage equipment	10	(S)	⁶ 846,463	(S)	⁶ 783,448
35722 —	Computer storage parts and subassemblies	23	(X)	1,954,981	(X)	^r 1,496,394
35751 —	Computer terminals	68	(X)	1,240,366	(X)	1,531,280
35751 80	Remote batch terminals	8		^a 19,291	^a 30,318	^a 30,806
35751 61	Teleprinters	9	(S)	^a 111,387	194,714	146,996
	Display terminals, including graphics type, whether or not incorporating a printing mechanism:					
35751 63	X-terminals	15		177,935	245,184	^b 326,127
	Other than X-terminals:					
35751 65	13-inch or less display	13		223,906	74,778	199,354
35751 67	More than 13-inch but less than 19-inch display .	25		1,698,611	717,341	3,558,959
35751 69	19-inch or more display	17		^b 40,729	^b 61,358	^b 54,250
35752 —	Computer terminal parts and subassemblies	14	(X)	(⁷)	(X)	^b 124,429
35771 —	Computer peripheral equipment, n.e.c.	277	(X)	10,412,237	(X)	9,810,214
	Keying equipment:					
35771 33	Keyboards	28	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾	⁽⁸⁾
35771 35	Other keying equipment	7		^a 20,555,276	^a 707,601	^a 19,518,063
35771 02	Mouse devices	14	⁽⁹⁾	⁽⁹⁾	⁽⁹⁾	⁽⁹⁾
35771 04	Digitizers and light pen tablets	9		⁹ 10,636,780	⁹ 176,250	⁹ 8,197,261
35771 06	Other manual input devices (joysticks, trackballs, touchscreens, etc.)	10		955,237	51,660	^a 893,491
35771 08	Computer output to microfilm (COM) equipment	5	(S)	66,717	⁽¹⁰⁾	⁽¹⁰⁾
35771 12	Media copying and/or conversion equipment	9		20,664	33,794	¹⁰ 17,219
	Optical scanning devices:					
35771 14	Bar code devices	35		1,081,606	734,802	^a 849,743
35771 16	OCR equipment	17		684,765	^a 217,634	497,661
	Other than bar code or OCR devices:					
35771 18	Flat bed scanners	8	(S)	210,361	157,953	^a 142,486
35771 22	Hand-held scanners	6		16,620	11,869	20,137
35771 24	Other	17		72,575	180,801	136,116
35771 26	Voice recognition equipment	11	(S)	23,015	52,056	21,797
35771 28	Magnetic strip and ink recognition equipment	11		^a 88,464	^b 138,407	^a 75,613
35771 29	Other document entry equipment	3	(D)	(D)	(D)	(D)
	Computer printers:					
	Impact printers:					
35771 74	Line type (typically with a Centronics interface with output measured in lines per minute)	18		395,421	314,136	389,166
35771 72	Serial type (typically with a serial and/or parallel interface with output measured in characters per second)	32		925,521	1,036,075	805,757

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 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
35771 —	Computer peripheral equipment, n.e.c.—Con. Computer printers—Con. Nonimpact printers: Laser:					
35771 41	Under \$15,000 (MLP)	28	(¹¹)	(¹¹)	(¹¹)	(¹¹)
35771 43	\$15,000 (MLP) and over	9	¹¹ 2,156,711	¹¹ 2,942,189	¹¹ 2,568,920	¹¹ a ^{3,044,209}
35771 45	Other (inkjet, thermal, ion deposition, etc.)	30	2,958,316	1,213,156	4,750,472	1,402,926
35771 47	Peripheral sharing devices	11	1,305,620	314,165	^r 424,915	^r 177,787
35771 49	Font cartridges	4	1,640	395	4,162	617
	Plotters, including electrostatic:					
35771 51	Under \$15,000 (MLP)	10	39,730	184,350	^r 61,510	435,358
35771 53	\$15,000 (MLP) and over	6	1,758	79,393	2,210	84,599
	Monitors, excluding terminals:					
35771 55	Flat panel displays	6	(D)	(D)	123,163	99,739
	Other than flat panel displays (e.g., CRT):					
35771 56	Less than 19-inch display	32	^a 730,626	^b 396,323	365,173	231,777
35771 58	19-inch or more display	17	^a 215,328	^a 201,286	227,042	212,559
35771 62	Monitor screen projection devices (e.g., LCD panels)	6	124,376	271,587	(D)	(D)
35771 63	All other input/output devices	67	(X)	^a 660,465	(X)	^b 618,845
35771 68	Accessories for computer peripherals (e.g., device supports and ergonomic aids)	40	(X)	^a 245,806	(X)	^a 259,707
35772 —	Parts and subassemblies for computer peripherals and input/output equipment	70	(X)	^a 2,566,416	(X)	2,554,290
35784 —	Calculating and accounting machines	46	(X)	1,464,211	(X)	^r 1,454,224
35784 54	Funds transfer devices	8	(S)	(¹²)	(S)	(¹²)
35784 55	Point-of-sale terminals	24	^b 284,986	726,325	^b ^r 255,289	^r 928,258
35784 16	Machines for sorting, wrapping, counting, changing, or dispensing coins and/or currency	13	325,634	139,252	268,335	120,912
35784 59	Other coin or currency handling machines, including cash registers, calculators, accounting, bookkeeping and billing machines, and credit card imprinters	16	(X)	¹² 598,634	(X)	¹² a ^{405,054}
35789 —	Parts for calculating, coin or currency handling, and accounting machines	16	(X)	^a 87,355	(X)	^a 77,693
35792 —	Automatic typing and word processing machines (all types)	5	1,579,941	290,250	1,717,001	342,924
35793 —	Duplicating machines	7	(S)	68,395	(D)	(D)
35795 —	Mailing, letter handling, and addressing machines	32	(X)	967,390	(X)	1,267,755
35795 34	Forms handling equipment, including bursters, decollators, and imprinters	9	(S)	49,372	479,530	48,440
35795 37	Mailing machines, including postage franking machines	8	(S)	(¹³)	(¹³)	(¹³)
35795 43	Letter and envelope handling machines	15	(S)	816,032	¹³ 769,789	¹³ 1,097,369
35795 48	Other mailing, letter handling, and addressing machines	13	^b 8,439	101,986	^b ^r 7,980	^b 121,946
35799 —	Other office machines, n.e.c.	44	(X)	570,154	(X)	(D)
35799 31	Check handling machines	11	^b 42,878	^b 196,412	52,367	^b 90,990
35799 32	Electric stapling machines, office type	3	(S)	8,986	^b 225,439	^b 10,495
35799 33	Time recording and time stamp machines	12	224,245	81,769	^a ^r 263,691	110,135
35799 41	Paper cutting machines and apparatus, office type ..	3	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)
35799 44	Paper shredders	2	¹⁴ 701,697	¹⁴ 34,783	¹⁴ ^r 575,251	¹⁴ 32,696
35799 45	Perforating or stapling machines, nonelectric.	5	(S)	(¹⁵)	3,843,041	^b 38,624
35799 95	All other office machines, n.e.c., including pencil sharpeners, typewriters, dictating machines, binding machines, ticket counting machines, and voting machines	24	(X)	¹⁵ 248,204	(X)	(D)
3579A —	Parts for office machines, n.e.c.	35	(X)	387,930	(X)	^r 344,689

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Computers and Office and Accounting Machines: 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
36950 —	Magnetic and optical recording media.....	64	(X)	4,782,290	(X)	¹ 4,483,254
	Rigid disks:					
36950 12	Less than 2-1/2 inches.....	3	(S)	⁽¹⁶⁾	(S)	⁽¹⁶⁾
36950 14	2-1/2 inches up to but not including 3-1/2 inches ..	7	(S)	¹⁶ 74,207	(S)	¹⁶ 122,599
36950 16	3-1/2 inches up to but not including 5-1/4 inches ..	13	(S)	801,891	(S)	¹ 638,018
36950 18	5-1/4 inches and greater	9	(S)	103,220	(S)	138,947
	Flexible disks:					
36950 22	3-1/2 inches up to but not including 5-1/4 inches ..	16	(S)	583,405	(S)	¹ 589,445
36950 24	5-1/4 inches and greater	17	(S)	77,863	(S)	138,270
36950 09	Optical disks	11	(S)	⁽¹⁷⁾	(S)	⁽¹⁷⁾
36950 26	Bulk magnetic tape	2	(S)	¹⁷ 321,539	(S)	¹⁷ 275,336
	Packaged magnetic tape:					
36950 11	In reels for computer use	5	(S)	⁽¹⁸⁾	(S)	⁽¹⁸⁾
36950 13	In cassette and cartridge for computer use	18	(S)	¹⁸ 681,504	(S)	¹⁸ 741,157
36950 28	In forms suitable for audio use	9	(S)	414,306	(S)	250,505
36950 21	In video cassette, 8-mm and 1/2-inch	13	(S)	894,389	(S)	¹ 935,192
36950 23	In video cassette, 3/4 (19-mm) and 2-inch (51-mm)	4	(S)	99,956	(S)	68,675
36950 34	Other package magnetic tape	2	(S)	⁽¹⁹⁾	(S)	⁽¹⁹⁾
36950 39	Other magnetic recording media, including parts	23	(X)	¹⁹ 730,010	(X)	¹⁹ 585,110
	Nonmanufacturing revenue of manufacturing establishments:					
50650 00	Supplies and accessories for use with computers or business machines (resales)	57	(X)	971,602	(X)	870,456
99980 49	Research and development, testing, and evaluation of systems and components	17	(X)	10,679	(X)	26,134
	Software sold with computer systems shipped by manufacturers:					
73721 00	Operating system software	23	(X)	50,546	(X)	¹ 44,351
73722 00	Utilities and device managers	15	(X)	17,950	(X)	⁽²⁰⁾
73723 00	Application software	42	(X)	183,681	(X)	⁽²⁰⁾
73724 00	Other software	17	(X)	151,496	(X)	²⁰ 319,578
73730 00	Systems integration revenues, including configuration, installation and site preparation, and custom programming	24	(X)	171,364	(X)	¹ 116,584
73700 00	Other nonmanufacturing revenues associated with computer systems	85	(X)	1,571,479	(X)	1,339,441

¹MLP Manufacturer's list price.²These 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*.³Data for product codes 36798 39, 36798 41, and 36798 43 are included with product code 36798 15 to avoid disclosing data for individual companies.⁴Data for product code 36721 35 are included with 36721 37 to avoid disclosing data for individual companies.⁵Data for product code 35721 51 are included with product code 35721 53 to avoid disclosing data for individual companies.⁶Data for product codes 35721 75 and 35721 77 are included with product code 35721 79 to avoid disclosing data for individual companies.⁷Based on discussions with respondents several companies reported products as parts for computer terminals (product code 35752 --) that should have been classified as electronic components, including printed circuit boards, printed circuit assemblies, loaded boards and modules, integrated microcircuits, or related electronic devices or instruments. Data for 1994 is not shown because it is not comparable to prior years.⁸Data for product code 35721 33 are included with product code 35721 35 to avoid disclosing data for individual companies.⁹Data for product code 35771 02 are included with product code 35771 04 to avoid disclosing data for individual companies.¹⁰Data for product code 35771 08 are included with product code 35771 12 to avoid disclosing data for individual companies.¹¹Data for product code 35771 41 are included with product code 35771 43 to avoid disclosing data for individual companies.¹²Data for product code 35784 54 are included with product code 35784 59 to avoid disclosing data for individual companies.¹³Data for product code 35795 37 are included with product code 35795 43 to avoid disclosing data for individual companies.¹⁴Data for product code 35799 41 are included with product code 35799 44 to avoid disclosing data for individual companies.¹⁵Data for product code 35799 45 are included with product code 35799 95 to avoid disclosing data for individual companies.¹⁶Data for product code 36950 12 are included with product code 35950 14 to avoid disclosing data for individual companies.¹⁷Data for product code 36950 09 are included with product code 35950 26 to avoid disclosing data for individual companies.¹⁸Data for product code 36950 11 are included with product code 35950 13 to avoid disclosing data for individual companies.¹⁹Data for product code 36950 34 are included with product code 35950 39 to avoid disclosing data for individual companies.²⁰Data for product codes 73722 and 73723 are included with product code 73724 to avoid disclosing data for individual companies.- Represents zero. D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. ¹Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item is estimated. ^bOver 26 percent of this item is estimated.

Table 3. Shipments, Exports, Imports and Apparent Consumption of Computing and Accounting Machines: 1994

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

Product code ¹	Product description	Manufacturers' shipments (f.o.b. plant)		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
		Quantity	Value	Quantity	Value at port	Quantity	Value
35713 00-35718 00	Computers, digital, analog, hybrid, and other	(X)	37,458.0	3,801.7	8,688.5	4,822.6	5,451.5
35721 47	Flexible magnetic disk drives	(S)	40.4	766.5	155.2	29,964.1	1,232.0
35721 35, 37, 39, 41, 43, 45	Rigid magnetic disk drives, including disk subsystems and disk arrays	2,725.9	3,229.2	2,201.5	1,670.7	33,595.9	7,655.8
35721 51, 53, 55, 57, 59, 61, 63, 65, 71, 73, 75, 77, 79	Computer storage devices and equipment, n.e.c.	(S)	2,649.0	1,670.6	1,589.2	13,742.6	2,244.1
35771 41, 43, 45, 72, 74	Computer printers	6,436.0	5,507.6	(NA)	(NA)	(NA)	(NA)
35771 33	Computer keyboards	(D)	(D)	2,597.7	161.8	23,517.8	455.8
35751 61, 63, 65, 67, 69, 80	Computer terminals	(X)	1,240.4	443.1	378.2	674.3	187.3
35771 56, 58	Monitors, CRT-type	946.0	597.6	886.1	484.2	(NA)	(NA)
35771 55, 62	Monitors, n.e.c.	(D)	(D)	161.7	158.1	2,774.1	1,837.7
35771 14, 16, 18, 22, 24, 28	Optical scanning devices and magnetic strip and ink recognition equipment	(S)	1,516.9	582.0	358.6	(NA)	(NA)
35771 02, 04, 06, 08, 12, 26, 29, 35, 47, 49, 51, 53, 63	Computer peripheral equipment, n.e.c.	(X)	(D)	3,627.6	1,275.3	3,309.3	242.0
35771 68, 35772 00	Parts, subassemblies, and accessories for computer peripheral equipment	(X)	2,812.2	(X)	(NA)	(X)	(NA)
35793 00	Duplicating machines	(S)	68.4	12.5	23.4	39.6	67.4
35784 55	Point-of-sales terminals	285.0	726.3	56.5	60.9	1,160.0	235.2
35784 16, 54, 59	Coin or currency handling machines, n.e.c., including cash registers, accounting, bookkeeping, and billing machines, and credit card imprinters	(X)	737.9	(NA)	(NA)	89,954.3	797.4
35789 00	Parts for calculating, coin, or currency handling, and accounting machines	(X)	87.4	(X)	218.2	(X)	257.0
35792 00	Automatic typing and word processing machines (all types)	1,579.9	290.3	(NA)	(NA)	(NA)	(NA)
35795 00	Mailing, letter handling, and addressing machines	(X)	967.4	81.7	77.9	222.5	101.5
35799 33	Time recording and time stamping machines	224.2	81.8	127.5	16.3	606.2	5.7
35799 31-32, 41, 44-45, 95	Office machines, n.e.c.	(X)	570.2	1,779.9	129.3	28,618.7	481.6
3579A —	Parts for office machines, n.e.c.	(X)	387.9	(X)	118.9	(X)	154.6

¹For 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.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

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.

7.2 SWITCHGEAR, SWITCHBOARD APPARATUS, RELAYS, AND INDUSTRIAL CONTROLS

INTRODUCTION

These data cover manufacturers of switchgear, switchboard apparatus, relays, and industrial controls, except very small firms (generally less than 20 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 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 719 companies are included. No estimate is derived for the small firms excluded from the survey.

SUMMARY OF FINDINGS

During 1994, the total value of shipments of switchgear and switchboard apparatus was \$5.6 billion, up 5 percent from the 1993 value of \$5.3 billion. The 1994 shipments include power circuit breakers, valued at \$530.7 million, an increase of 2 percent from 1993; low voltage panelboards, valued at \$1.7 billion, an increase of 4 percent from 1993; fuses and fuse equipment, valued at \$332.1 million, an increase of 4 percent from 1993; molded case circuit breakers, valued at \$1.1 billion, an increase of 10 percent from 1993; duct, valued at \$227.9 million, an increase of 14 percent from 1993; and switchgear valued at \$1.6 billion, an increase of 4 percent from 1993. During 1994, the total value of shipments of relays and industrial controls was \$7.6 billion, up 11 percent from the 1993 value of \$6.9 billion. The 1994 shipments include general-purpose relays valued at \$675.7 million, a decrease of 10 percent from 1993; specific-purpose industrial controls, valued at \$2.7 billion, an increase of 18 percent from 1993; general-purpose industrial controls, valued at \$3.7 billion, an increase of 11 percent from 1993; and motor controller accessories valued at \$502.1 million, an increase of 5 percent from 1993.

EXPLANATION OF TERMS

Relay. A device that is operative by a variation in the conditions of one electric circuit to effect the operation of other devices in the same or another electric circuit.

Control Relay. A relay that functions to initiate or to permit the next desired operation in a control circuit or scheme.

Overload Relay. A relay that functions at a predetermined value of current (overcurrent relay).

Busway. A prefabricated electric distribution system consisting of bus bars in a protective enclosure together with associated fittings. All busways include, as a minimum, bus bars, some supporting means for these bars, and a housing around them.

General Industry Controls

Industrial Control Pushbuttons, Selector Switches, Pilot Lights, and Foot Switches (All Voltages). Ac or dc manually operated devices designed primarily to operate in the control circuits of industrial applications. Includes control stations, reed devices, and rotary switches with control circuit ratings. Excludes metal mill and crane accessories and similar items incorporated in products covered by other categories (such as conversion kits for starters, and those designed for aircraft, appliances, business machines, computers, or elevator applications).

Industrial Control Relays (All Voltages). Ac and dc operated electromagnetic relays designed primarily to perform logic functions and/or operate in the control circuits of industrial applications. Includes reed devices and relays that carry ratings in addition to those applicable to control circuits and relays with mounted timer attachments. Excludes timer attachments sold separately, relays designed for use with metal mill or crane control, and relays incorporated in products covered by other categories. Also excludes relays designed for military applications or for the appliance or television industries.

Motor Controller Accessories. 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 control enclosures and enclosure fittings, reset mechanisms. Excludes motor circuit switches sold separately.

Ac Full Voltage, Noncombination Magnetic Starters (1,000 Volts or Less). Electromagnetic switches with overload protection rated in amperes, horsepower, or kilowatts for application at full voltage with nonsynchronous motors. Includes open and enclosed; single and multiple-speed; reversing and nonreversing; electrically, mechanically, or magnetically held; ac or dc operated; and controls for one or more squirrel cage or wound rotor motors. Excludes those starters that qualify for any specific application item.

Ac Full Voltage, Combination Magnetic Starters (1,000 Volts or Less). Electromagnetic switches with or without overload protection combined with a disconnect device, rated in amperes, horsepower, or kilowatts for application at full voltage with nonsynchronous motors. Includes open and enclosed; single- and multiple-speed; reversing and nonreversing; electrically, mechanically, or magnetically held; ac or dc operated; and controls for one or more squirrel cage or wound rotor motors. Variations include those with fusible or nonfusible disconnect switch or circuit breaker; and those with oil well, irrigation, or other pumping applications. Excludes those starters that qualify for any specific application item.

Disconnect Switches (600 Volts or Less). A 600-volt rated switch intended primarily to be used with electric motor controls, and where available, when fault currents greater than 10 kA RMS symmetrical are likely to be encountered. The device may be hp and ampere rated, and may meet the requirements for service entrance disconnecting means. "Safety Switches" are not included in this category.

Ac Full Voltage Manual Controllers (1,000 Volts or Less). Manual switches with or without overload protection, with or without disconnect devices, rated in amperes, horsepower, or kilowatts for application at full voltage with nonsynchronous motors. Includes open and enclosed, single- and multiple-speed, reversing and nonreversing, and controls for one or more squirrel cage or wound rotor motors. Variations include toggle switches, drum switches, and loom switches. Excludes those devices that qualify for any specific application item.

Solid-State Controllers. All primarily solid-state devices designed to operate in power circuits and directly control the single phase or polyphase power delivered to motors, ovens, furnaces, or other power-consuming devices should be reported as an ac device, 1,000 volts or less. Included are solid-state starters and contactors, solid-state reduced voltage (current) controllers that control motor acceleration from rest to rated speed, and solid-state deceleration (braking) controllers. Excluded are those solid-state current sensing devices such as overload relays with outputs that operate in control circuits and are sold separately, resistance welding controls, adjustable speed drive controls, and any other product that qualifies for inclusion in other specific application or general industry control categories.

Ac Magnetic Contactors (1,000 Volts or Less). Electromagnetic switches without overload protection and without disconnect devices rated in amperes, horsepower, or kilowatts. Includes open and enclosed; single- and multiple-speed; reversing and nonreversing; electrically, mechanically, or magnetically held; ac or dc operated, for lighting, heating, motor, power distribution, or high frequency applications.

Ac Reduced Voltage Magnetic or Manual Controllers (1,000 Volts or Less). Magnetic switches with or without overload protection, with or without disconnect devices, rated in amperes, horsepower, or kilowatts, which start nonsynchronous motors at reduced voltage. Includes open and enclosed, single- and multiple-speed, reversing and nonreversing types. Variations include controllers with primary or secondary resistor, reactor, autotransformer, partwinding, and stardelta starters. Excludes those devices that qualify for any specific application item.

Synchronous Motor Controllers (1,000 Volts or Less). Armature and field controls for synchronous motors, starting at full or reduced voltage. Excludes those devices

that qualify for any specific application item.

Motor Control Centers (1,000 Volts or Less). Factory-built and customer-assembled control centers, including the sections and units sold separately.

Medium Voltage Nonsynchronous and Synchronous Motor Controllers (Over 1,000 Through 7,200 Volts). Manual and magnetic devices for the control of squirrel cage, wound rotor, and synchronous motors. Includes open and enclosed, combination and noncombination, full or reduced voltage, reversing and nonreversing air brake, vacuum brake, and oil immersed starters and contactors. Excludes those devices that qualify for any specific application item.

Positioning Switches (All Voltages). Ac or dc switches and sensors that respond to movement or position. Includes mechanical and air-operated limit switches, proximity switches, photoelectric sensors and relays, and cam switches. Excludes those devices used in or covered by solid-state control systems or specific application items.

Industrial Control Timers (All Voltages). Mechanically or electrically operated (ac or dc) timers primarily used to operate in logic and control circuits of industrial applications. Includes timing attachments used with contactors or relays; motor driven, pneumatic, and electronic timing relays; time delay relays; and undervoltage time delay relays. Excludes relays with timer attachments mounted and timers designed as solid-state logic units or for metal mill or crane applications or incorporated in products covered by other categories.

Resistors and Rheostats. Separate components and assemblies of carbon and metal resistors designed to function in a power or motor field circuit. Includes manual and motor operated rheostats, cast and wound metal resistors, and carbon-pile resistors. Excludes resistors designed for use in electronic circuits.

Miscellaneous General Application Devices (All Voltages). Mechanical and electrical devices (ac or dc) designed for general industrial application that do not qualify for classification in any other category and are not used in products covered by any other category. Includes pressure, vacuum, temperature, and liquid level switches; phase or frequency sensitive relays; solenoids; magnetic unloaders; gas engine cutouts; saturating shunt; control circuit master switches; control circuit fuse blocks; sealed switches (plugging and antiplugging); zero speed switches; motion deflectors; dimmers; and dynamic braking controls sold separately.

Dc Power Circuit Devices (All Voltages). Manual and magnetic devices sold separately for the control of dc power. Includes open and enclosed; combination and noncombination; full or reduced voltage; reversing or nonreversing air brake; and oil immersed dc power circuit devices. Excludes those devices that qualify for any specific application item.

Ac or dc Friction Brakes and Clutches (All Voltages). All devices used to engage or control motion by slowing or stopping, provided the clutch or brake is operated or released electrically. Braking or clutch action may be controlled mechanically, hydraulically, or magnetically, using shoes or discs. Excludes dynamic braking controls.

Specific Application or Specific Industry Controls

Ac or dc Control Panels (All Voltages). Assemblies and components in which the principal power circuits are ac or dc, for applications other than welding, marine auxiliaries, crane, hoist, or adjustable speed drives. Excludes panels that have the outputs controlled by solid-state digital logic. Specifically includes analog controllers, furnace and lifting magnet controls, regulators, and motor controls that provide for plugging and/or dynamic braking.

U.S. Coast Guard, Navy, and Marine Auxiliary Controls and Accessories (All Voltages). Controllers and accessories designed to meet the requirements of the U.S. Navy, U.S. Coast Guard, and similar specifications for marine auxiliary control. Includes all ac or dc versions of such power circuit or control circuit devices for application above or below deck, except adjustable speed drive controls and solid-state digital logic systems for marine applications.

Crane and Hoist Controls (All Voltages). Ac or dc control assemblies designed to control hoist, trolley, and/or bridge motion for application in mines, traffic-carrying bridges, elevators, and general industry. Includes crane protective panels, hoist or crane master switches, and adjustable speed drives for these purposes. Excludes crane and hoist controls for marine applications, pendant control stations, and other accessories sold separately.

Definite-Purpose Contactors and Starters (600 Volts or Less). Definite-purpose full voltage contactors and starters, including open and enclosed devices. Including, but not limited to, heating loads, lighting loads, refrigeration, solid-state starters, and contactors.

Numerical Controls for Machine Tools Positioning. Numerical controls activated by direct data input, punched tape, punched cards, magnetic tape, cassette, or manual data input. Includes all controls in which point-to-point positioning and cutting or forming (regardless of the number of movement axes or auxiliary functions) are controlled automatically by means of numerical programs inserted into the systems. If a machine control permits positioning and continuous path operations, it is classified as continuous path.

Continuous Path or Computer Numerical Control. Numerical program controls activated by direct data input, e.g., punched tape, punched cards, magnetic tape, cassette, or manual data input. Includes all machine controls with which the path is processed by point-to-point positioning; the path is automatically controlled by means of numerical programs inserted into the systems. If a machine control permits positioning and continuous path operations, it is classified as continuous path.

Digital Readout Systems, Including Dial or Plugboard. Digital readout systems or dial or plugboard type of prerecorded motion program control systems. Includes all controls 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.

Resistance Welding Control, All Voltages. Controllers and accessories for resistance welding. Includes contactors, timing devices, electronic and solid-state analog and digital controls. Excludes control for arc welding.

Metal Mill Control and Accessories (All Voltages). Any ac or dc power or control circuit device designed for and sold separately for metal mill applications. Includes master switches, limit switches (power or control circuit), timers, and relays.

Other Specific-Purpose Equipment (All Voltages). Any industrial control equipment designed for a specific application that is not covered by any other category, such as aircraft contractors and controllers rated 601 V up to 2200 V, dynamic braking controls sold separately, dimmers, and automatic transfer switches.

Ac and dc Adjustable Speed Drive Controls (All Voltages). The control portion of adjustable (regulated) speed drives for controlling motors by adjusting voltage or adjusting frequency. Includes single and multimotor drive controls, eddy current coupling drives, all elements of the power units (except motor generators), and all auxiliary controls sold as part of the drive system. Excludes rotating equipment.

All Other General Industry Devices and Systems. Solid-state digital panels using either wired or retentive memory logic to provide data or control processes or machine function systems that are not elsewhere classified.

Table 4. Value of Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1985 to 1994

[Millions of unadjusted dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
36132	Power circuit breakers	530.7	520.8	480.8	368.5	387.6	393.4	386.0	372.8	377.9	377.5
36133	Low-voltage panelboards	1,744.4	1,687.1	1,531.1	1,642.6	1,722.3	1,747.2	1,663.5	1,569.3	1,552.0	1,607.4
36134	Fuses and fuse equipment	332.1	†319.9	412.8	409.4	419.3	418.5	390.3	367.6	362.1	368.8
36135	Molded case circuit breakers	1,106.8	1,009.8	954.7	916.6	959.4	952.4	948.2	879.2	925.6	935.1
36136	Duct, 1,000 volts and under	227.9	200.1	189.1	184.2	193.6	187.8	152.2	131.9	140.8	148.0
36139	Switchgear (except ducts)	1,635.9	†1,581.3	1,615.0	1,398.1	1,323.9	1,319.3	1,100.0	1,048.8	1,046.9	988.2
36251	Relays, general-purpose ¹	675.7	†750.6	781.5	772.0	804.7	834.6	873.2	888.7	876.5	634.2
36252	Specific-purpose industrial control	2,732.3	†2,321.6	1,915.7	1,992.7	2,019.6	1,927.6	1,808.3	1,731.6	1,708.7	1,746.8
36253	General-purpose industrial controls	3,698.5	†3,326.3	2,778.2	2,878.6	2,911.5	2,970.5	2,655.2	2,402.6	2,252.4	2,190.5
36254	Motor controller accessories and parts for industrial controls	502.1	†476.4	447.9	434.1	452.4	502.7	458.5	429.4	442.7	380.5

¹Prior to 1986, data for product code 36251 (formerly 36794), "General purpose relays," were collected on survey MA36N, *Selected Electronic and Associated Products*.

†Revised by 5 percent or more from previously published figures.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 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
3613- —	Switchgear and switchboard apparatus	(NA)	(X)	5,577,960	(X)	5,318,979
36132 —	Power circuit breakers, and parts, all voltages	26	(X)	530,695	(X)	520,814
36132 16	Power circuit breakers (sold separately) for use in metal-clad switchgear oil and oilless, over 1,000 volts, (number of breakers)	8	2,720	28,265	2,505	20,863
36132 17	Parts for power circuit breakers for use in metal-clad switchgear	5	(X)	(¹)	(X)	(¹)
36132 21	Power circuit breakers, free standing, oil and oilless, from 15.5 kV through 800 kV and above (number of breakers)	7	6,308	267,910	6,214	265,180
36132 22	Parts for power circuit breakers, free standing, oil and oilless, from 15.5 kV through 800 kV and above	4	(X)	¹ 10,032	(X)	¹ 12,821
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)	7	(²)	(²)	(³)	(³)
36132 27	Parts for power circuit breakers in individual enclosures and/or for use in low-voltage switchgear, 1,000 volts and below, excluding mold case circuit breakers	5	(X)	1,365	(X)	(³)
36132 31	All other power circuit breakers (sold separately), oil and oilless, network protectors, and automatic circuit reclosers	9	² 2,260,907	² 197,700	³ 2,206,489	³ 202,142
36132 32	Parts for all other power circuit breakers, oil and oilless, network protectors, and automatic circuit reclosers	9	(X)	25,423	(X)	¹ 19,808
36133 —	Low voltage panelboards, distribution boards, and other switching and interruption devices, 1,000 volts and below	130	(X)	1,744,442	(X)	1,687,097
	Panelboards, including enclosing cabinets:					
36133 11	Fusible, including combination switch fuse	51	1,466,283	140,775	1,348,193	123,383
36133 12	Circuit breaker	57	786,462	351,085	824,430	340,717
	Distribution switchboards:					
36133 15	Fusible	37	29,968	90,667	35,024	87,165
36133 17	Circuit breaker	51	64,084	249,207	77,060	250,079
36133 19	Other, including theater switchboards	9	26,932	14,091	37,221	18,627
	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	11	1,538,674	132,833	1,576,046	136,515
36133 22	General duty	9	1,417,138	53,272	1,441,371	54,682
36133 24	Enclosed fusible, service entrance, and branch circuit cutouts	8	834,273	10,662	395,408	6,275
36133 26	Circuit breaker type	18	10,381,505	260,457	8,576,680	250,365
	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)	16	410,658	26,949	343,339	25,015
36133 33	Other switches, excluding snap, toggle, push, etc., and including open knife switches, motor contact, motor disconnect, meter service equipment other than meter mounting, and test devices	29	(X)	180,337	(X)	¹ 175,909
36133 98	Other low voltage switchgear apparatus	33	(X)	234,107	(X)	¹ 218,365
36134 —	Fuses and fuse equipment, under 2,300 volts (except power distribution cutouts)	21	(X)	332,123	(X)	¹ 319,918
36134 31	Nonrenewable plug fuses	5	(X)	11,444	(X)	¹ 11,373
36134 51	Nonrenewable cartridge fuses	10	(X)	147,721	(X)	¹ 150,683
36134 71	Renewable plug and cartridge fuses, including renewable links	3	(X)	(⁴)	(X)	(⁴)
36134 93	Other fuses and open fuse material, including cutouts, clips, and bases	19	(X)	⁴ 172,958	(X)	⁴ ¹ 157,862

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 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
3613- —	Switchgear and switchboard apparatus—Con.					
36135 —	Molded case circuit breakers, 1,000 volts and under	32	101,722,837	1,106,843	118,951,277	1,009,763
	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	12	405,313	11,938	(⁵)	(⁵)
36135 16	Without ground fault detection capability	17	23,715,866	535,241	⁵ 24,857,514	⁵ 497,282
	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	9	813,836	25,058	684,536	¹ 20,948
36135 19	Without ground fault detection capability	9	34,951,696	260,442	52,233,643	248,500
36135 31	Individually enclosed industrial type, excluding panelboards and busway plug	15	7,348,341	19,513	6,870,918	15,488
	Other molded case circuit breakers:					
36135 91	Marine and Navy type	4	(⁶)	(⁶)	82,061	23,470
36135 92	Aircraft and aerospace	6	⁶ 965,043	⁶ 112,799	¹ 993,860	90,092
36135 93	Automotive	2	(⁷)	(⁷)	(⁷)	(⁷)
36135 94	Electronic	5	⁷ 27,962,443	⁷ 114,540	⁷ 28,305,948	⁷ 93,177
36135 95	All other types	13	5,560,299	27,312	¹ 4,922,797	¹ 20,806
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	25	2,850,298	227,947	2,552,757	200,091
36136 11	Busways	24	1,455,323	217,167	1,478,263	189,853
36136 31	Trolley-type and lighting distribution duct	3	1,394,975	10,780	1,074,494	10,238
36139 —	Switchgear (except ducts)	128	(X)	1,635,910	(X)	¹ 1,581,296
36139 07	Automatic and manual control panels (generators, transformers, feed-controls, etc.)	67	(X)	268,202	(X)	255,327
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	42	(X)	321,676	(X)	304,166
36139 10	Metal-enclosed load interrupter switchgear assemblies, all voltages, including parts	38	(X)	92,712	(X)	¹ 105,680
36139 13	Metal-enclosed low-voltage power circuit breaker switchgear assemblies, 1,000 volts and below, including parts and excluding load interrupter switchgear	32	(X)	154,919	(X)	145,280
36139 17	Metal-enclosed bus bars when sold separately, above 1,000 volts, including isolated, segregated, nonsegregated, and cable bus bars	20	(X)	36,035	(X)	39,948
	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	29	(X)	308,832	(X)	310,162
36139 45	Indoor	9	(X)	2,626	(X)	2,008
36139 51	Power fuses and fuse links for 2,300 volts and over, ac service, excluding distribution cut-outs	14	(X)	(⁸)	(X)	(D)
36139 81	Power and ground connectors generally used in substation construction	5	(X)	⁸ 122,583	(X)	10,923
36139 91	Overhead transmission and distribution connectors (clamps, taps, terminals, and splices)	6	(X)	40,215	(X)	40,444
36139 93	Transmission and distribution connectors, n.e.c., including underground deadends, hot line taps, stirrups, and repair sleeves	5	(X)	(⁹)	(X)	(D)
36139 83	Distribution cutouts	9	(X)	98,095	(X)	96,103
36139 98	Other switchgear devices, including regulators and miscellaneous switchboard devices (for sale separately)	26	(X)	⁹ 190,015	(X)	¹ 95,187

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 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
3625- —	Relays and industrial controls	(NA)	(X)	7,608,631	(X)	6,874,967
36251 —	General-purpose and other relays	116	(X)	675,689	(X)	⁷ 750,616
36251 01	Industrial-control relays (all voltages), n.e.c.	42	20,194,949	220,806	¹⁶ 16,123,866	215,347
	General-purpose electromechanical relays:					
	Over 100 MW actuating power and sealed (either hermetically or environmentally):					
36251 03	0 through 2.0 amperes contact rating	10	1,176,038	5,423	3,725,510	11,308
36251 04	Over 2.0 through 10.0 amperes contact rating	15	(S)	9,090	492,607	11,237
36251 05	Over 10.0 amperes contact rating	8	11,691,113	30,891	10,072,457	25,034
	Over 100 MW actuating power and not sealed:					
36251 02	0 through 10.0 amperes contact rating	14	3,571,284	20,477	³ 3,396,847	¹⁵ 15,012
36251 10	Over 10.0 amperes contact rating	12	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾
36251 11	0 through 100 MW actuating power (both sealed and not sealed)	3	¹⁰⁴ 4,440,267	¹⁰⁵ 15,566	¹⁰⁵ 5,793,816	¹⁰⁶ 16,706
	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	8	4,838,343	10,476	3,004,592	3,524
36251 15	Over 2.0 amperes contact rating	5	(D)	(D)	(D)	(D)
36251 20	Not sealed	6	(D)	(D)	(D)	(D)
	DIP or SIP footprint:					
36251 19	Sealed (either hermetically or environmentally)	4	(D)	(D)	(D)	(D)
	Telephone relays, all types:					
36251 22	Sealed (either hermetically or environmentally)	4	166,743	644	340,984	¹ 1,741
36251 23	Not sealed	5	50,090	438	⁹ 97,744	⁸ 91
36251 30	General-purpose solid-state relays, pure solid-state, and hybrid solid state, excluding time delay	13	2,642,462	12,982	1,732,874	⁸ 8,356
	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)	7	651,794	40,533	624,616	38,737
	Crystal can types (sealed):					
36251 32	Larger than full size	5	247,146	13,853	275,537	16,940
36251 33	Full size	4	140,109	6,096	177,144	6,716
36251 37	Half size and smaller, including TO-5 package	4	(D)	(D)	(D)	(D)
36251 52	RF, antenna and coaxial relays (sealed and not sealed), excluding reed relays	4	(D)	(D)	(D)	(D)
	Reed relays:					
	Dry reed:					
36251 59	Miniature size (glass length less than .85 inch)	9	19,591,877	30,069	45,082,097	40,103
36251 61	Standard size	8	⁽¹¹⁾	⁽¹¹⁾	⁽¹¹⁾	⁽¹¹⁾
36251 66	Mercury wetted reed	7	⁽¹¹⁾	⁽¹¹⁾	⁽¹¹⁾	⁽¹¹⁾
36251 69	Stepping switches, stepping and impulse relays	6	⁽¹¹⁾	⁽¹¹⁾	⁽¹¹⁾	⁽¹¹⁾
36251 75	Switchgear and protective relays	6	¹¹ 620,820	¹¹ 22,566	¹¹ 13,942,046	¹¹ 41,528
	Timing relays (timers):					
36251 79	Solid-state/EMR combination	22	833,138	25,860	877,754	29,204
36251 81	Solid-state-pure	12	271,852	4,078	271,319	5,989
36251 82	All other timing relays (timers), including pneumatic, motor driven, and electronic	18	951,111	23,972	991,988	25,422
36251 92	All other general-purpose and special-purpose relays, n.e.c	23	(X)	129,201	(X)	¹ 147,927
36251 96	Parts for general-purpose and special-purpose relays (sold separately)	6	(X)	3,034	(X)	(D)

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 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
3625- —	Relays and industrial controls—Con.					
36252 —	Specific-purpose industrial controls	244	(X)	2,732,308	(X)	'2,321,614
36252 45	U.S. Coast Guard, Navy, and Marine auxiliary controls and accessories	22	¹² (12)	¹² (12)	¹² (12)	¹² (12)
36252 47	Metal mill controls and accessories (all voltages)	7	¹² 117,157	¹² 236,341	¹² 118,549	¹² 197,087
36252 48	Crane and hoist controls, constant and adjustable voltage, including operators' desks and stations.	22	35,425	85,833	'32,867	'67,806
36252 49	Definite-purpose contactors and starters (600 volts and less)	15	(S)	133,209	7,950,142	'132,492
	Machine tool applications (motion controllers):					
	Stand-alone controls for numerically controlled machine tools:					
36252 51	Computer numerical controls (CNC); positioning (point-to-point)	10	9,784	15,946	'9,737	'16,155
36252 55	Computer numerical controls (CNC); continuous path (contouring)	13	29,251	164,787	33,549	129,187
36252 57	Robotic controls	(S)	(S)	(S)	(S)	(S)
36252 58	Other stand-alone motion controls	13	16,509	59,504	'15,570	'44,567
36252 60	Subordinate motion controls	12	85,606	12,043	77,152	'13,576
36252 64	Programmable controller (sold separately)	63	2,723,558	973,394	'1,140,853	778,481
36252 76	Other specific- or special-purpose ac and dc controllers, other definite-purpose devices	148	(X)	1,046,556	(X)	'942,238
36253 —	General-purpose industrial controls and power circuit devices.	272	(X)	3,698,502	(X)	'3,326,308
	General purpose controls:					
36253 01	ac full voltage non-combination magnetic starters (1,000 volts or less)	25	1,271,328	178,758	'1,236,436	'172,285
	ac full voltage combination magnetic starters (1,000 volts or less):					
36253 03	Combination starters (less pumping panels):	18	253,975	99,144	195,344	69,432
36253 05	Pumping panels	23	51,936	28,123	'42,911	'25,150
36253 06	Disconnect switches (600 volts or less)	18	1,825,812	50,523	1,295,761	'32,565
	ac full voltage manual controllers, 1,000 volts or less:					
36253 23	Designed and rated to U. S. National Standards (NEMA)	12	806,806	44,867	¹³ (13)	¹³ (13)
36253 25	Designed and rated to International Standards (IEC)	5	236,815	4,449	¹³ 866,443	¹³ 38,379
	ac contractors, 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	382,554	55,104	335,758	52,244
36253 29	Designed and rated to International Standards (IEC)	13	1,867,242	58,919	1,417,429	46,236
36253 14	ac reduced voltage controls, 1,000 volts or less, excluding synchronous motor starters	24	66,428	51,423	'45,162	33,245
36253 15	Synchronous motor starters, 1,000 volts or less, including both full and reduced voltage	8	1,929	3,578	(X)	¹⁴ (14)
36253 16	Motor control centers, 1,000 volts or less	41	(X)	439,569	(X)	344,902
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	13	(S)	73,394	64,355	67,090
36253 21	Brakes and clutches	18	(S)	57,798	1,115,736	65,015
36253 34	Digital readout system, including dial or plugboard type	16	(S)	14,426	11,304	'5,309
	Presence sensors and motion measurement devices:					
	Limit switches (positioning sensors):					
36253 32	Electromechanical positioning sensors	28	(X)	145,605	(X)	'136,122
36253 33	Movement sensors	17	(X)	29,560	(X)	27,936
	Solid-state positioning sensors:					
36253 35	Non-optical proximity sensors	15	(X)	94,743	(X)	'81,532
36253 36	Optical proximity sensors	14	(X)	76,540	(X)	'67,888
36253 37	All other pilot circuit devices, excluding relays and limit switches	11	(X)	14,262	(X)	17,625
36253 38	dc power circuit devices (all voltages)	14	(X)	19,571	(X)	'16,587
36253 39	Other control sensors (all voltages)	16	(X)	96,147	(X)	96,595

See footnotes at end of table.

Table 5. Shipments of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 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
3625- —	Relays and industrial controls—Con.					
36253 —	General-purpose industrial controls and power circuit devices—Con.					
	Presence sensors and motion measurement devices—Con.					
	Pushbuttons and pushbutton stations, excluding operators' desk and stations:					
36253 42	Pushbuttons, 18 mm and smaller	8	(X)	6,094	(X)	3,596
36253 46	Pushbuttons, 19 mm to 29 mm	15	(X)	39,369	(X)	36,877
36253 48	Pushbuttons, 30 mm and larger	21	(X)	205,360	(X)	179,059
36253 81	Rheostats and resistors (except for electronic applications) sold separately, n.e.c.	15	(X)	40,195	(X)	38,417
	Controls for adjustable speed drives, including electronic and nonelectric and operators' desks and stations:					
36253 83	Controls for ac packaged drives	30		234,620	169,299	230,654
36253 84	Controls for dc packaged drives	27		512,752	457,546	107,887
36253 85	ac drive systems	27		58,229	60,978	145,817
36253 86	dc drive systems	28		456,779	436,107	154,235
36253 98	Solid-state motor controllers (all voltages)	51		2,908,940	2,156,230	161,191
36253 99	All other general industry devices and systems.	94	(X)	838,491	(X)	872,438
36254 —	Motor controller accessories and parts for industrial controls	123	(X)	502,132	(X)	476,429
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	34	(X)	139,485	(X)	126,734
36254 97	Parts for industrial controls	108	(X)	362,647	(X)	349,695

¹Data for product code 36132 17 are included with product code 36132 22 to avoid disclosing figures for individual companies.
²For 1994, data for product code 36132 26 are included with product code 36132 31 to avoid disclosing figures for individual companies.
³For 1993, data for product codes 36132 26 and 36132 27 are included with product code 36132 31 to avoid disclosing figures for individual companies.
⁴Data for product code 36134 71 are included with product code 36134 93 to avoid disclosing figures for individual companies.
⁵For 1993, data for product code 36135 14 are included with product code 36135 16 to avoid disclosing figures for individual companies.
⁶For 1994, data for product code 36135 91 are included with product code 36135 92 to avoid disclosing figures for individual companies.
⁷Data for product code 36135 93 are included with product code 36135 94 to avoid disclosing figures for individual companies.
⁸For 1994, data for product code 36139 51 are included with product code 36139 81 to avoid disclosing figures for individual companies.
⁹For 1994, data for product code 36139 93 are included with product code 36139 98 to avoid disclosing figures for individual companies.
¹⁰Data for product code 36251 10 are included with product code 36251 11 to avoid disclosing figures for individual companies.
¹¹Data for product code 36251 61, 36251 66, and 36251 69 are included with product code 36251 75 to avoid disclosing figures for individual companies.
¹²Data for product code 36252 45 are included with product code 36252 47 to avoid disclosing figures for individual companies.
¹³For 1993, data for product code 36253 23 are included with product code 36253 25 to avoid disclosing figures for individual companies.
¹⁴For 1993, data for product code 36253 15 are included with product code 36253 99 to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified.
 †Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census.
 X Not applicable.

Table 6. Shipments, Exports, Imports, and Apparent Consumption of Switchgear, Switchboard Apparatus, Relays, and Industrial Controls: 1994

[Value in thousands of dollars]

Product code	Product description	Manufacturer's shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption ²
1994				
36132 16, 21, 26, 31	Power circuit breakers	493,875	108,823	4,080,883
36132 17, 22, 27, 32	Parts for power circuit breakers	36,820	125,807	(NA)
36133 11, 12, 15, 17, 19	Low voltage panelboards and distribution boards	845,825	63,657	(NA)
36133 21, 22	Knife switches	186,105	4,810	(NA)
36134 00	Fuses and fuse equipment, under 2,300 volts	332,123	89,965	2,011,649
36135 00	Molded case circuit breakers, 1,000 volts and under	1,106,843	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	1,473,112	119,974	128,953
36139 51	Power fuses and fuse links, 2,300 volts and over	(D)	11,391	66,641
36139 81, 91, 93	Power and ground connectors; and transmission and distribution connectors	352,813	168,261	(NA)
36251 01-05, 10-12, 15, 20, 30-33, 37, 52, 59, 61, 66, 69, 75, 81-82, 92	Relays	623,021	404,706	23,503,211
36252 51, 55	Controls for numerically controlled machine tools	180,733	27,209	(NA)
36252 71	Programmable controllers	973,394	123,737	(NA)
36253 01, 03, 05, 15	Motor starters	309,603	34,803	(NA)
36253 16	Motor control centers, 1,000 volts or less	439,569	33,450	(NA)
36253 21	Brakes and clutches	57,798	18,359	1,160,228
36253 32, 33	Limit switches	175,165	8,533	(NA)
36253 81	Rheostats and resistors	40,195	2,962	(NA)
1993				
36132 16, 21, 26, 31	Power circuit breakers	(³)	(³)	109,403
36132 17, 22, 27, 32	Parts for power circuit breakers	³ 501,006	³ 220,567	33,243
36133 11, 12, 15, 17, 19	Low voltage panelboards and distribution boards	819,971	60,874	94,491
36133 21, 22	Knife switches	191,197	5,331	480
36134 00	Fuses and fuse equipment, under 2,300 volts	³ 319,918	74,633	49,652
36135 00	Molded case circuit breakers, 1,000 volts and under	1,009,763	81,990	149,605
36136 00	Duct, including plug-in units and accessories	200,091	27,810	(NA)
36139 07, 09, 10, 13, 17, 41, 45, 83, 98	Switchgear and switchgear assemblies	1,353,861	108,670	297,274
36139 51	Power fuses and fuse links, 2,300 volts and over	(D)	11,101	2,353
36139 81, 91, 93	Power and ground connectors; and transmission and distribution connectors	¹ 51,367	139,825	105,059
36251 01-05, 10-12, 15, 20, 30-33, 37, 52, 59, 61, 66, 69, 75, 81-82, 92	Relays	¹ 661,722	354,547	562,695
36252 51, 55	Controls for numerically controlled machine tools	145,342	17,127	40,871
36252 71	Programmable controllers	778,481	123,970	506,083
36253 01, 03, 05, 15	Motor starters	(NA)	25,286	16,713
36253 16	Motor control centers, 1,000 volts or less	344,902	39,076	21,091
36253 21	Brakes and clutches	65,015	23,121	28,013
36253 32, 33	Limit switches	¹ 164,058	7,949	23,263
36253 81	Rheostats and resistors	¹ 38,417	3,046	2,663

¹Source: Bureau of the Census report, EM545, *U.S. Exports*.²Source: Bureau of the Census report, IM145, *U.S. Imports for Consumption*³Data for product codes 36132 16, 21, 26, and 31 are combined with product codes 36132 17, 22, 27, and 32 to avoid disclosing figures for individual companies.D Data withheld to avoid disclosing figures for individual companies. NA Not available. ¹Revised by 5 percent or more from previously published figures.

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.

7.3 ELECTRIC LAMPS

INTRODUCTION

These data cover all known manufacturers of electric lamps (bulbs only) in the United States, approximately 37 companies. The statistics were collected by mail on Bureau of the Census quarterly Form MQ36B, Electric Lamps (Bulbs Only).

SUMMARY OF FINDINGS

In 1994, production of electric lamps totaled 3,529 million units, a decrease of 1 percent from the 1993 total of 3,573 million units. Shipments of electric lamps in 1994 amounted to 3,563.3 million, valued at \$3,046 million, representing a decrease of less than 1 percent in the number and an increase of 4 percent in the value shipped relative to the previous year.

EXPLANATION OF TERMS

Production. Represents total number of lamps produced including for sale to other lamp manufacturers after adjustments for breakage, shrinkage, obsolescence, and any other inventory adjustment.

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

Stocks on Hand, End of Month. Includes all types of lamps on hand at the end of the month.

Photoflash Lamps.

AG (All Glass). All glass types with glass groove base: AG-1, AG-1B, etc.

M-Types. Types with miniature pinless base: M-2, M-2B, M-3, etc.

Flash Cubes. Types wherein several subminiature type flash lamps with reflectors are enclosed in one plastic cube, bar, etc. Each cube counts as four flashes, each flash bar as ten flashes, etc. Examples are as follows: flash cube, Magicube, flash bar, flip-flash, and highpower cube.

Other Flash Lamps. Other flash lamps using the bayonet base (5, 5B, P-25, etc.) and the medium screw base (11, 11B, P40, etc.)

General Lighting Large Incandescent Lamps. Represents all large incandescent lamps for general lighting purposes, 15 watts and above, 100 to 130 volts, including

tinted lamps such as pink, yellow, and white. White lamps are those with a special inside white coating that provides a softer, more diffused, and whiter light.

Three-Way Lamps. Includes medium and mogul base lamps, 100 to 130 volts, including tinted lamps, such as pink and white.

Reflector and Par Lamps. Includes all incandescent filament lighting lamps, 100 to 130 volts, using a pressed or blown bulb reflectorized from the maximum diameter to the neck of the bulb. These exclude special-purpose lamps, such as heat lamps, sun lamps, reflectorized photo lamps, and automotive types.

Infrared Lamps. Represents all types, including incandescent and tungsten halogen quartz, regardless of voltage.

Tungsten Halogen (Quartz Iodine). Represents all large incandescent lamps (except infrared) that utilize the tungsten halogen regenerative cycle. Excludes the 650-watt lamp used in sunguns, which are included with photoflood, photoenlarger, and other photolamps.

Decorative Under 150 Watts, 100 to 130 Volts. Represents flame, candelabra, chimney, or other special bulb shapes (except Christmas tree lamp types) intended for applications in which the aesthetic appearance of the lighted lamp is more important than light output or other design characteristics.

All Other Large Incandescent (Special-Purpose) Lamps. Includes all large incandescent lamps for special services such as sign and display (including colored lamps, except tinted), aviation, street, railway, spot, and floodlighting, train and country home lighting, showcases, other items for special applications, and large incandescent lamps, including those under 15 watts and other than 100 to 130 volts.

All Other Miniature Incandescent Lamps. Includes all lamps operating from small voltages and primarily used in special services (other than those covered in fluorescent hot cathode-high output), such as: toy, pin game, telephone switchboard, surgical, medical, and dental equipment, and other items for special applications.

Fluorescent (Hot Cathode) Lamps. Includes all types of fluorescent (hot cathode) lamps. High output includes high output, power grove, VHO, and SHO.

General Lighting High Intensity Discharge Lamps. Includes mercury, self-ballasted mercury, metal halide, and high pressure sodium lamps, in one of the following forms: (1) in clear or diffusing bulbs, (2) with or without light control (i.e., A, B, BT, E, R, or T bulbs), (3) intended for general lighting, (4) store and commercial lighting, (5) roadway and area lighting, or (6) flood and sports lighting applications.

Miscellaneous Electric Discharge Lamps. Includes short arc xenon, short arc mercury, short arc mercury-xenon, long arc xenon, photochemical, low pressure sodium, and other special-purpose discharge lamps not specifically cited elsewhere.

Christmas Tree Lamps. Includes both incandescent type and fluorescent or electrical discharge type Christmas tree lamps.

Table 7. Value of Domestic Shipments of Selected Electric Lamps: 1994 and 1993

[Thousands of dollars]

Period	Total	Large incandescent (except photo)	General lighting high intensity	Fluorescent hot cathode
1994				
Total	2,211,639	1,016,591	288,786	902,631
Fourth quarter	628,340	302,407	81,594	240,708
December	216,810	105,843	30,190	79,434
November	218,917	105,842	25,294	86,655
October	192,613	90,722	26,110	74,619
Third quarter	549,864	250,130	69,874	229,860
September	225,242	102,553	30,745	91,944
August	166,356	72,538	20,263	73,555
July	158,266	75,039	18,866	64,361
Second quarter	521,351	229,962	70,618	220,771
June	181,767	80,487	24,010	77,270
May	164,533	71,288	22,598	70,647
April	175,051	78,187	24,010	72,854
First quarter	512,084	234,092	66,700	211,292
March	205,841	95,978	25,346	84,517
February	171,767	77,250	22,678	71,839
January	134,476	60,864	18,676	54,936
1993				
Total	2,128,933	990,392	252,296	886,245
Fourth quarter	642,325	310,884	78,655	252,786
December	229,495	111,918	29,102	88,475
November	209,235	105,701	25,170	78,364
October	203,595	93,265	24,383	85,947
Third quarter	507,176	235,927	58,186	213,063
September	194,472	89,652	23,856	80,964
August	156,290	75,497	16,874	63,919
July	156,414	70,778	17,456	68,180
Second quarter	490,223	220,070	57,653	212,500
June	160,171	66,021	19,775	74,375
May	172,067	81,426	18,391	72,250
April	157,985	72,623	19,487	65,875
First quarter	489,209	223,511	57,802	207,896
March	180,753	78,229	21,445	81,079
February	180,949	82,699	21,328	76,922
January	127,507	62,583	15,029	49,895

Note: The monthly figures are based on data reported by major producers of these types of lamps on Bureau of the Census monthly Form M36D, Electric Lamps (Bulbs Only).

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993

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

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
	1994									
	TOTAL									
	All types ²	36	3,528,624	3,563,284	3,046,061	3,300,651	2,747,822	262,633	298,239	496,468
	Photographic incandescent	3	26,645	27,791	49,004	21,174	39,044	6,617	9,960	4,887
36411 27	Projection	3	7,566	6,807	43,991	5,182	35,154	1,625	8,837	1,036
36411 23	Photoflash, including blue	1	(³)	(³)	(³)	(³)	(³)	(³)	(³)	3,560
36411 25	Photoflood, photoenlarger, and other photolamps	2	³ 19,079	² 20,984	³ 5,013	³ 15,992	³ 3,890	³ 4,992	³ 1,123	³ 3,851
	Large incandescent (except photographic and Christmas tree)	14	1,815,234	1,836,627	1,090,569	1,741,585	1,016,591	95,042	73,978	297,978
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	804,611	818,806	261,478	798,547	257,528	20,259	3,950	82,452
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	554,961	556,424	165,940	520,258	158,569	36,166	7,371	97,503
36411 12	Above 150 watts, 100 to 130 volts	6	9,830	9,576	13,224	8,923	12,621	653	603	3,433
36411 13	Three-way, 100 to 130 volts	4	57,463	58,970	54,175	55,802	53,058	3,168	1,117	9,862
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	64,639	65,941	220,070	56,405	193,292	9,536	26,778	13,213
36411 19	R type (blown glass)	7	68,914	66,691	127,117	62,331	122,233	4,360	4,884	12,774
36411 15	Infrared (all types)	5	5,766	5,828	20,341	5,514	19,086	314	1,255	952
36411 16	Traffic and street lighting, 100 to 130 volts	6	7,027	7,014	9,722	(D)	(D)	(D)	(D)	3,080
36411 17	Rough and vibration service, 100 to 130 volts	6	25,345	24,739	22,389	23,345	21,693	1,394	696	2,468
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	6	3,880	4,096	18,241	3,616	16,576	480	1,665	1,395
	Other	5	13,669	13,419	64,685	7,815	46,340	5,604	18,345	2,938
36411 03	Low voltage display lamps (12V or less)	3	10,320	10,064	27,353	(D)	(D)	(D)	(D)	2,154
36411 04	All other	4	3,349	3,355	37,332	(D)	(D)	(D)	(D)	784
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	98,213	98,790	49,558	94,860	47,743	3,930	1,815	32,785
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	100,916	106,333	63,629	97,866	59,064	8,467	4,565	35,123
	Miniature incandescent	8	985,769	1,009,644	527,509	924,353	461,399	85,291	66,110	106,661
	Automobile glass and metal sealed beams:									
	OEM	3	37,412	38,336	90,560	(D)	(D)	(D)	(D)	1,695
36411 61	Replacement	4	64,404	64,670	222,896	(D)	(D)	(D)	(D)	6,684
	All other glass and metal sealed beams:									
	OEM	3	6,023	6,120	18,772	(D)	(D)	(D)	(D)	202
36411 67	Replacement	4	6,761	7,042	32,449	(D)	(D)	(D)	(D)	1,438
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	530,741	539,767	76,402	(D)	(D)	(D)	(D)	18,578
36411 33	Replacement	4	163,238	176,631	46,185	(D)	(D)	(D)	(D)	40,943
	Flashlight:									
	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 71	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 72	Radio panel:									
	OEM	3	11,173	11,534	1,542	11,114	1,497	420	45	215
36411 73	Replacement	4	2,843	5,488	1,225	4,532	1,099	956	126	2,115
	Subminiature lamps (T2 and below):									
	OEM	6	58,503	57,737	5,430	47,454	4,879	10,283	551	10,319
36411 74	Replacement	4	18,497	17,400	3,095	6,441	2,263	10,959	832	6,914
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	62,784	63,477	15,991	(D)	(D)	(D)	(D)	3,209
36411 77	Replacement	4	14,033	12,182	10,693	9,290	8,590	2,892	2,103	11,464
36411 78	Electric discharge (except Christmas tree)	17	700,976	689,222	1,378,979	613,539	1,230,788	75,683	148,191	86,942
36411 41	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	8	598,864	585,419	1,002,322	517,253	902,631	68,166	99,691	73,460
36411 43	Slimline, single pin base, including rapid start	6	62,535	64,790	156,604	57,521	145,241	7,269	11,363	8,637
36411 46	Circular, including rapid start	4	9,686	9,983	22,050	5,269	12,721	4,714	9,329	1,399
36411 47	High output 800 milliamp and over, including power groove, VHO, and SHO	7	31,665	32,551	128,162	30,318	121,572	2,233	6,590	6,548
	Other fluorescent hot cathode	7	494,978	478,095	695,506	424,145	623,097	53,950	72,409	56,876
	30 watts and below	6	75,520	78,416	218,235	62,688	181,887	15,728	36,348	14,880
36411 48	Compact fluorescent lamps	4	34,244	35,780	134,839	26,067	107,448	9,713	27,391	6,948
36411 49	All other	6	41,276	42,636	83,396	36,621	74,439	6,015	8,957	7,932
	Over 30 watts	7	419,458	399,679	477,271	361,457	441,210	38,222	36,061	41,996
36411 81	U-shaped T8 and T12	3	25,939	15,207	65,437	13,715	60,470	1,492	4,967	1,760
36411 82	Linear T8 rapid start	3	84,615	56,107	92,521	53,299	87,984	2,808	4,537	7,970
36411 83	All other above 30 watts	7	308,904	328,365	319,313	294,443	292,756	33,922	26,557	32,266
	Miscellaneous electrical discharge	11	99,659	101,380	349,482	94,315	306,676	7,065	42,806	13,267
36411 51	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	28,575	28,830	330,327	25,009	288,786	3,821	41,541	4,045
36411 54	Sodium vapor	4	12,633	13,336	132,806	11,558	118,138	1,778	14,668	2,143
36411 56	Standard mercury vapor	6	5,770	5,658	41,829	4,783	35,116	875	6,713	685
36411 57	Metal halide	8	10,172	9,836	155,692	8,668	135,532	1,168	20,160	1,166
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

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

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1994										
FIRST QUARTER										
	All types ²	36	843,933	854,957	723,616	793,347	652,246	61,610	71,370	555,531
	Photographic incandescent	3	7,186	6,098	10,530	4,598	8,514	1,500	2,016	7,121
36411 27	Projection	3	^b 4,487	^b 1,372	^b 9,365	^b 1,076	^b 7,595	^b 296	^b 1,770	^b 392
36411 23	Photoflash, including blue	1	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾
36411 25	Photoflood, photoenlarger, and other photolamps	2	^b ³ 5,699	³ 4,726	³ 1,165	³ 3,522	³ 919	^b ³ 1,204	^b ³ 246	^c 36,729
	Large incandescent (except photographic and Christmas tree)	14	432,721	431,744	249,672	410,535	234,092	21,209	15,580	322,529
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	7	^a 195,480	195,803	59,709	190,371	58,802	5,432	907	^b 96,323
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	^b 130,946	133,106	39,524	127,099	38,272	^a 6,007	^b 1,252	^c 96,805
36411 12	Above 150 watts, 100 to 130 volts	6	^b 2,481	2,462	3,363	2,343	3,240	^a 119	^a 123	^a 3,321
36411 13	Three-way, 100 to 130 volts	4	^b 13,768	15,832	14,315	14,867	13,992	^b 965	^b 323	^b 9,305
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	^b 16,087	14,639	48,614	12,494	43,166	^c 2,145	^b 5,448	^c 15,972
36411 19	R type (blown glass)	7	^b 15,893	16,285	30,765	15,272	29,507	^b 1,013	^b 1,258	^b 10,273
36411 15	Infrared (all types)	5	^a 1,659	¹ 1,638	¹ 5,304	¹ 1,556	¹ 5,060	^a 82	^a 244	^c 1,047
36411 16	Traffic and street lighting, 100 to 130 volts	6	^c 1,541	1,842	2,581	(D)	(D)	(D)	(D)	^c 2,779
36411 17	Rough and vibration service, 100 to 130 volts	6	^b 5,362	6,861	5,807	6,568	5,633	^a 293	^a 174	^b 2,286
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	5	^c 7,592	⁷ 986	¹ 4,127	^a 844	^a 3,806	^a 142	^b 321	^b 1,207
36411 05	Other	5	³ 2,293	³ 0,111	¹ 13,906	¹ 1,932	¹ 10,391	1,079	3,515	2,969
36411 03	Low voltage display lamps (12V or less)	3	^b 2,650	2,262	5,558	(D)	(D)	(D)	(D)	^b 2,286
36411 04	All other	4	^a 1,643	⁷ 749	⁸ 3,348	(D)	(D)	(D)	(D)	^b 683
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	^b 22,972	22,064	10,951	20,720	10,356	^a 1,344	^a 595	34,270
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	^b 22,647	17,215	10,706	14,811	9,559	^b 2,404	^a 1,147	^a 45,972
	Miniature incandescent	8	239,554	255,414	138,557	234,262	122,078	21,152	16,479	114,106
	Automobile glass and metal sealed beams:									
36411 61	OEM	3	9,025	9,270	22,190	(D)	(D)	(D)	(D)	1,228
36411 62	Replacement	4	18,317	18,089	64,776	(D)	(D)	(D)	(D)	5,422
	All other glass and metal sealed beams:									
36411 65	OEM	3	1,589	1,613	4,881	(D)	(D)	(D)	(D)	275
36411 67	Replacement	4	1,152	1,367	6,687	(D)	(D)	(D)	(D)	1,504
	Automobile miniature other than glass and metal sealed beams:									
36411 33	OEM	4	131,187	135,681	19,041	(D)	(D)	(D)	(D)	23,110
36411 36	Replacement	4	35,803	41,565	10,538	(D)	(D)	(D)	(D)	48,574
	Flashlight:									
36411 71	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 72	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Radio panel:									
36411 73	OEM	3	3,674	3,796	504	3,664	490	132	14	454
36411 74	Replacement	4	793	1,404	281	1,140	247	264	34	4,149
	Subminiature lamps (T-2 and below):									
36411 75	OEM	6	^b 14,222	15,512	1,456	^b 12,885	^b 1,315	^c 2,627	^c 141	^c 10,595
36411 76	Replacement	4	2,834	4,345	818	1,868	630	2,477	188	4,306
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
36411 77	OEM	6	16,373	17,301	3,945	(D)	(D)	(D)	(D)	^a 2,974
36411 78	Replacement	4	2,125	3,106	2,866	2,179	2,370	927	496	8,632
	Electric discharge (except Christmas tree)	17	164,472	161,701	324,857	143,952	287,562	17,749	37,295	¹ 11,775
36411 41	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode:									
	Slimline, single pin base, including rapid start	8	139,374	136,745	236,305	120,880	211,292	¹ 15,865	25,013	98,690
36411 43	Circular, including rapid start	6	^b 17,018	18,310	42,019	16,658	39,131	^b 1,652	^c 2,888	^b 9,600
36411 46	High output 800 milliamp and over, including power grove, VHO and SHO	4	^c 2,497	2,426	5,515	1,295	3,029	^c 1,131	^c 2,486	^b 1,767
36411 47	Other fluorescent hot cathode	7	^b 8,447	8,705	32,962	8,074	31,156	^b 631	^b 1,806	^b 7,176
	30 watts and below	6	111,412	107,304	155,809	94,853	137,976	12,451	17,833	¹ 80,147
	Compact fluorescent lamps	4	19,149	18,621	49,492	15,206	40,855	3,415	8,637	18,304
36411 48	All other	4	⁸ 2,217	⁷ 856	²⁸ 716	⁵ 851	²² 618	^c 2,005	^c 6,098	^b 8,845
36411 49	Over 30 watts	6	^b 10,932	10,765	20,776	9,355	18,237	^b 1,410	^c 2,539	^a 9,459
36411 81	U-shaped T8 and T12	7	⁹² 263	⁸⁸ 683	¹⁰⁶ 317	⁷⁹ 647	⁹⁷ 121	⁹ 036	⁹ 196	⁶ 1,843
36411 82	Linear T8 rapid start	3	³ 993	3,478	15,235	3,081	13,839	^c 397	^c 1,396	^c 3,009
36411 83	All other above 30 watts	3	^b 12,677	10,529	17,967	9,833	16,690	^b 696	^b 1,277	^a 9,407
	Miscellaneous electrical discharge	11	24,417	24,285	81,642	22,529	70,931	1,756	10,711	¹ 2,891
36411 51	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	6,759	6,628	77,102	5,675	66,700	953	10,402	3,647
36411 54	Sodium vapor	4	^b 3,047	2,922	31,449	2,472	27,809	^b 450	^b 3,640	^b 1,969
36411 56	Standard mercury vapor	6	^a 1,385	1,469	10,473	1,256	8,810	^a 213	^a 1,663	^a 489
36411 57	Metal halide	8	^b 2,327	² 2,337	³⁵ 180	¹ 947	³⁰ 081	^b 290	^c 5,099	^c 1,189
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

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

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1994										
SECOND QUARTER										
	All types ²	36	893,432	855,146	724,487	789,101	644,177	66,045	80,310	631,448
	Photographic incandescent	3	6,692	5,886	12,245	4,148	9,531	1,738	2,714	7,927
36411 27	Projection	3	1,836	1,714	11,030	1,257	8,579	457	2,451	514
36411 23	Photoflash, including blue	1	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36411 25	Photoflood, photoenlarger, and other photolamps	2	³ 4,856	³ 4,172	³ 1,215	³ 2,891	³ 952	³ 1,281	³ 263	³ 7,413
	Large incandescent (except photographic and Christmas tree)	14	462,207	408,379	250,840	386,295	229,962	22,084	20,878	396,966
	General lighting:									
36411 08	15 to 150 watts, 100 to 130 volts, white lamps	8	191,626	162,495	51,479	159,008	50,689	3,487	790	125,454
36411 09	15 to 150 watts, 100 to 130 volts, all other	8	153,194	131,098	40,494	122,290	38,577	8,808	1,917	118,902
36411 12	Above 150 watts, 100 to 130 volts	6	2,627	2,095	2,978	1,982	2,846	113	132	3,811
36411 13	Three-way, 100 to 130 volts	4	13,515	12,458	10,773	11,673	10,463	785	310	10,362
	Reflector, 100 to 130 volts:									
36411 14	Par type (pressed glass)	7	16,877	15,231	51,210	12,390	42,585	2,841	8,625	17,613
36411 19	R type (blown glass)	7	17,240	15,231	28,974	14,061	27,622	¹ 1,170	¹ 1,352	12,224
36411 15	Infrared (all types)	5	¹ 1,197	¹ 1,104	¹ 4,379	¹ 1,041	¹ 4,106	63	273	1,134
36411 16	Traffic and street lighting, 100 to 130 volts	6	² 2,129	1,847	2,473	(D)	(D)	(D)	(D)	3,056
36411 17	Rough and vibration service, 100 to 130 volts	6	7,097	6,926	5,547	6,563	5,367	363	180	8,181
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
36411 05	General lighting	5	^a ¹ 1,293	¹ 1,149	¹ 4,749	^a ¹ 1,091	^a ¹ 4,530	58	219	1,351
	Other	5	³ 6,122	³ 3,434	¹ 6,885	¹ 1,814	¹ 11,539	1,620	5,346	3,147
36411 03	Low voltage display lamps (12V or less)	3	2,715	2,600	7,379	(D)	(D)	(D)	(D)	2,401
36411 04	All other	4	¹ 897	¹ 834	¹ 9,506	(D)	(D)	(D)	(D)	746
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	24,385	23,461	12,033	22,702	11,646	759	387	50,194
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	27,415	31,850	18,866	30,006	17,754	1,844	1,112	41,537
	Miniature incandescent	8	258,318	274,067	120,339	250,159	103,680	23,908	16,659	¹ 110,515
	Automobile glass and metal sealed beams:									
36411 61	OEM	3	8,427	9,500	22,477	(D)	(D)	(D)	(D)	2,301
36411 62	Replacement	4	14,669	13,256	41,668	(D)	(D)	(D)	(D)	8,591
	All other glass and metal sealed beams:									
36411 65	OEM	3	1,480	1,479	4,522	(D)	(D)	(D)	(D)	276
36411 67	Replacement	3	1,757	1,775	7,649	(D)	(D)	(D)	(D)	1,486
	Automobile miniature other than glass and metal sealed beams:									
36411 33	OEM	4	147,106	150,094	21,095	(D)	(D)	(D)	(D)	20,122
36411 36	Replacement	4	38,180	46,687	11,938	(D)	(D)	(D)	(D)	41,327
	Flashlight:									
36411 71	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 72	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Radio panel:									
36411 73	OEM	3	3,279	3,282	464	3,158	451	124	13	451
36411 74	Replacement	4	374	1,426	329	1,109	286	317	43	3,097
	Subminiature lamps (T-2 and below):									
36411 75	OEM	6	^b 14,683	15,140	1,439	(D)	(D)	(D)	(D)	^b 17,134
36411 76	Replacement	4	5,034	5,841	902	(D)	(D)	(D)	(D)	3,499
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
36411 77	OEM	6	19,023	19,369	4,441	(D)	(D)	(D)	(D)	² 6,228
36411 78	Replacement	4	1,140	3,262	2,717	2,741	2,229	521	488	6,510
	Electric discharge (except Christmas tree)	17	166,215	166,814	341,063	148,499	301,004	18,315	40,059	116,040
36411 41	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	8	139,383	141,603	247,506	125,241	220,771	16,362	26,735	101,846
36411 43	Slimline, single pin base, including rapid start	6	17,005	16,675	39,857	14,860	36,618	1,815	3,239	9,930
36411 46	Circular, including rapid start	4	2,263	2,400	5,669	1,270	3,031	1,130	2,638	1,636
36411 47	High output 800 milliamp and over, including power groove, VHO, and SHO	7	8,093	7,804	31,357	7,251	29,541	553	1,816	7,468
	Other fluorescent hot cathode	7	112,022	114,724	170,623	101,860	151,581	12,864	19,042	82,812
	30 watts and below	6	20,382	19,262	54,004	15,763	44,063	3,499	9,941	19,424
36411 48	Compact fluorescent lamps	3	8,772	8,626	32,027	6,474	25,077	2,152	6,950	8,991
36411 49	All other	6	11,610	10,636	21,977	9,289	18,986	1,347	2,991	10,433
	Over 30 watts	7	91,640	95,462	116,619	86,097	107,518	9,365	9,101	63,388
36411 81	U-shaped T8 and T12	3	3,403	3,881	16,183	3,383	14,604	498	1,579	2,531
36411 82	Linear T8 rapid start	3	12,484	13,894	22,577	12,866	21,342	1,028	1,235	11,320
36411 83	All other above 30 watts	7	75,753	77,687	77,859	69,848	71,572	7,839	6,287	49,537
	Miscellaneous electrical discharge	12	26,185	24,586	86,550	22,756	74,718	1,830	11,832	13,977
36411 51	Glow	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	8,156	6,816	82,024	5,813	70,618	1,003	11,406	4,717
36411 54	Sodium vapor	4	3,548	2,992	32,124	2,499	27,899	493	4,225	2,525
36411 56	Standard mercury vapor	6	1,589	1,391	11,077	1,173	9,112	218	1,965	687
36411 57	Metal halide	8	3,019	2,433	38,823	2,141	33,607	292	5,216	1,505
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

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

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1994										
THIRD QUARTER										
	All types ²	35	805,994	874,181	746,301	810,227	674,374	63,954	71,927	515,730
	Photographic incandescent	3	6,641	7,812	12,120	5,903	9,694	1,909	2,426	6,756
36411 27	Projection	3	2,170	1,700	10,900	1,306	8,752	394	2,148	984
36411 23	Photoflash, including blue	1	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36411 25	Photoflood, photoenlarger, and other photolamps	2	³ 4,471	³ 6,112	³ 1,220	³ 4,597	³ 942	³ 1,515	³ 278	³ 5,772
	Large incandescent (except photographic and Christmas tree)	14	405,889	458,302	269,189	433,503	250,130	24,799	19,059	324,343
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	7	182,222	210,178	66,450	205,466	65,450	4,712	1,000	97,499
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	119,980	139,541	40,970	127,976	38,644	11,565	2,326	99,341
36411 12	Above 150 watts, 100 to 130 volts	6	2,018	2,270	3,183	2,071	2,992	199	191	6,054
36411 13	Three-way, 100 to 130 volts	4	13,030	13,138	11,908	12,381	11,671	757	237	10,252
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	14,286	17,077	58,406	14,882	51,213	2,195	7,193	14,818
36411 14	R type (blown glass)	7	15,643	15,793	29,801	14,754	28,703	1,039	1,098	12,018
36411 15	Infrared (all types)	5	1,314	1,268	4,393	1,175	4,011	93	382	1,174
36411 16	Traffic and street lighting, 100 to 130 volts	6	^a 1,473	1,441	1,953	(D)	(D)	(D)	(D)	3,096
36411 17	Rough and vibration service, 100 to 130 volts	6	5,896	4,161	5,086	3,812	4,931	349	155	2,269
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	5	^a 1,103	1,049	4,869	^a 900	^a 4,351	149	518	1,415
	Other	5	3,315	3,165	15,369	1,928	10,947	1,237	4,422	3,298
36411 03	Low voltage display lamps (12V or less)	3	2,485	2,364	6,629	(D)	(D)	(D)	(D)	2,522
36411 04	All other	4	830	801	8,740	(D)	(D)	(D)	(D)	776
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	19,186	23,773	12,042	23,153	11,713	620	329	30,607
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	26,423	25,448	14,759	23,726	13,774	1,722	985	42,512
	Miniature incandescent	8	225,974	231,396	119,364	211,100	104,966	20,296	14,398	93,505
	Automobile glass and metal sealed beams:									
	OEM	3	9,586	8,888	20,929	(D)	(D)	(D)	(D)	1,999
36411 62	Replacement	4	13,671	13,814	48,171	(D)	(D)	(D)	(D)	8,448
	All other glass and metal sealed beams:									
	OEM	3	1,297	1,374	4,263	(D)	(D)	(D)	(D)	199
36411 67	Replacement	4	1,641	1,570	7,335	(D)	(D)	(D)	(D)	1,557
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	118,918	119,505	17,345	(D)	(D)	(D)	(D)	19,535
36411 36	Replacement	4	37,906	44,205	11,829	(D)	(D)	(D)	(D)	33,768
	Flashlight:									
	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 72	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Radio panel:									
	OEM	3	2,173	2,138	300	2,006	286	132	14	486
36411 74	Replacement	4	1,271	1,236	285	1,062	262	174	23	3,132
	Subminiature lamps (T-2 and below):									
	OEM	6	^b 13,489	13,719	1,320	(D)	(D)	(D)	(D)	^c 7,576
36411 76	Replacement	4	4,758	5,342	870	(D)	(D)	(D)	(D)	2,915
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	15,002	15,186	3,800	(D)	(D)	(D)	(D)	^a 2,444
36411 78	Replacement	4	4,455	2,495	2,439	2,120	1,999	375	440	8,470
	Electric discharge (except Christmas tree)	17	167,490	176,671	345,628	159,721	309,584	16,950	36,044	91,126
	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	8	142,923	151,800	254,396	136,582	229,860	15,218	24,536	75,494
	Slimline, single pin base, including rapid start	6	13,896	13,954	35,398	12,230	32,573	1,724	2,825	9,872
36411 46	Circular, including rapid start	4	2,051	2,346	5,497	1,342	3,276	1,004	2,221	1,335
36411 47	High output 800 milliamp and over, including power grove, VHO, and SHO	7	7,070	7,892	31,656	7,278	29,843	614	1,813	6,643
	Other fluorescent hot cathode	7	119,906	127,608	181,845	115,732	164,168	11,876	17,677	57,644
	30 watts and below	6	16,710	19,352	54,777	15,815	45,639	3,537	9,138	16,782
36411 48	Compact fluorescent lamps	4	7,853	8,567	34,124	6,331	26,815	2,236	7,309	8,277
36411 49	All other	6	8,857	10,785	20,653	9,484	18,824	1,301	1,829	8,505
	Over 30 watts	7	103,196	108,256	127,068	99,917	118,529	8,339	8,539	40,862
	U-shaped T8 and T12	3	7,022	3,768	16,240	3,526	15,348	242	892	1,763
36411 81	Linear T8 rapid start	3	26,849	15,932	25,933	15,457	24,781	475	1,152	7,895
36411 82	All other above 30 watts	7	69,325	88,556	84,895	80,934	78,400	7,622	6,495	31,204
36411 83	Miscellaneous electrical discharge	11	24,019	24,326	84,807	22,695	74,606	1,631	10,201	15,412
	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	6,323	6,640	79,871	5,813	69,874	827	9,997	4,403
36411 54	Sodium vapor	4	2,851	2,952	31,864	2,631	29,175	321	2,689	2,426
36411 56	Standard mercury vapor	6	1,302	1,292	9,708	1,087	8,188	205	1,520	697
36411 57	Metal halide	8	2,170	2,396	38,299	2,095	32,511	301	5,788	^a 1,280
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

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

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1994										
FOURTH QUARTER										
	All types ²	35	985,265	979,000	851,657	907,976	777,025	71,024	74,632	496,468
	Photographic incandescent	3	6,126	7,995	14,109	6,525	11,305	1,470	2,804	4,887
36411 27	Projection	3	2,073	2,021	12,696	1,543	10,228	478	2,468	1,036
36411 23	Photoflash, including blue	1	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36411 25	Photoflood, photoenlarger, and other photolamps	2	³ 4,053	³ 5,974	³ 1,413	³ 4,982	³ 1,077	³ 992	³ 336	³ 3,851
	Large incandescent (except photographic and Christmas tree)	14	514,417	538,202	320,868	511,252	302,407	26,950	18,461	297,978
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	235,283	250,330	83,840	243,702	82,587	6,628	1,253	82,452
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	150,841	152,679	44,952	142,893	43,076	9,786	1,876	97,503
36411 12	Above 150 watts, 100 to 130 volts	6	2,704	2,749	3,700	2,527	3,543	222	157	3,433
36411 13	Three-way, 100 to 130 volts	4	17,150	17,542	17,179	16,881	16,932	661	247	9,862
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	17,389	18,994	61,840	16,639	56,328	2,355	5,512	13,213
36411 19	R type (blown glass)	7	20,138	19,382	37,577	18,244	36,401	1,138	1,176	12,774
36411 15	Infrared (all types)	5	1,596	1,818	6,265	1,742	5,909	76	356	952
36411 16	Traffic and street lighting, 100 to 130 volts	6	^a 1,884	1,884	2,715	(D)	(D)	(D)	(D)	3,080
36411 17	Rough and vibration service, 100 to 130 volts	6	6,990	6,791	5,949	6,402	5,762	389	187	2,468
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	6	^a 892	912	4,496	^a 781	^a 3,889	131	607	1,395
	Other	5	3,449	3,809	18,525	2,141	13,463	1,668	5,062	2,938
36411 03	Low voltage display lamps (12V or less)	3	2,470	2,838	7,787	(D)	(D)	(D)	(D)	2,154
36411 04	All other	4	979	971	10,738	(D)	(D)	(D)	(D)	784
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	31,670	29,492	14,532	28,285	14,028	1,207	504	32,785
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	24,431	31,820	19,298	29,323	17,977	2,497	1,321	35,123
	Miniature incandescent	8	261,923	248,767	149,249	228,832	130,675	19,935	18,574	106,661
	Automobile glass and metal sealed beams:									
	OEM	3	10,374	10,678	24,964	(D)	(D)	(D)	(D)	1,695
36411 61	Replacement	4	17,747	19,511	68,281	(D)	(D)	(D)	(D)	6,684
	All other glass and metal sealed beams:									
	OEM	3	1,657	1,654	5,106	(D)	(D)	(D)	(D)	202
36411 67	Replacement	4	2,211	2,330	10,778	(D)	(D)	(D)	(D)	1,438
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	133,530	134,487	18,921	(D)	(D)	(D)	(D)	18,578
36411 33	Replacement	4	51,349	44,174	11,880	(D)	(D)	(D)	(D)	40,943
	Flashlight:									
	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 71	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 72	Radio panel:									
	OEM	3	2,047	2,318	274	2,286	270	32	4	215
36411 73	Replacement	4	405	1,422	330	1,221	304	201	26	2,115
	Subminiature lamps (T-2 and below):									
	OEM	6	^b 16,109	13,366	1,215	(D)	(D)	(D)	(D)	^c 10,319
36411 75	Replacement	3	5,871	1,872	505	(D)	(D)	(D)	(D)	6,914
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	12,386	11,621	3,805	(D)	(D)	(D)	(D)	^a 3,209
36411 77	Replacement	4	6,313	3,319	2,671	2,250	1,992	1,069	679	11,464
	Electric discharge (except Christmas tree)	17	^f 202,799	184,036	367,431	161,367	332,638	22,669	34,793	86,942
	Germicidal, bacterial, and ozone	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 41	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Fluorescent, hot cathode	8	^f 177,184	155,271	264,115	134,550	240,708	20,721	23,407	73,460
	Slimline, single pin base, including rapid start	6	14,616	15,851	39,330	13,773	36,919	2,078	2,411	8,637
36411 43	Circular, including rapid start	4	2,875	2,811	5,369	1,362	3,385	1,449	1,984	1,399
36411 47	High output 800 milliamp and over, including power groove, VHO, and SHO	7	8,055	8,150	32,187	7,715	31,032	435	1,155	6,548
	Other fluorescent hot cathode	7	^f 151,638	128,459	187,229	111,700	169,372	16,759	17,857	56,876
	30 watts and below	6	19,279	21,181	59,962	15,904	51,330	5,277	8,632	14,880
	Compact fluorescent lamps	4	9,402	10,731	39,972	7,411	32,938	3,320	7,034	6,948
36411 48	All other	6	9,877	10,450	19,990	8,493	18,392	1,957	1,598	7,932
36411 49	Over 30 watts	7	^f 132,359	107,278	127,267	95,796	118,042	11,482	9,225	41,996
	U-shaped T8 and T12	3	^f 11,521	4,080	17,779	3,725	16,679	355	1,100	1,760
36411 81	Linear T8 rapid start	3	^f 32,605	15,752	26,044	15,143	25,171	609	873	7,970
36411 82	All other above 30 watts	7	88,233	87,446	83,444	76,928	76,192	^a 10,518	7,252	32,266
36411 83	Miscellaneous electric discharge:									
	Glow	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	7,337	8,746	91,330	7,708	81,594	1,038	9,736	3,994
36411 54	Sodium vapor	4	3,187	4,470	37,369	^f 3,956	33,255	514	4,114	2,143
36411 56	Standard mercury vapor	6	1,494	1,506	10,571	1,267	9,006	239	1,565	685
36411 57	Metal halide	8	2,656	2,770	43,390	2,485	39,333	285	4,057	^a 1,166
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps (all types) ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993

[Quantity in thousands of lamps; value in thousands of dollars]

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1993										
TOTAL										
	All types ²	37	3,573,279	3,564,256	2,928,591	3,312,391	2,663,835	251,865	264,756	575,080
	Photographic incandescent	4	41,271	37,344	44,535	32,980	37,685	4,364	6,850	6,033
36411 27	Projection	3	5,156	5,416	37,527	4,505	31,580	911	5,947	277
36411 23	Photoflash, including blue	3	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36411 25	Photoflood, photoenlarger, and other photolamps	3	³ 36,115	³ 31,928	³ 7,008	³ 28,475	³ 6,105	³ 3,453	³ 903	³ 5,756
	Large incandescent (except photographic and Christmas tree)	14	1,859,714	1,861,825	1,056,917	1,781,613	990,392	80,212	66,525	323,972
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	841,793	847,055	270,993	820,780	265,687	26,275	5,306	96,676
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	586,328	600,466	183,555	579,116	177,826	21,350	5,729	99,396
36411 12	Above 150 watts, 100 to 130 volts	6	10,689	12,517	16,866	11,811	16,211	706	655	3,473
36411 13	Three-way, 100 to 130 volts	4	58,545	60,413	55,987	57,931	54,771	2,482	1,216	11,369
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	52,718	51,512	169,741	44,181	148,832	7,331	20,909	14,650
36411 19	R type (blown glass)	7	61,317	63,152	123,786	59,462	119,086	3,690	4,700	10,925
36411 15	Infrared (all types)	5	5,114	5,325	18,784	5,002	17,707	323	1,077	1,058
36411 16	Traffic and street lighting, 100 to 130 volts	6	6,550	6,206	7,447	(D)	(D)	(D)	(D)	3,090
36411 17	Rough and vibration service, 100 to 130 volts	6	25,047	24,166	21,538	23,154	20,726	1,012	812	5,436
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	7	7,653	8,596	42,705	8,387	42,018	209	687	1,758
	Other	4	10,004	10,015	49,893	5,388	31,676	4,627	18,217	2,652
36411 03	Low voltage display lamps (12V or less)	4	8,247	8,316	26,651	(D)	(D)	(D)	(D)	1,898
36411 04	All other	3	1,757	1,699	23,242	(D)	(D)	(D)	(D)	754
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	93,385	79,991	39,111	75,747	37,019	4,244	2,092	33,362
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	100,571	92,411	56,511	85,086	52,054	7,325	4,457	40,127
	Miniature incandescent	8	1,002,849	1,007,667	525,670	897,432	463,813	110,235	61,857	129,966
	Automobile glass and metal sealed beams:									
	OEM	3	36,550	37,016	83,078	(D)	(D)	(D)	(D)	1,473
36411 61	Replacement	4	62,544	63,981	232,981	(D)	(D)	(D)	(D)	5,194
	All other glass and metal sealed beams:									
	OEM	3	5,799	5,876	18,033	(D)	(D)	(D)	(D)	299
36411 65	Replacement	4	6,244	6,288	30,561	(D)	(D)	(D)	(D)	1,719
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	504,761	509,367	71,321	(D)	(D)	(D)	(D)	27,604
36411 33	Replacement	4	184,153	190,273	46,573	(D)	(D)	(D)	(D)	54,336
	Flashlight:									
	OEM	3	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 71	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 72	Radio panel:									
	OEM	3	15,641	15,668	2,092	15,173	2,038	495	54	576
36411 73	Replacement	4	8,754	5,245	1,121	4,236	999	1,009	122	4,760
	Subminiature lamps (T-2 and below):									
	OEM	6	74,294	73,079	6,828	(D)	(D)	(D)	(D)	11,885
36411 33	Replacement	4	21,173	21,103	3,141	(D)	(D)	(D)	(D)	5,817
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	55,174	54,090	13,682	53,958	13,522	132	160	3,902
36411 77	Replacement	4	14,940	12,733	13,043	10,006	11,086	2,727	1,957	9,613
36411 78	Electric discharge (except Christmas tree)	18	669,445	657,420	1,301,469	600,366	1,171,945	57,054	129,524	115,109
36411 41	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	9	572,420	560,214	973,399	510,262	886,245	49,952	87,154	100,442
36411 43	Slimline, single pin base, including rapid start	7	61,079	59,562	153,752	54,272	145,054	5,290	8,698	10,893
36411 46	Circular, including rapid start	4	7,994	7,818	19,201	4,830	12,573	2,988	6,628	1,696
36411 47	High output 800 milliamp and over, including power groove, VHO, and SHO	7	31,877	30,775	119,858	28,605	112,283	2,170	7,575	7,437
	Other fluorescent hot cathode	8	471,470	462,059	680,588	422,555	616,335	39,504	64,253	80,416
	30 watts and below	7	72,252	71,526	211,334	58,895	180,250	12,631	31,084	17,843
36411 48	Compact fluorescent lamps	5	32,226	33,441	136,040	24,759	112,762	8,682	23,278	8,551
36411 49	All other	7	40,026	38,085	75,294	34,136	67,488	3,949	7,806	9,292
	Over 30 watts	8	399,218	390,533	469,254	363,660	436,085	26,873	33,169	62,573
36411 81	U-shaped T8 and T12	3	13,630	13,234	58,276	11,857	53,386	1,377	4,890	2,494
36411 82	Linear T8 rapid start	4	48,894	43,839	80,895	41,187	75,133	2,652	5,762	7,259
36411 83	All other above 30 watts	7	336,066	332,849	317,313	310,085	296,465	22,764	20,848	52,645
	Miscellaneous electrical discharge	11	95,065	95,274	303,996	88,473	265,923	6,801	38,073	14,395
36411 51	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	23,842	24,602	289,740	21,074	252,296	3,528	37,444	3,380
36411 54	Sodium vapor	4	11,522	11,681	127,913	9,761	110,930	1,920	16,983	1,882
36411 56	Standard mercury vapor	6	4,844	5,403	41,645	4,611	35,933	792	5,712	573
36411 57	Metal halide	8	7,947	7,977	129,760	7,101	113,759	876	16,001	1,100
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

[Quantity in thousands of lamps; value in thousands of dollars]

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1993										
FIRST QUARTER										
	All types ²	37	918,200	848,050	681,976	790,400	624,579	57,650	57,397	624,491
	Photographic incandescent	4	18,090	10,353	9,222	8,809	7,828	1,544	1,394	21,132
36411 27	Projection	3	1,069	1,063	7,569	890	6,409	173	1,160	1,034
36411 23	Photoflash, including blue	3	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36411 25	Photoflood, photoenlarger, and other photolamps	3	³ 17,021	³ 9,290	³ 1,653	³ 7,919	³ 1,419	³ 1,371	³ 234	³ 20,098
	Large incandescent (except photographic and Christmas tree)	14	463,235	426,688	238,265	409,349	223,511	17,339	14,754	341,137
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	205,627	184,632	58,297	180,552	57,484	4,080	813	124,244
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	147,000	141,574	43,610	135,709	41,902	5,865	1,708	99,479
36411 12	Above 150 watts, 100 to 130 volts	6	2,734	3,261	4,167	3,067	3,994	194	173	5,008
36411 13	Three-way, 100 to 130 volts	4	15,189	14,274	13,277	13,650	12,944	624	333	14,476
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	13,287	10,315	32,267	8,866	27,928	1,449	4,339	12,092
36411 19	R type (blown glass)	7	16,530	15,321	30,048	14,368	28,824	953	1,224	13,687
36411 15	Infrared (all types)	5	1,039	1,316	4,400	1,217	4,115	99	285	643
36411 16	Traffic and street lighting, 100 to 130 volts	5	1,910	1,574	1,381	(D)	(D)	(D)	(D)	3,027
36411 17	Rough and vibration service, 100 to 130 volts	6	6,967	6,702	5,789	6,395	5,550	307	239	5,116
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	6	2,423	2,053	10,220	1,977	9,997	76	223	2,882
	Other	4	2,905	2,034	10,767	1,206	7,102	828	3,665	3,221
36411 03	Low voltage display lamps (12V or less)	4	2,275	1,598	5,682	(D)	(D)	(D)	(D)	2,519
36411 04	All other	3	630	436	5,085	(D)	(D)	(D)	(D)	702
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	23,343	20,742	10,187	19,655	9,585	1,087	602	25,423
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	24,281	22,890	13,855	21,288	12,899	1,602	956	31,839
	Miniature incandescent	8	261,637	255,894	133,713	229,460	118,670	26,434	15,043	144,504
	Automobile glass and metal sealed beams:									
	OEM	3	9,504	9,511	20,524	(D)	(D)	(D)	(D)	1,932
36411 61	Replacement	4	17,093	16,783	62,533	(D)	(D)	(D)	(D)	6,941
	All other glass and metal sealed beams:									
	OEM	3	1,487	1,579	4,777	(D)	(D)	(D)	(D)	284
36411 65	Replacement	4	1,420	1,197	5,839	(D)	(D)	(D)	(D)	1,986
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	130,089	132,377	18,383	(D)	(D)	(D)	(D)	29,073
36411 33	Replacement	4	45,115	41,693	11,120	(D)	(D)	(D)	(D)	63,878
	Flashlight:									
	OEM	3	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 71	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 72	Radio panel:									
	OEM	3	5,181	5,207	643	5,075	629	132	14	577
36411 73	Replacement	4	1,597	1,288	269	994	234	294	35	1,560
	Subminiature lamps (T-2 and below):									
	OEM	5	20,102	20,819	2,020	(D)	(D)	(D)	(D)	9,953
36411 75	Replacement	3	7,979	5,735	874	(D)	(D)	(D)	(D)	8,475
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	15,891	15,381	3,399	15,341	3,357	40	42	3,512
36411 77	Replacement	4	4,678	2,515	2,838	2,216	2,394	299	444	9,569
36411 78	Electric discharge (except Christmas tree)	18	175,238	155,115	300,776	142,782	274,570	12,333	26,206	117,718
36411 41	Germicidal, bacterial, and ozone	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	9	150,414	130,943	223,191	120,169	205,121	10,774	18,070	102,505
36411 43	Slimline, single pin base, including rapid start	7	15,735	14,384	41,625	13,092	39,560	1,292	2,065	9,614
36411 46	Circular, including rapid start	4	2,377	1,827	4,410	1,257	3,036	570	1,374	2,152
36411 47	High output 800 milliamp and over, including power grove, VHO, and SHO	7	8,095	7,501	28,935	7,132	27,208	369	1,727	6,081
	Other fluorescent hot cathode	8	124,207	107,231	148,221	98,688	135,317	8,543	12,904	84,658
	30 watts and below	7	19,914	16,978	47,497	14,351	41,786	2,627	5,711	21,818
36411 48	Compact fluorescent lamps	5	9,696	7,392	28,837	5,697	24,684	1,695	4,153	12,891
36411 49	All other	7	10,218	9,586	18,660	8,654	17,102	932	1,558	8,927
	Over 30 watts	8	104,293	90,253	100,724	84,337	93,531	5,916	7,193	62,840
36411 81	U-shaped T8 and T12	3	3,517	3,185	13,184	2,846	12,009	339	1,175	2,399
36411 82	Linear T8 rapid start	4	10,897	7,783	14,194	7,396	13,228	387	966	6,366
36411 83	All other above 30 watts	7	89,879	79,285	73,346	74,095	68,294	5,190	5,052	54,075
	Miscellaneous electrical discharge	11	24,339	23,711	72,137	22,222	65,054	1,489	7,083	14,993
36411 51	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	6,005	5,930	67,324	5,278	60,577	652	6,747	3,757
36411 54	Sodium vapor	4	2,831	2,698	28,020	2,356	25,073	342	2,947	1,765
36411 56	Standard mercury vapor	6	1,323	1,402	10,023	1,247	8,958	155	1,065	1,093
36411 57	Metal halide	7	1,851	1,830	29,281	1,675	26,546	155	2,735	899
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

[Quantity in thousands of lamps; value in thousands of dollars]

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1993										
SECOND QUARTER										
	All types ²	37	914,682	852,756	679,109	783,932	611,409	68,824	67,700	698,611
	Photographic incandescent	4	7,955	7,480	12,196	6,559	9,551	921	2,645	^f 10,318
36411 27	Projection	3	^b 1,332	1,540	10,628	^b 1,179	^b 8,228	^a 361	^a 2,400	^b 335
36411 23	Photoflash, including blue	2	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾
36411 25	Photoflood, photoenlarger, and other photolamps	2	^b 6,623	^b 5,940	^b 1,568	^b 5,380	^a 1,323	^a 560	^a 245	^a 9,983
	Large incandescent (except photographic and Christmas tree)	14	461,475	416,525	236,582	393,489	220,070	23,036	16,512	407,253
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	^a 184,555	174,180	56,234	^a 164,480	^a 54,565	9,700	^a 1,669	^b 132,910
36411 09	15 to 150 watts, 100 to 130 volts, all other	8	^b 167,267	145,855	44,711	^b 140,394	^b 43,291	^b 5,461	^c 4,420	^b 140,655
36411 12	Above 150 watts, 100 to 130 volts	6	^b 2,708	2,860	3,831	^b 2,656	^b 3,657	^b 204	^b 174	^a 4,629
36411 13	Three-way, 100 to 130 volts	4	^b 15,626	12,568	10,669	^b 11,928	^a 10,355	^b 640	^c 314	^a 17,210
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	^b 13,789	11,054	37,180	^b 9,421	^c 31,904	^b 1,633	^b 5,276	^b 19,151
36411 19	R type (blown glass)	7	^a 14,702	14,219	27,245	^a 13,386	^a 26,190	^b 833	^b 1,055	^a 14,514
36411 15	Infrared (all types)	5	1,247	1,010		^a 933	^a 3,523	77	^a 308	^b 1,226
36411 16	Traffic and street lighting, 100 to 130 volts	5	^c 1,877	1,571	2,006	(D)	(D)	(D)	(D)	^b 3,607
36411 17	Rough and vibration service, 100 to 130 volts	6	^a 6,899	5,936	5,135	^a 5,667	^b 4,907	^a 269	^a 228	^a 5,762
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	6	^a 2,458	1,968	10,277	^b 1,956	^b 10,209	^c 12	^c 68	^a 3,449
	Other	4	2,399	2,353	12,014	1,273	7,743	1,080	4,271	3,580
36411 03	Low voltage display lamps (12V or less)	3	^b 2,004	1,959	6,231	(D)	(D)	(D)	(D)	^b 2,689
36411 04	All other	3	^b 395	394	5,783	(D)	(D)	(D)	(D)	^b 891
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	^b 21,332	17,420	8,554	^b 16,404	^b 8,108	^a 1,016	^a 446	^a 26,478
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	^b 26,616	25,531	14,895	^b 23,565	^b 13,721	^a 1,966	^a 1,174	^b 34,082
	Miniature incandescent	8	274,477	267,509	120,099	237,173	103,298	30,336	16,801	148,304
	Automobile glass and metal sealed beams:									
	OEM	3	10,528	9,833	21,051	(D)	(D)	(D)	(D)	2,627
36411 62	Replacement	4	14,242	12,677	43,997	(D)	(D)	(D)	(D)	8,506
	All other glass and metal sealed beams:									
	OEM	3	1,622	1,521	4,734	(D)	(D)	(D)	(D)	385
36411 67	Replacement	4	1,860	1,554	7,832	(D)	(D)	(D)	(D)	2,292
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	136,885	136,620	19,046	(D)	(D)	(D)	(D)	29,338
36411 36	Replacement	4	51,013	53,468	11,827	(D)	(D)	(D)	(D)	61,423
	Flashlight:									
	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 72	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Radio panel:									
	OEM	3	5,059	5,014	657	4,922	647	92	10	622
36411 74	Replacement	4	1,946	1,469	291	1,129	252	340	39	2,037
	Subminiature lamps (T-2 and below):									
	OEM	6	^b 21,506	19,944	1,886	(D)	(D)	(D)	(D)	^c 11,515
36411 76	Replacement	3	6,925	3,247	651	(D)	(D)	(D)	(D)	12,153
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	13,858	14,398	3,869	14,364	^a 3,831	34	^c 38	^a 2,972
36411 78	Replacement	4	5,259	3,260	3,283	2,716	2,874	544	409	11,568
	Electric discharge (except Christmas tree)	18	170,775	161,242	310,232	146,711	278,490	^f 14,531	31,742	^f 132,736
	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode:									
	Slimline, single pin base, including rapid start	9	146,400	137,324	229,778	124,572	209,725	12,662	20,053	116,710
36411 43	Circular, including rapid start	6	^b 16,061	13,872	34,114	^b 12,949	^b 32,374	^b 923	^b 1,740	^b 12,911
36411 46	High output 800 milliamp and over, including power grove, VHO, and SHO	4	^c 1,671	1,719	4,200	^b 972	^b 2,711	^c 747	^c 1,489	^b 2,022
36411 47	Other fluorescent hot cathode	7	^b 8,274	7,651	28,482	^b 7,104	^b 26,440	^b 547	^c 2,042	^b 7,552
	30 watts and below	8	120,394	113,992	162,982	103,547	148,200	10,445	14,782	94,225
	Compact fluorescent lamps	7	17,571	17,417	49,827	14,486	42,696	2,931	7,131	20,207
36411 48	All other	4	^b 7,949	7,738	31,887	^b 5,542	^b 26,530	^c 2,196	^c 5,357	^b 12,281
36411 49	Over 30 watts	6	^b 9,622	9,679	17,940	^b 8,944	^b 16,166	^b 735	^b 1,774	^a 7,926
	U-shaped T8 and T12	8	102,823	96,575	113,155	89,061	105,504	7,514	7,651	74,018
36411 81	Linear T8 rapid start	3	^b 3,280	3,248	14,478	^b 2,915	^b 13,304	^b 333	^c 1,174	^b 2,462
36411 82	All other above 30 watts	3	^b 10,670	11,286	21,137	^b 10,613	^b 19,723	^b 673	^c 4,144	^a 4,702
36411 83	Miscellaneous electrical discharge	7	^b 88,873	82,041	77,540	^b 75,533	^b 72,477	^a 5,508	^a 5,063	^b 66,854
	Glow	11	^b 23,918	^b 23,540	75,068	^b 21,743	64,428	1,797	10,640	^f 15,817
36411 51	General lighting high intensity lamps:	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Sodium vapor	9	6,239	5,862	70,938	4,880	60,428	982	10,510	4,751
36411 54	Standard mercury vapor	4	^a 3,043	2,767	30,623	^b 2,235	^b 25,628	532	4,995	^b 2,450
36411 56	Metal halide	6	^a 1,270	1,221	9,269	^a 997	^a 7,794	224	1,475	1,103
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	8	^b 1,926	1,874	31,046	^b 1,648	^b 27,006	^a 226	^b 4,040	^c 1,198
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

[Quantity in thousands of lamps; value in thousands of dollars]

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
THIRD QUARTER										
	All types ²	35	775,045	830,540	688,864	777,340	630,400	53,200	58,464	643,325
	Photographic incandescent	4	7,439	10,202	10,212	8,672	9,062	1,530	1,150	7,555
36411 27	Projection	3	^b 1,192	1,206	8,229	1,078	7,339	^b 128	^c 890	^r ^b 321
36411 23	Photoflash, including blue	2	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾
36411 25	Photofloor, photoenlarger, and other photolamps	2	³ 6,247	³ 8,996	³ 1,983	³ 7,594	³ 1,723	³ 1,402	³ 260	³ 7,234
	Large incandescent (except photographic and Christmas tree)	14	410,381	439,352	250,744	422,654	235,927	16,698	14,817	378,285
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	^b 192,513	205,815	63,872	201,061	62,747	^a 4,754	^b 1,125	^b 119,608
36411 09	15 to 150 watts, 100 to 130 volts, all other	8	^b 120,693	138,503	42,438	133,565	41,009	^c 4,938	^c 1,429	^b 122,845
36411 12	Above 150 watts, 100 to 130 volts	6	^b 2,546	2,923	3,993	2,745	3,835	^c 178	^b 158	^a 4,252
36411 13	Three-way, 100 to 130 volts	4	^b 12,302	13,308	12,432	12,912	12,191	^c 396	^c 241	^a 16,204
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	^r ^b 11,575	13,170	44,270	11,537	39,450	^b 1,633	^b 4,820	^b 17,556
36411 19	R type (blown glass)	7	^a 14,011	14,655	28,617	13,737	27,504	^b 918	^b 1,113	^a 13,871
36411 15	Infrared (all types)	5	^a 1,094	1,168	4,197	1,103	4,000	65	^b 197	^b 1,152
36411 16	Traffic and street lighting, 100 to 130 volts	6	^c 1,369	1,407	1,787	(D)	(D)	(D)	(D)	^b 3,569
36411 17	Rough and vibration service, 100 to 130 volts	6	^r ^b 4,721	5,086	4,645	4,925	4,510	^b 161	^b 135	^a 5,397
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	7	^r ^b 1,944	2,164	10,738	2,126	10,608	^a 38	^b 130	^a 3,229
	Other	4	2,292	2,464	11,975	1,406	8,030	1,058	3,945	3,408
36411 03	Low voltage display lamps (12V or less)	3	^b 1,938	2,085	6,500	(D)	(D)	(D)	(D)	2,542
36411 04	All other	3	^b 354	379	5,475	(D)	(D)	(D)	(D)	866
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	5	^b 22,582	16,785	8,021	16,010	7,646	^a 775	^b 375	32,277
36411 18	All other large incandescent (special purpose), including under 15 watts and other than 100 to 130 volts ³	4	^b 22,739	21,904	13,759	20,295	12,783	^a 1,609	^a 976	^b 34,917
	Miniature incandescent	8	205,415	220,705	119,504	199,915	106,061	20,790	13,443	133,215
	Automobile glass and metal sealed beams:									
	OEM	3	8,029	8,307	19,300	(D)	(D)	(D)	(D)	2,349
36411 62	Replacement	4	13,515	14,713	52,955	(D)	(D)	(D)	(D)	7,308
	All other glass and metal sealed beams:									
	OEM	3	1,198	1,273	4,007	(D)	(D)	(D)	(D)	310
36411 67	Replacement	4	1,474	1,359	6,722	(D)	(D)	(D)	(D)	2,407
	Automobile miniature other than glass and metal sealed beams:									
	OEM	4	108,745	110,270	15,586	(D)	(D)	(D)	(D)	28,498
36411 36	Replacement	4	35,959	43,663	11,438	(D)	(D)	(D)	(D)	53,719
	Flashlight:									
	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 72	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Radio panel:									
	OEM	3	2,626	2,710	404	2,603	392	107	12	538
36411 74	Replacement	4	2,564	1,049	224	922	208	127	16	3,552
	Subminiature lamps (T-2 and below):									
	OEM	6	^b 14,185	14,301	1,378	(D)	(D)	(D)	(D)	11,399
36411 76	Replacement	4	(D)	4,641	656	(D)	(D)	(D)	(D)	7,028
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
	OEM	6	12,512	12,097	3,213	12,051	^a 3,151	46	^c 62	^a 3,387
36411 78	Replacement	4	845	2,685	2,805	2,373	2,460	312	345	9,728
	Electric discharge (except Christmas tree)	18	151,810	160,281	308,404	146,099	279,350	14,182	29,054	124,270
	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	9	128,312	136,534	230,432	123,922	210,288	12,612	20,144	108,493
36411 43	Slimline, single pin base, including rapid start	6	^b 13,268	14,411	35,319	13,250	33,379	^b 1,161	^b 1,940	^b 11,773
36411 46	Circular, including rapid start	4	^b 1,684	1,780	4,434	1,168	3,071	^b 612	^c 1,363	^b 1,926
36411 47	High output 800 milliamper and over, including power grove, VHO, and SHO	7	^b 7,187	7,451	29,904	6,927	28,046	^b 524	^c 1,858	^b 7,288
	Other fluorescent hot cathode	8	106,173	112,892	160,775	102,577	145,792	10,315	14,983	87,506
	30 watts and below	7	16,539	17,431	48,695	14,054	41,160	3,377	7,535	19,315
	Compact fluorescent lamps	3	^c 6,959	8,285	30,416	5,848	24,595	^c 2,437	^c 5,821	^b 10,955
36411 49	All other	6	^b 9,580	9,146	18,279	8,206	16,565	940	^b 1,714	8,360
	Over 30 watts	8	89,634	95,461	^r 112,080	88,523	104,632	^r 6,938	^r 7,448	^r 68,191
36411 81	U-shaped T8 and T12	3	^b 2,918	2,985	13,567	2,709	12,477	^c 276	^c 1,090	^b 2,395
36411 82	Linear T8 rapid start	3	^b 11,740	11,356	20,429	10,656	18,770	^b 700	^c 1,659	^b 5,086
36411 83	All other above 30 watts	7	^b 74,976	81,120	78,084	75,158	73,385	5,962	^b 4,699	^b 60,710
	Miscellaneous electrical discharge	11	^r 23,066	^r 23,322	72,825	^r 21,825	64,963	^r 1,497	^r 7,862	^r 15,561
36411 51	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	5,386	5,640	68,692	4,959	60,961	681	7,731	4,497
36411 54	Sodium vapor	4	^a 2,551	2,518	27,746	2,165	24,600	353	3,146	^b 2,483
36411 56	Standard mercury vapor	6	^a 1,074	1,252	10,106	1,106	9,025	146	1,081	925
36411 57	Metal halide	8	^a 1,761	1,870	30,840	1,688	27,336	^a 182	^b 3,504	^c 1,089
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 8. Production, Shipments, and Stocks of Electric Lamps, by Quarter: 1994 and 1993—Con.

[Quantity in thousands of lamps; value in thousands of dollars]

Product code	Product description	Number of companies ¹	Production	Shipments (except shipments from other lamp manufacturers)						Stocks, end of year (quantity)
				Total		Domestic		Export		
				Quantity	Value	Quantity	Value	Quantity	Value	
1993										
FOURTH QUARTER										
	All types ²	35	965,352	1,032,910	878,642	960,719	797,447	72,191	81,195	575,080
	Photographic incandescent	4	7,787	9,309	12,905	8,940	11,244	369	1,661	6,033
36411 27	Projection	3	^b 1,563	1,607	11,101	1,358	9,604	^b 249	^b 1,497	^b 277
36411 23	Photoflash, including blue	2	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾
36411 25	Photoflood, photoenlarger, and other photolamps	2	^a 6,224	^a 7,702	^a 1,804	^a 7,582	^a 1,640	^a 120	^a 164	^a 5,756
	Large incandescent (except photographic and Christmas tree)	14	524,623	579,260	331,326	556,121	310,884	23,139	20,442	323,972
	General lighting:									
	15 to 150 watts, 100 to 130 volts, white lamps	8	^b 259,098	282,428	92,590	274,687	90,891	7,741	1,699	^b 96,676
36411 08	15 to 150 watts, 100 to 130 volts, all other	8	^b 151,368	174,534	52,796	169,448	51,624	^b 5,086	^a 1,172	^b 99,396
36411 12	Above 150 watts, 100 to 130 volts	6	^b 2,701	3,473	4,875	3,343	4,725	^b 130	^b 150	^b 3,473
36411 13	Three-way, 100 to 130 volts	4	^b 15,428	20,263	19,609	19,441	19,281	^b 822	^b 328	^a 11,369
	Reflector, 100 to 130 volts:									
	Par type (pressed glass)	7	^b 14,067	16,973	56,024	14,357	49,550	^b 2,616	^b 6,474	^c 14,650
36411 19	R type (blown glass)	7	^b 16,074	18,957	37,876	17,971	36,568	^b 986	^b 1,308	^b 10,925
36411 15	Infrared (all types)	5	^a 1,734	1,831	6,356	1,749	6,069	^a 82	^a 287	^c 1,058
36411 16	Traffic and street lighting 100-130 volts	6	^b 1,394	1,654	2,273	(D)	(D)	(D)	(D)	^b 3,090
36411 17	Rough and vibration service, 100 to 130 volts	6	^a 6,460	6,442	5,969	6,167	5,759	^a 275	^a 210	^a 5,436
	Tungsten halogen (quartz iodine), excluding 650 watt lamp used in sungun:									
	General lighting	7	^c 828	2,411	11,470	2,328	11,204	^b 83	^b 266	^a 1,758
	Other	6	2,408	3,164	15,137	1,503	8,801	1,661	6,336	2,652
36411 03	Low voltage display lamps (12V or less)	3	^b 2,030	2,674	8,238	(D)	(D)	(D)	(D)	^b 1,898
36411 04	All other	3	^b 378	490	6,899	352	4,678	138	2,221	^b 754
36411 18	Decorative, under 150 watts, 100 to 130 volts (except A line)	5	26,128	25,044	12,349	23,678	11,680	^b 1,366	^a 669	33,362
	All other large incandescent (special-purpose), including under 15 watts and other than 100 to 130 volts ⁴	4	^b 26,935	22,086	14,002	19,938	12,651	^b 2,148	^a 1,351	^a 40,127
	Miniature incandescent	8	261,320	263,559	152,354	230,884	135,784	32,675	16,570	129,966
	Automobile glass and metal sealed beams:									
36411 61	OEM	3	8,489	9,365	22,203	(D)	(D)	(D)	(D)	1,473
36411 62	Replacement	4	17,694	19,808	73,496	(D)	(D)	(D)	(D)	5,194
	All other glass and metal sealed beams:									
36411 65	OEM	3	1,492	1,503	4,515	(D)	(D)	(D)	(D)	299
36411 67	Replacement	4	1,490	2,178	10,168	(D)	(D)	(D)	(D)	1,719
	Automobile miniature other than glass and metal sealed beams:									
36411 33	OEM	3	129,042	130,100	18,306	(D)	(D)	(D)	(D)	27,604
36411 36	Replacement	4	52,066	51,449	12,188	(D)	(D)	(D)	(D)	54,336
	Flashlight:									
36411 71	OEM	2	(D)	(D)	(D)	(D)	(D)	-	-	(D)
36411 72	Replacement	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Radio panel:									
36411 73	OEM	3	2,775	2,737	388	2,573	370	164	18	576
36411 74	Replacement	4	2,647	1,439	337	1,191	305	248	32	4,760
	Subminiature lamps (T-2 and below):									
36411 75	OEM	6	^b 18,501	18,015	1,544	(D)	(D)	(D)	(D)	^c 11,885
36411 76	Replacement	4	6,269	7,480	960	(D)	(D)	(D)	(D)	5,817
	All other miniature incandescent, including surgical, medical, and dental instruments: ⁵									
36411 77	OEM	6	12,913	12,214	3,201	12,202	^a 3,183	12	^c 18	^a 3,902
36411 78	Replacement	4	4,158	4,273	4,117	2,701	3,358	1,572	759	9,613
	Electric discharge (except Christmas tree)	18	171,622	180,782	382,057	164,774	339,535	16,008	42,522	115,109
36411 41	Germicidal, bacterial, and ozone	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 42	Sunlamp bulbs	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fluorescent, hot cathode	9	146,666	154,892	277,228	141,068	250,010	13,824	27,218	100,267
36411 43	Slimline, single pin base, including rapid start	6	^b 16,015	16,895	42,694	14,981	39,741	^b 1,914	^b 2,953	^b 10,893
36411 46	Circular, including rapid start	4	^c 2,262	2,492	6,157	1,433	3,755	^c 1,059	^c 2,402	^b 1,696
36411 47	High output 800 milliamper and over, including power groove, VHO, and SHO	7	^b 8,321	8,172	32,537	7,442	30,589	^a 730	^b 1,948	^b 7,437
	Other fluorescent hot cathode	8	120,068	127,333	195,840	117,212	175,925	10,121	19,915	80,241
	30 watts and below	7	18,228	19,700	65,315	16,004	54,608	3,696	10,707	17,843
	Compact fluorescent lamps	3	^c 7,622	10,026	44,900	7,672	36,953	^c 2,354	^c 7,947	^b 8,551
36411 48	All other	6	^b 10,606	9,674	20,415	8,332	17,655	^b 1,342	^c 2,760	^a 9,292
36411 49	Over 30 watts	8	101,840	107,633	130,525	101,208	121,317	6,425	9,208	62,398
	U-shaped T8 and T12	3	^b 3,915	3,816	17,047	3,387	15,596	^b 429	^c 1,451	^b 2,494
36411 81	Linear T8 rapid start	3	15,587	13,414	25,135	12,522	23,412	^a 892	^b 1,723	^a 7,259
36411 82	All other above 30 watts	7	^b 82,338	90,403	88,343	85,299	82,309	^a 5,104	^b 6,034	^b 52,645
36411 83	Miscellaneous electrical discharge	11	24,521	25,463	99,689	23,354	85,433	2,109	14,256	14,618
36411 51	Glow	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	General lighting high intensity lamps	9	6,840	7,781	95,556	6,488	81,431	1,293	14,125	3,555
36411 54	Sodium vapor	4	^b 3,097	3,698	41,524	3,005	35,629	^a 693	^a 5,895	^b 1,882
36411 56	Standard mercury vapor	6	^a 1,177	1,528	12,247	1,261	10,156	^a 267	^b 2,091	^a 573
36411 57	Metal halide	8	^b 2,566	2,555	41,785	2,222	35,646	^b 333	^c 6,139	^c 1,100
36411 53	Sodium, photochemical, cold cathode fluorescent, and other miscellaneous electrical discharge	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36411 55	Christmas tree lamps, all types ²	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See page 7-34 for footnotes.

Table 8--Con. (Footnotes)

¹Number of companies engaged in the production, shipments, or stocks of each line.
²Total does not include Christmas tree lamps.
³Data from products combined to avoid disclosing figures for individual companies.
⁴Includes lamps for special services such as sign and display lighting, aviation, street, railway, spot and flood lighting, train, country home and showcase lighting, other items for special applications, and large incandescent lamps under 15 watts and other than 100 to 130 volts.
⁵Includes lamps for use in toys, pin games, surgical, medical, and dental instruments, and for special applications.
- Represents zero. D Data withheld to avoid disclosing figures for individual companies. †Revised by 5 percent or more from previously published figures.

Note: Beginning stocks, plus production, minus shipments, do not necessarily equal ending stocks.

Also, the percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item is estimated. ^b25 to 50 percent of this item is estimated. ^cOver 50 percent of this item is estimated.

Table 9. Shipments of Electric Lamps, as Reported in Current Industrial Report MQ36B: 1985 to 1994

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

Shipments of electric lamps	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
Quantity	3,563.3	3,564.3	3,422.1	3,297.5	3,318.5	3,429.5	3,510.2	3,399.4	3,421.3	3,472.0
Value	3,046.1	2,928.6	2,854.3	2,718.6	2,679.3	2,689.9	2,730.2	2,681.5	2,610.1	2,669.2

Note: These data do not include Christmas tree lamps or cold cathode fluorescent lamps.

Table 10. Shipments, Exports, and Imports of Electric Lamps: 1994

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

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value
36411 —	Electric filament lamps and electric discharge lamps, including ultraviolet and infrared lamps and photoflash lamps; electric luminescent lamps, and arc lamps	3,489,602	2,917,127	22,194	533,942	1,822,387	784,244
	Large incandescent (except photographic and Christmas tree):						
	Tungsten halogen:						
36411 05	General lighting	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
36411 03	Low voltage display lamps 12 volts or less	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
36411 04	All other	⁴ 3,997	⁴ 18,033	⁴ 16,322	⁴ 75,883	⁴ 111,990	⁴ 172,556
	General lighting:						
36411 08	15 to 150 watts, 100 to 130 volts, white lamps	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 09	15 to 150 watts, 100 to 130 volts, all other	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 12	Above 150 watts, 100 to 130 volts	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
	Reflector, 100 to 130 volts:						
36411 14	Par type (pressed glass)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 19	R type (blown glass)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 16	Traffic and street lighting, 100 to 130 volts.	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 17	Rough and vibration service, 100 to 130 volts	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 18	All other large incandescent (special-purpose), including under 15 watts and other than 100 to 130 volts	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
	Photographic incandescent:						
36411 23	Photoflash, including blue	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 27	Projection	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
36411 25	Photoflood, photoenlarger, and other photolamps	⁵ 1,655,524	⁵ 883,569	⁵ 61,939	⁵ 52,400	⁵ 409,331	⁵ 115,153
36411 07	Decorative under 150 watts, 100 to 130 volts (except A line)	98,790	49,558	3,146	1,851	134,540	35,201
36411 13	Three-way, 100 to 130 volts	58,970	54,175	1,847	594	189	115
36411 15	Infrared (all types)	1,638	5,304	2,476	14,322	1,630	7,314

See footnotes at end of table.

Table 10. Shipments, Exports, and Imports of Electric Lamps: 1994—Con.

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

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value
	Miniature incandescent lamps (except Christmas tree):						
	Automotive glass and metal sealed beams:						
36411 61	OEM	(6)	(6)	(6)	(6)	(6)	(6)
36411 62	Replacement	(6)	(6)	(6)	(6)	(6)	(6)
	All other glass and metal sealed beams:						
36411 65	OEM	(6)	(6)	(6)	(6)	(6)	(6)
36411 67	Replacement	⁶ 116,168	⁶ 364,677	⁶ 27,161	⁶ 133,153	⁶ 16,006	⁶ 49,699
	Automotive miniature other than glass and metal sealed beams:						
36411 33	OEM	(7)	(7)	(7)	(7)	(7)	(7)
36411 36	Replacement	(7)	(7)	(7)	(7)	(7)	(7)
	Flashlight:						
36411 71	OEM	(7)	(7)	(7)	(7)	(7)	(7)
36411 72	Replacement	(7)	(7)	(7)	(7)	(7)	(7)
	Radio panel:						
36411 73	OEM	(7)	(7)	(7)	(7)	(7)	(7)
36411 74	Replacement	(7)	(7)	(7)	(7)	(7)	(7)
	Subminiature lamps (T-2 and below):						
36411 75	OEM	(7)	(7)	(7)	(7)	(7)	(7)
36411 76	Replacement	(7)	(7)	(7)	(7)	(7)	(7)
	All other miniature incandescent, including surgical, medical, and dental instruments:						
36411 77	OEM	(7)	(7)	(7)	(7)	(7)	(7)
36411 78	Replacement	⁷ 893,476	⁷ 162,832	⁷ 47,239	⁷ 30,060	⁷ 802,323	⁷ 124,855
	Electric discharge lamps (except Christmas tree):						
	Fluorescent hot cathode:						
36411 43	Slimline, single pin base, including rapid start	(8)	(8)	(8)	(8)	(8)	(8)
36411 46	Circular, including rapid start	(8)	(8)	(8)	(8)	(8)	(8)
36411 47	High output - 800 milliamp and over, including power grove, VHO, and SHO	(8)	(8)	(8)	(8)	(8)	(8)
36411 48	Other compact fluorescent lamps, 30 watts and below	(8)	(8)	(8)	(8)	(8)	(8)
36411 49	All other 30 watt and below fluorescent lamps	(8)	(8)	(8)	(8)	(8)	(8)
36411 81	U-shaped T8 and T12, over 30 watts	(8)	(8)	(8)	(8)	(8)	(8)
36411 82	Linear T8 rapid start, over 30 watts	(8)	(8)	(8)	(8)	(8)	(8)
36411 83	All other above 30 watts	⁸ 585,419	⁸ 1,002,322	⁸ 47,829	⁸ 110,182	⁸ 81,842	⁸ 158,432
	Electric discharge (except fluorescent):						
36411 41	Germicidal, bacterial, and ozone	(9)	(9)	(9)	(9)	(9)	(9)
36411 42	Sunlamp bulbs	(9)	(9)	(9)	(9)	(9)	(9)
	Miscellaneous electric discharge:						
36411 51	Glow	(9)	(9)	(9)	(9)	(9)	(9)
	General lighting high intensity lamps:						
36411 54	Sodium vapor	(9)	(9)	(9)	(9)	(9)	(9)
36411 56	Standard mercury vapor	(9)	(9)	(9)	(9)	(9)	(9)
36411 57	Metal halide	(9)	(9)	(9)	(9)	(9)	(9)
36411 53	Sodium, photochemical, cold cathode fluorescent, and other	⁹ 75,620	⁹ 376,657	⁹ 10,840	⁸ 113,160	⁹ 19,988	⁹ 95,435
36411 55	Christmas tree lamps (all types)	(D)	(D)	(¹⁰)	(¹⁰)	244,548	25,484

¹For 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.

²Source: Bureau of Census report EM545, *U.S. Exports*.

³Source: Bureau of Census report IM145, *U.S. Imports for Consumption*. This value represents the c.i.f. and calculated duty.

⁴Product codes 36411 03-05 were combined to show comparability between manufacturers' shipments, exports, and imports.

⁵Product codes 36411 08-09, 12, 14, 16-19, 23, 25, and 27 were combined to show comparability between manufacturers' shipments, exports, and imports.

⁶Product codes 36411 61-62, 65, and 67 were combined to show comparability between manufacturers' shipments, exports, and imports.

⁷Product codes 36411 33, 36, and 71-78 were combined to show comparability between manufacturers' shipments, exports, and imports.

⁸Product codes 36411 43, 46-49, and 81-83 were combined to show comparability between manufacturers' shipments, exports, and imports.

⁹Product codes 36411 41-42, 51, 53-54, and 56-57 were combined to show comparability between manufacturers' shipments, exports, and imports.

¹⁰Exports of Christmas tree lights are included in 8539.22.4000.

D Data withheld to avoid disclosing figures for individual companies.

HISTORICAL NOTE

Data on electric lamps 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.

FUNDING

The MQ36B survey is funded, in part, by the National Electrical Manufacturers Association.

CONTACT FOR DATA USERS

For additional information about these data, contact Raphael Corrado, 301-457-4743.

7.4 FLUORESCENT LAMP BALLASTS

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 13 companies.

SUMMARY OF FINDINGS

The value of manufacturers' shipments of fluorescent lamp ballasts amounted to \$922 million in 1994, a decrease of 5 percent from shipments of \$970 million in 1993. The quantity of fluorescent lamp ballasts shipped decreased to 104 million units in 1994, from 107 million units in 1993. Corrected power-factor types accounted for 54 percent of the quantity and 52 percent of the value of shipments of all fluorescent lamp ballasts during the year 1994. For 1994, the quantity of shipments for corrected power-factor lamp ballasts increased 3 percent, while that for uncorrected power-factor ballasts remained the same, compared with 1993; the dollar value of shipments of the former type showed a 5-percent increase, while the dollar value of the latter type showed a 1-percent decrease. The value of shipments of electronic ballasts was \$372 million in 1994, compared with \$447 million in 1993.

EXPLANATION OF TERMS

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.

Rapid Start. Includes ballasts of all voltage and frequency ratings for operation of all lamps designed for cathode preheating without the use of starters.

Switch Start. Includes ballasts of all voltage and frequency ratings for operation of all lamps of the switch 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.

Table 11. **Quantity and Value of Shipments of Uncorrected and Corrected Power-Factor Type Fluorescent Ballasts: 1983 to 1994**

[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
1994.....	104,194	921,554	27,517	75,013	55,991	474,952	20,686	371,589
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	(¹)	(¹)
1984.....	67,519	392,072	18,085	39,265	49,434	352,807	(¹)	(¹)
1983.....	60,825	337,361	18,272	36,170	42,553	301,191	(¹)	(¹)

¹Data for electronic type were not collected separately prior to 1986.

Table 12. Quantity and Value of Shipments, By Type of Ballast: 1994 and 1993

[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
1994											
36124 —	Total	104,194	921,554	26,611	249,710	25,610	230,035	24,524	219,275	27,449	222,534
	Uncorrected power-factor type. . . .	27,517	75,013	6,341	20,550	6,777	17,847	6,654	18,855	7,745	17,761
	Switch start	17,839	30,199	4,309	6,949	4,359	7,279	4,104	8,166	5,067	7,805
36124 62	20 watt and less	16,216	24,651	¹ 3,918	¹ 5,825	4,035	5,849	¹ 3,725	¹ 6,547	¹ 4,538	¹ 6,430
36124 63	21 to 40 watt	1,232	5,548	¹ 391	¹ 1,124	¹ 324	¹ 1,430	¹ 379	¹ 1,619	¹ 529	¹ 1,375
36124 65	Above 40 watt	-	-	-	-	-	-	-	-	-	-
36124 61	Rapid start	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
36124 66	Other than rapid and switch start	¹ 9,678	¹ 44,814	¹ 2,032	¹ 13,601	¹ 2,418	¹ 10,568	¹ 2,550	¹ 10,689	¹ 2,678	¹ 9,956
	Corrected power-factor type	55,991	474,952	13,446	112,357	14,530	123,438	13,566	118,606	14,449	120,551
	Slimline and instant start	10,325	120,802	2,414	28,811	2,578	30,200	2,571	29,663	2,762	32,128
36124 67	Two-lamp 96T12 and 72T12 ..	8,827	105,543	² 1,100	² 25,606	2,160	25,926	² 1,175	² 25,666	² 2,392	² 28,345
36124 68	Other	1,498	15,259	³ 14	³ 205	³ 418	³ 4,274	³ 396	³ 3,997	³ 370	³ 3,783
	Rapid start	44,086	344,583	10,698	81,518	11,569	91,030	10,561	86,330	11,258	85,705
36124 71	Two-lamp, 40 watt	34,246	217,657	8,424	52,715	¹ 9,076	¹ 59,093	8,167	53,296	¹ 8,579	¹ 52,553
	All other rapid start	9,840	126,926	2,274	28,803	2,493	31,937	2,394	33,034	2,679	33,152
36124 72	800 to 1,000 mA	3,091	64,125	⁷ 27	⁷ 15,123	781	⁷ 15,907	⁷ 22	⁷ 15,851	⁷ 861	⁷ 17,244
36124 73	1,500 mA	305	10,947	⁸ 0	⁸ 2,906	⁸ 0	⁸ 3,084	⁸ 72	⁸ 2,449	⁸ 73	⁸ 2,508
36124 74	Other	6,444	51,854	¹ 1,467	¹ 10,774	1,632	12,946	1,600	¹ 14,734	¹ 1,745	¹ 13,400
	Switch start	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
	Two-lamp 40 watt	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 81	Other (except 2-lamp 40 watt)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 79	All other corrected power-factor type	² 1,580	² 9,567	² 334	² 2,028	² 383	² 2,208	² 434	² 2,613	² 429	² 2,718
	Electronic type	20,686	371,589	6,824	116,803	4,303	88,750	4,304	81,814	5,255	84,222
36124 83	Preheat or rapid start lamp up through 40 watt	19,377	325,921	⁶ 557	⁶ 109,952	⁶ 3,922	⁶ 72,348	⁶ 3,994	⁶ 67,681	⁶ 4,904	⁶ 75,940
36124 85	Single-pin slimline, instant start lamp	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36124 87	Rapid start lamp operating at 800 mA and above	³ 1,306	³ 45,668	³ 267	³ 6,851	³ 381	³ 16,402	³ 307	³ 14,133	³ 351	³ 8,282
1993											
36124 —	Total	107,428	969,542	28,052	259,899	28,306	271,892	26,319	233,770	24,751	203,981
	Uncorrected power-factor type. . . .	28,150	65,820	8,091	19,205	6,354	14,281	6,790	15,548	6,915	16,786
	Switch start	16,669	26,718	4,554	7,068	4,007	6,268	4,057	6,198	4,051	7,184
36124 62	20 watt and less	15,244	22,229	4,148	5,765	3,641	5,206	3,758	5,230	3,697	6,028
36124 63	21 to 40 watt	1,425	4,489	406	1,303	366	1,062	299	968	354	1,156
36124 65	Above 40 watt	-	-	-	-	-	-	-	-	-	-
36124 61	Rapid start	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
36124 66	Other than rapid and switch start	¹ 11,481	¹ 39,102	¹ 3,537	¹ 12,137	¹ 2,347	¹ 8,013	¹ 2,733	¹ 9,350	¹ 2,864	¹ 9,602
	Corrected power-factor type	54,790	457,222	13,267	113,272	13,440	110,172	14,524	122,094	13,559	111,684
	Slimline and instant start	9,980	117,648	2,435	30,164	2,408	27,747	2,572	30,137	2,565	29,600
36124 67	Two-lamp 96T12 and 72T12 ..	8,642	103,814	2,207	27,616	2,100	24,606	2,160	25,926	2,175	25,666
36124 68	Other	1,338	13,834	228	2,548	308	3,141	412	4,211	390	3,934
	Rapid start	43,376	331,273	10,549	81,426	10,698	80,497	11,569	89,749	10,560	79,601
36124 71	Two-lamp, 40 watt	34,136	213,160	8,469	53,314	8,424	51,715	9,076	59,093	8,167	49,038
	All other rapid start	9,240	118,113	2,080	28,112	2,274	28,782	2,493	30,656	2,393	30,563
36124 72	800 to 1,000 mA	3,018	61,604	789	16,236	727	15,102	781	15,386	721	14,880
36124 73	1,500 mA	299	10,485	67	2,306	80	2,906	80	2,824	72	2,449
36124 74	Other	5,923	46,024	1,224	9,570	1,467	10,774	1,632	12,446	1,600	13,234
	Switch start	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
	Two-lamp 40 watt	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 81	Other (except 2-lamp 40 watt)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
36124 79	All other corrected power-factor type	² 1,434	² 8,301	² 283	² 1,682	² 334	² 1,928	² 383	² 2,208	² 434	² 2,483
	Electronic type	24,488	446,500	6,694	127,422	8,512	147,439	5,005	96,128	4,277	75,511
36124 83	Preheat or rapid start lamp up through 40 watt	22,906	404,718	6,334	117,744	8,074	135,865	4,528	83,716	3,970	67,393
36124 85	Single-pin slimline, instant start lamp	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
36124 87	Rapid start lamp operating at 800 mA and above	³ 1,582	³ 41,782	³ 360	³ 9,678	³ 438	³ 11,574	³ 477	³ 12,412	³ 307	³ 8,118

¹Data for product code 36124 61 and product code 36124 66 were combined to avoid disclosing figures for individual companies.
²Data for "Switch start" and product code 36124 79 were combined to avoid disclosing figures for individual companies.
³Data for product code 36124 85 and product code 36124 87 were combined to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ¹Revised by 5 percent or more from previously published figures.

Table 13. **Shipments, Exports, Imports, and Apparent Consumption of Fluorescent Lamp Ballasts: 1994 and 1993**

[Thousands of dollars]

Product code ¹	Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Imports for consumption ²	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	c.i.f. and calculated duty
36124 —	Fluorescent lamp ballasts.....1994 1993	104,194 107,428	921,554 969,542	10,178 ³ 8,117	66,697 ³ 64,007	62,702 ³ 62,705	352,952 ³ 385,130

¹Source: Bureau of the Census report EM545, *U.S. Exports*. The Schedule B export number is 8504.10.0000.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. The HTSUSA import number is 8504.10.0000.

³Exports/imports are overstated due to the inclusion of specialty transformers classified in product code 36123.

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 Carol Beasley, 301-457-4781.

7.5 WIRING DEVICES AND SUPPLIES

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 1994, manufacturers' shipment of wiring devices and supplies totaled \$8.1 billion, an increase of 11 percent from \$7.3 billion in 1993. Current-carrying wiring devices accounted for \$4.5 billion, an increase of 10 percent from \$4.1 billion in 1993, while the noncurrent-carrying wiring devices accounted for \$3.6 billion, an increase of 11 percent, from \$3.3 billion in 1993. The 1994 shipments

included lampholders, valued at \$213.3 million, an increase of 1 percent, from \$210.4 million in 1993; convenience and power outlets, valued at \$344.0 million, an increase of 10 percent, from \$313.8 million in 1993; switches, valued at \$1.6 billion, an increase of 11 percent, from \$1.5 billion in 1993; metal contacts, valued at \$244.4 million, an increase of 18 percent, from \$208.0 million in 1993; wire connectors, valued at \$1.1 billion, an increase of 9 percent, from \$976.0 million in 1993; other current-carrying wiring devices, valued at \$1.0 billion, an increase of 12 percent, from \$904.4 million in 1993; pole line and transmission hardware, valued at \$621.3 million, an increase of 1 percent, from \$618.0 million in 1993; electrical conduit and conduit fittings, valued at \$1.9 billion, an increase of 14 percent, from \$1.6 billion in 1993; and other noncurrent-carrying wiring devices, valued at \$1.1 billion, an increase of 12 percent, from \$998.7 million in 1993.

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 14. Value of Shipments of Wiring Devices and Supplies, by Class of Product: 1985 to 1994

[Millions of current dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
3643	Current-carrying wiring devices.....	4,510.0	4,086.6	4,153.6	3,939.3	3,857.8	4,031.4	3,921.9	3,663.6	3,320.5	3,433.0
36431	Lampholders.....	213.3	210.4	197.3	214.7	230.0	240.3	226.6	218.4	202.0	195.0
36432	Convenience and power outlets, both general- and special-purpose, excluding pin and sleeve type.....	344.0	313.8	332.0	308.6	287.0	301.2	304.3	290.6	278.8	270.8
36433	Switches for electrical circuitry.....	1,632.1	1,473.9	1,423.5	1,310.4	1,348.6	1,376.6	1,524.6	1,425.2	1,254.5	1,265.0
36434	Metal contacts precious and other.....	244.4	208.0	240.1	332.3	317.4	375.4	201.8	176.6	159.8	201.6
36435	Wire connectors for electrical circuitry.....	1,064.0	976.0	1,007.3	915.8	844.3	857.2	842.0	794.6	720.9	778.7
36436	Other current-carrying wiring devices, including attachment plug caps, connector bodies, lightning arrestors, and pin and sleeve convenience power outlets.....	1,012.3	904.4	953.3	857.6	830.4	884.2	822.6	758.2	704.6	721.9
3644	Noncurrent-carrying wiring devices.....	3,599.7	3,250.7	3,140.4	2,930.3	3,095.8	3,114.7	3,212.1	2,791.1	2,434.1	2,459.5
36441	Pole line and transmission hardware.....	621.3	618.0	541.6	493.6	516.5	525.5	455.3	384.6	375.2	380.5
36442	Electrical conduit and conduit fittings.....	1,864.3	1,633.9	1,601.1	1,496.5	1,657.7	1,664.7	1,833.9	1,528.6	1,265.9	1,275.7
36443	Other noncurrent-carrying wiring devices and supplies.....	1,114.1	998.7	997.7	940.1	921.6	924.5	923.0	877.9	793.0	803.2

*Revised by 5 percent or more from previously published figures.

Table 15. Quantity and Value of Shipments of Wiring Devices and Supplies: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3643	Wiring devices and supplies	(X)	(X)	8,109,710	(X)	7,337,252
	Current-carrying wiring devices	(X)	(X)	4,510,042	(X)	4,086,585
36431 —	Lampholders	36	754,134	213,252	732,186	210,440
	Incandescent:					
36431 03	Outlet box, threaded, medium base only, pull and keyless types	8	20,595	21,274	18,788	20,340
36431 04	Push through and pull types, all materials, threaded, medium base only, excluding outlet box type and socket interiors	5	229,728	44,687	¹ 216,004	¹ 43,658
36431 06	Weatherproof, threaded, medium base only	10	4,230	^a 4,690	4,203	4,555
36431 11	Candelabra base, all types	11	63,566	13,398	65,531	11,472
36431 13	Sign and fixture, medium base only	7	18,964	16,994	¹ 17,100	¹ 14,400
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	155,039	56,444	¹ 158,059	^a 63,059
	Fluorescent:					
36431 15	Bi-pin	8	211,930	27,565	204,582	26,258
36431 21	Slimline	5	17,794	6,374	18,256	6,456
36431 23	Recessed double contact	5	12,377	8,692	11,275	7,863
36431 25	All other fluorescent, including but not limited to circline, panelescent, and starter holders	6	13,089	5,710	¹ 12,200	¹ 5,315
36431 28	All other lampholders, including cold cathode neon, and bases for quartz lamps	8	^b 6,822	^a 7,424	¹ 6,158	¹ 7,064
36432 —	Convenience and power outlets, both general- and special-purpose, excluding pin and sleeve type	15	243,971	343,999	225,385	313,805
36432 27	Receptacles with GFIC (all types, all amperages)	6	18,392	126,672	16,137	113,263
36432 28	2-pole, 2-wire (flush, all types)	6	⁽¹⁾	⁽¹⁾	⁽²⁾	⁽²⁾
	2-pole, 3-wire and up (flush):					
36432 29	Locking, 15 amperes and under	6	⁽¹⁾	⁽¹⁾	⁽²⁾	⁽²⁾
36432 30	Locking, 20 amperes and over	6	3,525	15,868	¹ 3,162	¹ 13,939
36432 31	Nonlocking, 15 amperes and under	6	76,082	52,758	¹ 69,502	¹ 46,218
36432 32	Nonlocking, 20 amperes and over	8	21,424	40,563	¹ 20,993	¹ 42,208
36432 34	Appliance and special applications all amperages, all types	5	17,822	7,014	⁽²⁾	⁽²⁾
36432 39	All other types, including dust and explosion proof, surface and 2-pole/2-wire	8	¹ 106,726	¹ 101,124	² 115,591	² 98,177
36433 —	Switches for electrical circuitry	83	955,356	1,632,125	914,680	1,473,916
	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	80,025	56,999	74,786	52,524
36433 63	Single pole, over 15 amperes	6	6,483	18,262	¹ 5,323	¹ 14,130
36433 64	Other than single pole, including but not limited to double pole 3-way, 4-way	8	48,063	67,541	39,286	61,315
36433 51	ac-dc (except mercury)	4	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾

See footnotes at end of table.

Table 15. Quantity and Value of Shipments of Wiring Devices and Supplies: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3643	Wiring devices and supplies—Con. Current-carrying wiring devices—Con.					
36433 —	Switches for electrical circuitry—Con.					
36433 69	General use flush-mounted switches, designed for mounting in switch or outlet boxes (except dimmers)—Con. All other general-use switches, including surface-mounted, mercury, etc.	8	³ 20,425	³ 21,012	³ 18,893	³ 18,009
36433 70	Special-purpose switches: Appliance and fixture, including pendant and canopy types and variable speed controls	22	106,232	183,430	98,435	162,368
36433 71	Precision (1/8-inch gap or less) snap-acting switches, excluding limit switches	11	^a 85,821	^a 52,668	^a 98,913	^a 57,747
36433 72	Aircraft types	9	2,700	75,590	2,939	78,572
36433 76	Automotive types	31	393,053	791,617	361,234	689,160
36433 77	All other special-purpose switches, including foot actuated, light sensing, and signal actuated.	27	200,293	237,681	^r 202,644	^r 224,648
	Dimmers:					
	Incandescent:					
36433 93	Infinitely variable, 600 watts or less.	11	9,280	57,770	8,701	51,505
36433 94	Infinitely variable, over 600 watts.	10	(⁴)	(⁴)	453	27,535
36433 95	All other types, including but not limited to portable lamps and high-low switches	9	⁴ 2,981	⁴ 69,555	3,073	36,403
36434 —	Metal contacts, precious and other	16	⁵ 16,175	244,427	⁵ 15,546	207,979
36435 —	Wire connectors, including connectors used under national electrical application.	66	⁵ 25,243	1,063,960	⁵ 23,421	976,035
36435 82	Pressure connectors, where pressure is applied by screw, cone, or other mechanical device.	26	⁵ 627	156,274	⁵ 507	139,120
36435 83	Compression connectors, uninsulated terminals and splicers, tool installed	26	⁵ 2,389	132,559	⁵ 2,516	128,470
36435 84	Preinsulated terminals and splicers, tool installed	16	⁵ 2,015	203,191	⁵ 1,603	168,257
36435 86	Banded or strip terminals and splicers, machine installed.	16	⁵ 5,829	115,682	⁵ 5,646	110,945
36435 87	Pigtail connectors, including wire nuts	14	⁵ 2,835	73,755	⁵ 2,594	68,154
36435 88	Blade or pin type, separable terminations and splicers	12	⁵ 5,274	137,724	⁵ 4,993	123,807
36435 89	Other wire connectors, n.e.c., including solder type	28	⁵ 6,274	244,775	⁵ ^r 5,562	^r 237,282
36436 —	Other current-carrying wiring devices, including attachment plug caps, connector bodies, lightning arresters, pin and sleeve convenience power outlets, etc.	123	(X)	1,012,279	(X)	904,410
36436 40	Attachment plug caps and flanged outlets, including motor bases, all types; including fused, fuseless, switch, and switchless: 2-pole, 2-wire, all types, general use locking and nonlocking, all amperages ..	14	54,753	18,320	^r 47,161	15,885
36436 41	2-pole, 3-wire and up: Locking, 15 amperes and under	9	2,568	^a 6,129	^r 2,129	^r 4,860
36436 42	Locking, 20 amperes and over	9	^b 2,172	^a 17,105	^r 1,859	^r 14,705
36436 43	Nonlocking, 15 amperes and under	12	^a 22,256	^b 35,051	^r 21,511	33,946
36436 44	Nonlocking, 20 amperes and over	12	9,875	20,907	8,978	^r 18,459
36436 45	All other types (except pin and sleeve), including dust and explosion-proof, appliance, and other special application.	10	2,607	35,705	2,304	32,539

See footnotes at end of table.

Table 15. Quantity and Value of Shipments of Wiring Devices and Supplies: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3643	Wiring devices and supplies—Con. Current-carrying wiring devices—Con.					
36436 —	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:					
36436 49	2-pole, 2-wire, all types, all amperages .. 2-pole, 3-wire and up:	13	5,742	2,668	[†] 6,504	2,707
36436 51	Locking, 15 amperes and under.	10	1,636	10,546	[†] 1,289	[†] 7,002
36436 53	Locking, 20 amperes and over.	8	852	^a 12,965	[†] 788	[†] 11,652
36436 55	Nonlocking, 15 amperes and under.	11	^a 5,243	^a 18,616	[†] 4,745	[†] 16,507
36436 57	Nonlocking, 20 amperes and over.	8	712	4,000	862	3,309
36436 58	All other types, excluding pin and sleeve, including dust and explosion-proof, appliance, and other special application.	9	41,008	45,273	[†] 33,191	35,467
	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.	9	947	33,623	753	28,643
36436 67	Attachment plug caps.	9	305	20,488	[†] 340	[†] 19,862
36436 69	Connector bodies.	9	443	22,791	[†] 378	[†] 19,552
36436 72	All other pin and sleeve, including dust and explosion-proof, 20-ampere types, etc.	7	300	11,637	411	12,999
36436 79	Fluorescent starters.	5	9,631	2,504	8,197	2,572
36436 81	Terminal blocks.	23	133,859	109,106	117,419	93,665
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)	31,827	(X)	30,265
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)	111,318	(X)	102,699
36436 88	Surge suppressors, designed for equipment operating on 110/120 volt circuits.	11	(X)	50,847	(X)	[†] 39,561
36436 91	Lightning rods.	12	(X)	^a 36,899	(X)	^a 32,161
36436 94	Electric harnesses and assemblies, excluding engine harnesses (from purchased wire).	16	(X)	86,526	(X)	73,134
36436 97	Miscellaneous, including combination devices, adaptors, current taps, surface extensions, rosettes, choke coils, rail bonds, and overhead trolley line materials.	38	(X)	261,252	(X)	[†] 246,856
36436 98	All other wiring devices with integral ground fault circuit interrupting capabilities, excluding circuit breakers.	5	314	6,176	269	[†] 5,403

See footnotes at end of table.

Table 15. Quantity and Value of Shipments of Wiring Devices and Supplies: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3644	Wiring devices and supplies—Con. Noncurrent-carrying wiring devices	(X)	(X)	3,599,668	(X)	3,250,667
36441 — 36441 12	Pole and transmission line hardware Pole and transmission line construction materials, also known as overhead and underground line hardware for electric transmission, distribution, and communication lines	40	(X)	621,274	(X)	618,029
36441 13	Pole and transmission line anchors	32	(X)	496,834	(X)	^r 502,584
36441 19	All other pole and transmission line hardware	5	(X)	16,604	(X)	15,289
36442 —	Electrical conduit and conduit fittings	82	(X)	1,864,300	(X)	1,633,915
	Rigid metal conduit, excluding couplings, nipples, bends, and elbows:					
36442 01	Standard weights (steel) (short tons)	7		243,240	^e 249,499	^e 224,848
36442 05	Other metallic conduit (short tons)	3		24,058	(^e)	(^e)
36442 24	Nonmetallic conduit (1,000 pounds)	6		630,533	549,401	228,753
36442 27	Electrical metallic tubing (short tons)	6		358,848	321,753	247,209
36442 33	Flexible steel and aluminum conduit (1,000 feet)	9		218,099	^r 170,980	55,534
36442 32	Flexible nonmetallic conduit (1,000 pounds)	12		^c 85,697	^b ^r 84,913	31,533
36422 35	Raceways and wire ways, including fittings, metal	15	(X)	146,923	(X)	134,297
36442 38	Ventilated cable tray and accessories	5	(X)	41,411	(X)	38,005
36442 51	Cast conduit bodies, covers, and gaskets	10	(X)	116,358	(X)	^r 117,704
	Rigid conduit fittings, including couplings, nipples, bends, and elbows:					
36442 53	Couplings, connectors, and unions	20	(X)	142,747	(X)	142,445
36442 54	Locknuts and bushings	10	(X)	29,429	(X)	28,256
36442 59	All other rigid conduit fittings	8	(X)	(^r)	(X)	(^r)
36442 52	Nonmetallic conduit fittings	15	(X)	^r 92,901	(X)	^r 73,873
	EMT fittings (couplings and connectors):					
36442 56	Gland type	15	(X)	33,483	(X)	31,861
36442 57	Set-screw type	12	(X)	47,402	(X)	35,812
36442 58	All others	11	(X)	6,426	(X)	^a ^r 3,720
36442 44	Service entrance caps, ells, and connectors	14	(X)	10,216	(X)	9,811
	Cable, cord, and flexible conduit fittings:					
36442 71	Armored cable, metallic sheathed cable, and flexible conduit fittings	16	(X)	127,089	(X)	^r 95,304
36442 77	Liquid-tight flexible conduit fittings	13	(X)	54,801	(X)	63,340
36442 72	Nonmetallic sheathed cable and cord fittings	16	(X)	38,221	(X)	^r 36,931
36442 46	Other electric conduit fittings	16	(X)	32,399	(X)	^a ^r 34,679
36443 —	Other noncurrent-carrying wiring devices and supplies	82	(X)	1,114,094	(X)	998,723
	Stamped metal boxes, covers, and accessories, including stamped conduit boxes:					
36443 31	Switch and receptacle boxes	13	(X)	334,551	(X)	291,598
36443 32	Outlet boxes	10	(X)	116,845	(X)	100,731
36443 33	Covers	11	(X)	37,961	(X)	29,992
36443 34	Supports, bar hangers, and other accessories	15	(X)	42,349	(X)	^r 45,210

See footnotes at end of table.

Table 15. Quantity and Value of Shipments of Wiring Devices and Supplies: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3644	Wiring devices and supplies—Con. Noncurrent-carrying wiring devices—Con.					
36443 —	Other noncurrent-carrying wiring devices and supplies—Con. Cast metal boxes, covers, gaskets, and accessories:					
36443 41	FS and FD switch and receptacle type . . .	11	(X)	37,823	(X)	35,104
36443 42	Outlet type	8	(X)	36,667	(X)	36,089
36443 43	Junction type	19	(X)	79,104	(X)	72,831
	Switch, outlet, FM/TV, and telephone wall plates:					
36443 35	Metallic	9		44,371		47,515
36443 36	Nonmetallic	9		253,343		234,541
36443 37	Plastic boxes and covers	18	(X)	95,231	(X)	82,456
36443 38	Floor boxes and covers	9	(X)	35,335	(X)	31,404
36443 48	Other noncurrent-carrying wiring devices and supplies	35	(X)	219,472	(X)	199,611

¹For 1994, product codes 36432 28, 36432 29, and 36432 39 are combined to avoid disclosing figures for individual companies.²For 1993, product codes 36432 28, 36432 29, 36432 34, and 36432 39 are combined to avoid disclosing figures for individual companies.³Product codes 36433 51 and 36433 69 are combined to avoid disclosing figures for individual companies.⁴For 1994, product codes 36433 94 and 36433 95 are combined to avoid disclosing figures for individual companies.⁵Quantities for product codes beginning with 36434 and 36435 are published in millions of units rather than thousands of units.⁶For 1993, product codes 36442 01 and 36442 05 are combined to avoid disclosing figures for individual companies.⁷Product codes 36442 59 and 36442 52 are combined to avoid disclosing figures for individual companies.n.e.c. Not elsewhere classified. [†]Revised by 5 percent or more from previously published figures. X Not applicable.Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item is estimated. ^b26 to 50 percent of this item is estimated. ^cOver 50 percent of this item is estimated.

Table 16. Value of Shipments, Exports, and Imports of Selected Wiring Devices: 1994 and 1993

[Millions of dollars]

Product description	Manufacturers' shipments f.o.b. plant ¹	Exports of domestic merchandise at port ^{1 2}	Imports for consumption ^{1 3}
1994			
Lampholders	213.3	13.9	66.2
Metal contacts	244.4	28.0	36.6
1993			
Lampholders	210.4	12.9	61.2
Metal contacts	208.0	19.2	28.0

¹For 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.²Source: Bureau of the Census report EM545, *U.S. Exports*.³Source: Bureau of the Census report IM145, *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. Histori-

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

CONTACT FOR DATA USERS

For additional information about these data, contact Jack Matthews, 301-457-4842.

7.6 ELECTRIC LIGHTING FIXTURES

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 1994, the total value of shipments of electric lighting fixtures was \$5,475.5 million. This represents a 7-percent increase from the 1993 total value of \$5,115.0 million. The 1994 figure includes residential type fixtures, \$1,033.9 million, an increase of 4 percent from 1993; commercial and institutional type fixtures, \$2,592.1 million, an increase of 8 percent from 1993; industrial type fixtures, \$533.0 million, an increase of 8 percent from 1993; and outdoor lighting equipment, \$1,316.6 million, an increase of 7 percent from 1993. Vehicular lighting equipment data were discontinued in 1992.

EXPLANATION OF TERMS

See Introduction for an explanation of terms.

Table 17. Value of Shipments of Electric Fixtures: 1985 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
	Electric lighting fixtures ¹	5,475.5	5,115.0	4,720.1	4,426.0	4,798.2	4,738.0	4,571.8	4,417.8	4,102.8	3,913.8
36451	Residential type	1,033.9	996.5	898.2	760.9	827.6	858.5	877.1	916.1	844.9	786.8
36462	Commercial and institutional type (except spot-light)	2,592.1	2,390.8	2,221.2	2,164.8	2,379.7	2,316.7	2,242.7	2,094.8	1,940.2	1,832.3
36463	Industrial type	533.0	493.4	442.1	446.4	529.4	504.6	430.6	419.1	400.9	389.2
36470	Vehicular lighting equipment	(NA)	(NA)	(NA)	1,616.1	1,620.7	1,570.5	1,564.4	1,368.5	1,222.4	1,001.2
36485	Outdoor lighting equipment	1,316.6	1,234.2	1,158.6	1,053.9	1,061.5	1,058.2	1,021.4	987.8	916.8	905.5

¹Excludes product code 36470, "Vehicular lighting equipment," which is not available for 1992 to 1994.

NA Not available.

Table 18. Quantity and Value of Shipments of Electric Lighting Fixtures: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36451 —	Electric lighting fixtures, residential type	121	(X)	1,033,886	(X)	996,546
	Incandescent, excluding PAR lampholders and floodlights:					
	Interior, including bath or kitchen:					
36451 11	Ceiling or pendant	76	^b 16,725	^b 331,947	17,252	^a 323,458
36451 13	Wall or bracket	64	^b 3,727	^b 75,703	4,174	^a 80,743
	Track lighting:					
36451 06	Single circuit track lengths and accessories	6	(X)	5,606	(X)	⁵ 5,675
36451 07	Multiple circuit track lengths and accessories	3	(X)	(D)	(X)	(D)
36451 08	Line voltage heads	2	(¹)	(¹)	(¹)	(¹)
36451 09	Low voltage heads	3	(¹)	(¹)	(¹)	(¹)
36451 10	Track lengths and heads sold together (kits)	2	¹ 505	¹ 10,741	¹ 403	¹ 8,763
36451 12	Recessed IC (direct contact with ceiling insulation)	8	12,153	92,864	9,623	84,331
36451 14	Recessed non-IC (3-inch minimum clearance from ceiling insulation)	8	^a 5,174	80,038	7,041	77,486
	Outdoor:					
36451 15	Designed for attachment to house	47	^b 4,845	^a 72,673	4,794	69,050
36451 16	Custom lighting (lanterns, etc.)	8	399	11,124	(D)	(D)
36451 17	Not designed for attachment to house (garden, patio, and yard)	35	2,360	^a 63,918	¹ 1,919	55,851
	Fluorescent:					
36451 18	Wraparounds	26	5,117	76,438	4,806	71,550
36451 20	Ceiling mounted decorative	27	5,422	75,028	5,097	70,389
36451 22	Ceiling mounted general-purpose	17	5,778	60,531	5,679	57,573
36451 24	Pendant	6	(D)	(D)	(D)	(D)
36451 26	Recessed IC (direct contact with ceiling insulation)	4	(²)	(²)	(²)	(²)
36451 28	Recessed non-IC (3-inch minimum clearance from ceiling insulation)	4	² 845	² 25,182	² 574	² 17,354
36451 30	Wall or bracket	22	^c 900	11,097	777	8,508
36451 69	Components and renewal parts for residential type sold separately	32	(X)	^a 30,974	(X)	36,466
36462 —	Electric lighting fixtures, commercial and institutional type (except portable and spotlight)	161	(X)	2,592,070	(X)	2,390,827
	Incandescent fixtures:					
	Utilitarian and ornamental types (primarily for public buildings, banks, stores, office buildings, schools, auditoriums, churches, theaters, etc.):					
36462 11	Surface or pendant	51	^b 1,584	^a 100,057	^a 1,348	81,507
	Recessed:					
36462 12	IC (direct contact with ceiling insulation)	16	^a 7,441	^a 67,846	^a 6,313	^a 66,529
36462 14	Non-IC (3-inch minimum clearance from ceiling insulation)	19	^a 9,229	^a 135,056	^a 8,177	^a 124,315
	Track lighting:					
36462 20	Single circuit track lengths and accessories	8	(X)	41,109	(X)	39,678
36462 22	Multiple circuit track lengths and accessories	9	(X)	^a 9,544	(X)	^a 8,361
36462 24	Line voltage heads	11	2,665	50,097	2,358	47,257
36462 26	Low voltage heads	10	648	20,771	601	19,918
36462 28	Track lengths and heads sold together (kits)	5	266	4,136	256	4,254
36462 18	Specialized custom lighting fixtures, chandeliers, church lighting, etc.	42	(X)	^a 38,956	(X)	¹ 39,161
36462 19	Other incandescent fixtures, such as interior display and PAR lampholders	21	(X)	^c 40,062	(X)	^c 26,163
	High intensity discharge types:					
36462 30	Surface or pendant	28	^a 209	^a 28,778	¹ 191	¹ 26,615
36462 31	Indirect lighting	11	89	22,507	¹ 81	¹ 21,472
	Recessed non-IC (3-inch minimum clearance from ceiling insulation):					
36462 36	Open reflector	17	471	^a 27,022	¹ 464	¹ 23,880
36462 38	Enclosed	18	334	^a 33,807	¹ 337	¹ 36,303
	Recessed IC (direct contact with ceiling insulation):					
36462 39	Open reflector	3	(³)	(³)	(³)	(³)
36462 41	Enclosed	6	³ 13	³ 2,261	³ 20	³ 3,063

See footnotes at end of table.

Table 18. Quantity and Value of Shipments of Electric Lighting Fixtures: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36462 —	Electric lighting fixtures, commercial and institutional type (except portable and spotlight)—Con.					
	Fluorescent:					
	Recessed troffers, air handling, including heat extraction versions:					
36462 43	Lensed	16	^a 401	^a 23,574	^r 390	^r 21,718
36462 44	Metal louvered	15	4,299	254,030	^r 4,135	^r 226,034
36462 45	Non-metal louvered.	10	^a 65	^a 7,030	^r 64	^r 6,944
	Recessed troffers, non-air handling, including heat extraction versions:					
36462 46	Lensed	40	11,565	420,439	11,108	393,775
36462 47	Metal louvered	23	^a 1,954	^a 101,525	^r 1,952	^r 96,745
36462 48	Non-metal louvered.	12	^b 158	^b 6,556	119	4,905
36462 49	Striplights (surface).	50	11,584	228,202	11,425	219,231
36462 50	Striplights (recessed)	13	^a 752	26,951	588	^r 22,121
36462 55	Ceiling systems, including luminous ceilings	19	(X)	^b 26,170	(X)	^b 25,813
36462 56	Plastic wraparounds	42	4,933	^a 150,471	4,487	131,501
36462 57	Wall mounted fixtures.	55	^b 1,389	^b 75,150	^a 1,532	79,178
36462 65	Under cabinet mount task light.	26	1,857	62,590	^r 1,723	^r 59,764
	Surface and pendant, all other:					
36462 66	Lensed	48	3,261	99,470	^r 2,863	^r 89,084
36462 68	Louvered.	24	^a 264	^a 33,321	^r 258	^r 32,834
	Compact fluorescent downlights:					
36462 70	Recessed IC (direct contact with ceiling insulation)	7	^a 84	^b 18,556	44	12,414
36462 72	Recessed non-IC (3-inch minimum clearance from ceiling insulation)	13	^a 1,536	^a 66,463	^r 1,379	^a 54,705
	Specific function lighting, all sources (incandescent, HID, and fluorescent):					
36462 59	Enclosed and gasketed (clean room fixtures).	36	^b 561	^b 41,265	^a 525	37,866
36462 74	Indirect lighting, furniture mount	4	34	2,845	24	2,274
36462 76	Indirect lighting, pendant mount	7	^a 12	^a 2,939	^a 11	^a 2,390
36462 61	Indoor signs, including electro-luminescence (exit, directional, etc.)	26	^b 1,790	^b 130,262	^a 1,610	^b 112,256
36462 62	Indoor emergency lighting (automatic self-powered)	16	^a 849	^b 47,456	^r 737	^a 43,373
36462 63	Vandal resistant (specialty products designed for this application)	11	250	16,149	157	10,159
36462 64	All other	30	(X)	^c 86,308	(X)	^b 81,967
36462 69	Components and renewal parts for commercial and institutional type sold separately	38	(X)	^a 56,378	(X)	^r 55,030
36463 —	Electric lighting fixtures, industrial type	60	(X)	532,951	(X)	493,387
	General lighting (except portable):					
36463 11	Incandescent	17	^b 670	^b 16,468	^b 622	^b 15,051
36463 13	Fluorescent.	34	^a 4,206	^a 143,755	^a 3,933	^a 125,996
	High intensity discharge types, including integrally mounted and remote ballasts:					
36463 06	Open reflector	15	1,055	99,266	^r 928	^r 86,041
36463 08	Enclosed.	16	961	129,313	900	117,586
36463 10	Parking garage lighting (fixtures designed specifically for this application)	10	116	12,611	104	11,225
	Hazardous lighting - UL listed, class, division, group:					
36463 16	Incandescent, including portable	9	(X)	18,957	(X)	19,403
36463 17	Fluorescent, including portable.	17	(X)	^c 18,234	(X)	^a 19,409
36463 19	High intensity discharge types, including integrally mounted and remote ballasts	11	(X)	63,014	(X)	68,029
36463 29	Components and renewal parts for industrial type sold separately.	19	(X)	^a 31,333	(X)	^r 30,647
36485 —	Outdoor lighting equipment, excluding lamps	104	(X)	1,316,622	(X)	1,234,245
	Street and highway lighting luminaries, including bridge and tunnel lighting:					
36485 11	Incandescent (filament and quartz iodine)	4	(D)	(D)	(D)	(D)
	High intensity discharge types, including low pressure sodium and integrally mounted and remote ballasts:					
36485 13	Open	3	450	17,596	503	19,069
36485 14	Enclosed.	17	1,286	107,788	1,266	99,734
36485 15	Fluorescent.	7	^b 19	^b 3,643	^b 24	^b 4,748
36485 17	Special-purpose luminaries for highmast, sign lighting, and expressway fixtures, excluding value of poles	6	^b 140	^b 22,430	^r 120	18,773

See footnotes at end of table.

Table 18. Quantity and Value of Shipments of Electric Lighting Fixtures: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36485 —	Outdoor lighting equipment, excluding lamps—Con.					
	Floodlighting, area, and site lighting luminaries:					
	General-purpose floodlighting:					
36485 20	Incandescent filament	10	^b 242	^c 15,030	^b 205	^c 12,438
36485 22	Incandescent quartz iodine	17	2,503	32,417	2,305	29,671
36485 23	High intensity discharge types, general, including low pressure sodium and integrally mounted and remote ballasts	27	1,090	^a 159,989	1,028	^a 152,949
36485 26	Fluorescent	11	393	15,734	339	13,256
36485 27	HID sportslighting (fixtures designed specifically for this application)	9	159	26,736	148	23,498
	HID area and site lighting:					
36485 35	Site lighting (under 20-foot mounting)	23	1,920	^a 101,084	1,786	95,807
36485 39	Bollards	15	^a 39	^a 12,223	33	10,231
36485 51	Post-top	15	100	15,108	99	14,952
36485 42	Large area lighting (20- to 60-foot mounting)	20	^a 463	^a 105,742	^a 470	^a 102,061
36485 32	Wall packs (such as high intensity discharge, incandescent, and quartz)	23	1,030	103,001	986	92,386
36485 34	Outdoor PAR lampholders	16	7,491	76,078	6,134	77,590
	Other floodlighting and area lighting equipment:					
36485 43	Spotlights, including indoor and stage and excluding vehicular	8	^c 295	^c 32,248	286	30,766
36485 45	All other outdoor lighting equipment (such as underwater fountain and pool lighting)	28	(X)	^b 88,093	(X)	^a 78,504
	Aviation ground lighting equipment (for fixed-based airports):					
36485 31	Runway approach lighting, including fixtures, regulators, insulating transformers, isolating lamp transformers, beacons, wind tees, and cones	7	(X)	^a 14,712	(X)	13,139
36485 33	Runway (except runway approach), taxiway, and ramp light, including fixtures, regulators, and isolating lamp transformers	9	(X)	(D)	(X)	(D)
36485 98	Components and renewal parts for outdoor lighting equipment sold separately	32	(X)	^a 51,815	(X)	53,191
	Poles, standards, newels, brackets, and accessories:					
	For street and highway lighting, including traffic signal standards:					
36485 36	Steel and cast iron poles	17	(X)	67,657	(X)	^f 59,942
36485 38	Aluminum poles	11	(X)	^a 26,566	(X)	25,227
36485 40	Concrete poles	3	(X)	⁽⁴⁾	(X)	⁽⁴⁾
36485 37	All other (fiberglass, wood, etc.)	3	(X)	⁴ 20,039	(X)	⁴ 18,693
	For area lighting, sports and other off-street use:					
36485 46	Steel and cast iron poles (60-foot and over)	7	(X)	^a 13,443	(X)	^f 11,899
36485 47	Steel and cast iron poles (under 60-foot)	22	(X)	^b 79,249	(X)	^f 69,655
36485 48	Aluminum poles	21	(X)	^b 45,379	(X)	^f 41,512
36485 49	All other (concrete, wood, etc.)	7	(X)	(D)	(X)	(D)

¹Data for product codes 36451 08, 36451 09, and 36451 10 have been combined to avoid disclosing figures for individual companies.²Data for product codes 36451 26 and 36451 28 have been combined to avoid disclosing figures for individual companies.³Data for product codes 36462 39 and 36462 41 have been combined to avoid disclosing figures for individual companies.⁴Data for "Value" in product codes 36485 40 and 36485 37 have been combined to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies.

^fRevised by 5 percent or more from previously published figures.

X Not applicable.

Note: The percent of estimation of each item is indicated as follows:

^a10 to 25 percent of this item is estimated.^b26 to 50 percent of this item is estimated.^cOver 50 percent of this item is estimated.

Table 19. Shipments, Exports, and Imports of Electric Lighting Fixtures: 1994

[Quantity in units. Value in thousands of dollars]

Product code ¹	Product description	Manufacturers' shipments f.o.b. plant (value)	Exports of domestic merchandise ¹		Imports for consumption ³	
			Quantity	Value at port ²	Quantity	Value in foreign country ³
36451 06-18, 20, 22, 24, 26, 28, 30	Electric lighting fixtures, residential type (except portable), excluding components and renewal parts	1,002,912	6,168,370	32,078	49,910,771	474,721
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	3,037,310	2,245,740	82,240	10,036,019	99,162
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	993,840	13,037,677	159,598	82,908,654	316,553
36451 69, 36462 69, 36463 29, 36485 98	Components and renewal parts for lighting fixtures	170,500	(NA)	142,717	(NA)	172,689

¹For 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.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

NA Not available.

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 Jack Matthews, 301-457-4842.

7.7 Communication Equipment

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 1994, the total value of shipments of communication equipment totaled \$47.5 billion, an increase of 11 percent from the 1993 figure of \$42.8 billion. Telephone switching equipment totaled \$8.1 billion, an increase of

12.5 percent from the 1993 value of \$7.2 billion. Carrier line equipment and modems totaled \$5.7 billion, an increase of 14 percent from the 1993 value of \$5.0 billion. Other telephone and telegraph equipment totaled \$8.7 billion, an increase of 24.3 percent from the 1993 value of \$7.0 billion.

Communication systems and equipment totaled \$17.1 billion, an increase of 5.5 percent from the 1993 value of \$16.2 billion.

Broadcast, studio, and related electronic equipment totaled \$2.6 billion, an increase of 23.8 percent from the 1993 value of \$2.1 billion. Alarm systems totaled \$1.6 billion, an increase of 6.6 percent from the 1993 value of \$1.5 billion. Electronic teaching machines, teaching aids, trainers, and simulators totaled \$781.9 million, a decrease of 8.4 percent from the 1993 value of \$847.7 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 20. Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment, by Class of Product: 1989 to 1994

[Millions of unadjusted dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989
	Communication equipment, including telephone, telegraph, and other electronic systems and equipment ..	47,491.9	42,113.8	39,501.9	37,821.0	36,990.3	35,415.7
36611	Telephone switching and switchboard equipment	8,088.5	7,240.9	7,291.3	6,956.6	7,537.1	6,975.5
36613	Carrier line equipment and modems	5,680.7	4,993.3	4,810.6	4,298.4	5,013.8	4,705.7
36614	Other telephone and telegraph equipment and components.	8,647.1	7,026.4	5,507.3	4,909.5	3,180.5	3,061.8
36631	Communication systems and equipment (except broadcast)	17,132.5	16,196.7	15,162.8	14,987.9	14,768.0	14,016.3
36632	Broadcast, studio, and related electronic equipment .	2,562.9	2,077.5	1,948.2	1,836.3	1,856.4	1,809.6
36693	Intercommunications systems, including inductive paging systems (selective calling)	265.9	241.7	288.5	303.8	346.1	367.8
36691	Alarm systems	1,555.6	1,532.4	1,370.4	1,145.0	1,027.2	1,132.5
36692	Vehicular and pedestrian traffic control equipment and electrical railway signals and attachments	634.6	'573.4	597.3	491.1	470.6	451.1
36991	Electronic teaching machines, teaching aids, trainers and simulators	781.9	'847.7	1,310.8	1,411.0	1,208.8	1,359.6
36992	Laser systems and equipment (except medical and communication) ¹	746.4	(NA)	(NA)	(NA)	(NA)	(NA)
36995	Ultrasonic equipment.	137.5	127.3	119.2	113.7	108.8	137.7
36999	Other electronic systems and equipment, n.e.c. ²	1,258.3	1,256.5	1,095.5	720.8	1,473.0	1,398.1

¹Beginning in 1994, data for "Laser equipment, instrumentation, and components" have been eliminated from this survey. Only laser sources are being collected.

²Product code 36997 changed to product code 36999 for 1992. Product codes 36998, 39992, and 39447 are no longer collected on this survey.

NA Not available. n.e.c. Not elsewhere classified. 'Revised by 5 percent or more from previously published figures.

Table 21. **Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment, by Product Code: 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
36611 —	Telephone switching and switchboard equipment.....	86	(X)	8,088,538	(X)	7,240,910
	Central office switching equipment:					
36611 23	Local switching	13	(X)	3,203,545	(X)	3,447,032
36611 28	Toll switching	10	(X)	1,254,185	(X)	549,817
	Private branch exchange switching equipment:					
36611 41	Up to 99 lines	8	(X)	(1)	(X)	(1)
36611 43	100-399 lines	7	(X)	1,456,350	(X)	1,359,401
36611 45	400-1,000 lines	7	(X)	235,765	(X)	189,010
36611 49	Over 1,000 lines	7	(X)	216,133	(X)	166,484
36611 51	Cellular mobile telephone switching equipment	8	(X)	(2)	(X)	(2)
36611 55	Packet switching equipment	7	(X)	2,556,543	(X)	2,402,418
36611 91	Other telephone switching and switchboard equipment	37	(X)	1,860,808	(X)	1,875,720
36611 98	Parts, components and subassemblies for telephone switching equipment	29	(X)	305,209	(X)	251,028
36613 —	Carrier line equipment and modems.....	105	(X)	5,680,699	(X)	4,993,346
	Carrier line equipment:					
	Repeaters and line transceivers:					
36613 01	Analog	5	(X)	(3)	(X)	9,959
36613 05	Digital, all copper wire	11	(X)	(3)	(X)	(4)
36613 09	Digital, optical input or output	3	(X)	3,441,945	(X)	4,245,379
	Multiplex equipment, including channel banks:					
36613 30	Analog	14	(X)	74,124	(X)	72,833
36613 33	Digital, all copper wire	29	(X)	(5)	(X)	829,326
36613 36	Digital, optical input or output	8	(X)	5,102,803	(X)	243,319
	Other subscriber loop carrier terminal and line equipment:					
36613 41	Analog	7	(X)	64,220	(X)	65,372
36613 45	Digital, all copper wire	14	(X)	(6)	(X)	(6)
36613 49	Digital, optical input or output	5	(X)	6,969,642	(X)	6,823,089
	Other carrier line equipment:					
36613 51	Analog	6	(X)	(7)	(X)	78,179
	Digital:					
36613 55	Meeting or exceeding T1 standard (1.5 mbps) ..	13	(X)	(7)	(X)	(8)
36613 59	Other	13	(X)	7,172,019	(X)	8,104,711
	Modems:					
36613 61	Up through 10,000 bps	37		2,105,565	2,601,088	881,276
36613 65	Over 10,000 bps	29		3,309,274 ^a	1,311,766	697,503
36614 —	Other telephone and telegraph equipment and components	240	(X)	8,647,088	(X)	7,026,433
	Telephone sets:					
36614 21	Single line and ISDN sets	9		1,444,865	2,012,631	144,206
36614 25	Key sets	9		377,161	373,512	50,408
36614 29	Public pay telephone equipment	7		140,295	143,266	56,645
36614 36	Cordless handsets	3	(D)	(9)	(D)	(9)
36614 38	Other telephone sets and accessories (e.g., handsets)	14	(X)	9 ^b 166,832	(X)	9 ^b 123,187
	Other data communications equipment:					
36614 41	Routers and gateways	22	(X)	2,307,721	(X)	1,601,787
36614 43	Bridges	14	(X)	83,414 ^a	(X)	51,297 ^c
36614 45	Terminal servers	11	(X)	(10)	(X)	(10)
36614 47	Concentrators	11	(X)	10,144,663	(X)	10,087,356
36614 49	Other data communications equipment (front end processors, translators, etc.)	43	(X)	973,857 ^b	(X)	820,280
36614 51	Voice frequency equipment	15	(X)	82,777	(X)	94,668
36614 55	Telephone key systems equipment	7	(X)	(11)	(X)	356,025
36614 59	Video teleconferencing equipment (video CODECS and other systems equipment)	14	(X)	466,496	(X)	323,086
	Voice/call message processing equipment, including answering devices:					
36614 61	Voice mail equipment	11	(X)	244,993	(X)	221,662
36614 63	Voice response equipment	12	(X)	(12)	(X)	(12)
36614 65	Automated attendance equipment	5	(X)	(12)	(X)	(12)
36614 67	Automatic call distributors	6	(X)	12 ^a 460,097	(X)	12 ^a 378,413
36614 69	Other voice or call processing equipment	18	(X)	89,413	(X)	83,045
36614 91	Facsimile communication equipment (complete)	12	(X)	140,858	(X)	154,523

See footnotes at end of table.

Table 21. Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment, by Product Code: 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
	Other telephone and telegraph equipment and components—Con.					
36614 97	Other telephone/telegraph equipment	58	(X)	¹¹ 1,697,632	(X)	^r 1,218,904
36614 99	Parts, components and subassemblies for other telephone equipment	33	(X)	^a 236,854	(X)	^r 260,941
36631 —	Communications systems and equipment (except broadcast)	381	(X)	17,132,502	(X)	16,196,685
	Radio station type ¹³	(NA)	(X)	10,690,468	(X)	9,326,831
36631 15	Amateur	14	(X)	22,570	(X)	16,496
36631 17	Broadcast (sound and TV)	7	(X)	⁽¹⁴⁾	(X)	⁽¹⁴⁾
36631 19	Earth exploration	2	(X)	⁽¹⁴⁾	(X)	⁽¹⁴⁾
36631 21	Meteorological	3	(X)	^{14 b} 56,759	(X)	¹⁴ 85,504
36631 23	Fixed	28	(X)	^{a1} 1,898,158	(X)	^r 1,358,796
36631 25	Intersatellite	17	(X)	1,749,212	(X)	^r 1,308,487
36631 27	Telecommand	4	(X)	⁽¹⁵⁾	(X)	⁽¹⁵⁾
36631 29	Telemetry	16	(X)	91,712	(X)	131,583
36631 31	Radionavigational and locational	7	(X)	^{b9} 93,680	(X)	^r 61,932
36631 33	Aeronautical communications	8	(X)	¹⁵ 305,291	(X)	¹⁵ 272,148
	Mobile:					
	Cellular system equipment (report switching equipment in 36611 51):					
36631 34	Analog	8	(X)	⁽¹⁶⁾	(X)	⁽¹⁶⁾
36631 35	Digital	11	(X)	^(a 16)	(X)	⁽¹⁶⁾
36631 42	Other conventional and trunked system equipment	14	(X)	¹⁶ 6,146,982	(X)	¹⁶ 5,848,943
36631 44	Other mobile	12	(X)	90,340	(X)	81,744
36631 46	Other	14	(X)	235,764	(X)	^r 161,198
36631 48	Other type	(NA)	(X)	6,614,969	(X)	6,869,854
	Checkout, monitoring, evaluation and other electronic support equipment for communications systems	52	(X)	440,862	(X)	401,572
	Antenna systems, sold separately:					
36631 53	Below 890 MHZ	52	(X)	747,558	(X)	646,160
36631 55	890 MHZ and above	46	(X)	^a 340,223	(X)	284,295
	Fiber optics equipment, excluding connectors, cable, photodiode and laser diode components, microwave equipment, and multiplexors:					
	Equipment meeting SONET standards:					
36631 57	OC-1 equipment	4	(X)	⁽¹⁷⁾	(X)	⁽¹⁷⁾
36631 59	OC-2 and 3 equipment	4	(X)	⁽¹⁷⁾	(X)	⁽¹⁷⁾
36631 61	OC-4 through OC-9 equipment	1	(X)	⁽¹⁷⁾	(X)	⁽¹⁷⁾
36631 63	Greater than OC-9 equipment	4	(X)	⁽¹⁷⁾	(X)	⁽¹⁷⁾
36631 69	Equipment not meeting SONET standards	18	(X)	781,595	(X)	735,659
36631 73	Other carrier equipment, n.e.c.	13	(X)	¹⁷ 348,064	(X)	¹⁷ 244,308
36631 79	Other communications systems and equipment	185	(X)	3,956,667	(X)	4,557,860
36632 —	Broadcast, studio, and related electronic equipment	196	(X)	2,562,905	(X)	2,077,453
	Audio equipment, excluding consumer and P.A. types:					
36632 12	Amplifiers and preamplifiers	27		460,843	601,407	^r 209,288
36632 13	Control consoles and switchers	21		20,847	17,147	54,012
36632 17	Other (power supplies, terminal equipment, broadcast recorders, etc.)	41	(X)	232,578	(X)	222,317
	Video equipment, excluding consumer and P.A. types:					
36632 22	Amplifiers	8	(D)	⁽¹⁸⁾	(D)	⁽¹⁸⁾
36632 24	Television cameras	3	(D)	⁽¹⁸⁾	(D)	⁽¹⁸⁾
36632 25	Video tape recorders	3	(X)	¹⁸ 102,011	(X)	¹⁸ 66,143
36632 28	Other (power supplies, synchronization equipment, terminal equipment monitors, telecine chains, control consoles and switchers, film equipment, and TV outside vans)	29	(X)	416,446	(X)	401,594
	Transmitters, translators, RF power amplifiers, and related equipment:					
36632 31	AM and FM transmitters	12	(X)	51,801	(X)	53,801

See footnotes at end of table.

Table 21. **Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment, by Product Code: 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
36632 —	Broadcast, studio, and related electronic equipment—Con.					
	Transmitters, translators, RF power amplifiers, and related equipment: —Con.					
36632 34	TV transmitters	9	(X)	^a 96,638	(X)	68,241
36632 37	Other (broadcast transmission line equipment, phasing equipment, TV boosters and repeaters (translators), etc.)	22	(X)	346,238	(X)	198,575
36632 39	Studio transmission links (STL) and remote pickup equipment	6	(X)	85,288	(X)	53,934
	Cable TV (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.) ...	21	(X)	^a 207,336	(X)	148,701
36632 46	Subscriber converters	1	(X)	⁽¹⁹⁾	(X)	⁽¹⁹⁾
36632 49	Subscriber equipment (decoders, switchers; wall outlet taps; distribution amplifiers; power suppliers; directional couplers, splitters, alternators, and equalizers)	5	(X)	⁽¹⁹⁾	(X)	⁽¹⁹⁾
36632 43	Broadcasting transmitting antennae and community antennae systems	8	(X)	¹⁹ 167,056	(X)	¹⁹ 126,350
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	26	(X)	299,666	(X)	255,083
36632 45	Other broadcast, studio, theatre, and commercial sound equipment, sold separately, excluding studio lighting equipment, radiating and supporting towers ..	32	(X)	205,026	(X)	181,960
36632 59	Parts and accessories for broadcast, studio and related electronic equipment (sold separately)	13	(X)	^b 61,386	(X)	^r 37,454
36691 —	Alarm systems	122	(X)	1,555,582	(X)	1,532,361
	Intrusion detection:					
36691 48	Local	30	(X)	^a 117,577	(X)	^r 109,862
36691 49	Central station	27	(X)	337,156	(X)	304,249
36691 50	Direct connect	14	(X)	35,109	(X)	31,935
36691 51	Hold-up systems (commercial and industrial)	8	(X)	⁽²⁰⁾	(X)	⁽²⁰⁾
36691 52	Automotive	8	(X)	163,114	(X)	^r 149,416
	Fire detection and prevention:					
	Smoke and heat detection alarms:					
36691 53	Ionization chamber type	14	(X)	125,041	(X)	169,695
36691 54	Other, including photo cell type	22	(X)	261,709	(X)	^r 244,369
36691 56	Central station	15	(X)	92,791	(X)	79,871
36691 57	Direct connect	17	(X)	144,025	(X)	151,206
36691 59	Other intercommunication and alarm systems, including electric sirens, and horns (marine, industrial, and air raid), and security locking systems ..	37	(X)	^{20 a} 279,060	(X)	^{20 a} 291,758
36692 —	Vehicular and pedestrian traffic control equipment, electrical railway signal and attachments	48	(X)	634,589	(X)	^r 573,369
	Vehicular and pedestrian traffic control equipment:					
36692 42	Signal heads, including parts and accessories	11	(X)	66,246	(X)	61,465
36692 43	Electronic and electro-mechanical controllers, detectors, and sensors, including parts and accessories	25	(X)	181,244	(X)	163,578
	Railway signals and attachments, electric:					
36692 45	Railway highway grade crossing signals, excluding relays and other control apparatus	4	(X)	⁽²¹⁾	(X)	⁽²¹⁾
36692 46	Other railway signal systems and safety control equipment	11	(X)	²¹ 387,099	(X)	²¹ 348,326

See footnotes at end of table.

Table 21. Quantity and Value of Shipments of Communication Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment, by Product Code: 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
36693 —	Intercommunications systems, including inductive paging systems (selective calling).....	51	(X)	265,850	(X)	241,728
36693 12	Wired.....	42	(X)	^a 192,968	(X)	188,295
36693 13	Nonwired.....	11	(X)	^a 72,882	(X)	53,433
36991 —	Electronic teaching machines, teaching aids, trainers, and simulators.....	54	(X)	781,880	(X)	¹ 847,689
36991 81	Electronic trainers and simulators.....	40	(X)	^a 750,184	(X)	¹ 816,396
36991 85	Other electronic teaching machines and teaching aids.....	12	(X)	^a 31,696	(X)	31,293
36992 —	Laser sources.....	46	(X)	746,394	(X)	(NA)
	Gas lasers:					
36992 12	5 watts or less.....	6	(X)	38,538	(X)	(NA)
36992 16	6 watts to 100 watts.....	5	(X)	⁽²²⁾	(X)	(NA)
36992 22	101 watts to 500 watts.....	4	(X)	24,013	(X)	(NA)
36992 26	Over 500 watts.....	3	(X)	²² 98,121	(X)	(NA)
	Solid-state lasers:					
36992 32	100 watts or less.....	8	(X)	27,317	(X)	(NA)
36992 36	101 watts to 500 watts.....	6	(X)	⁽²³⁾	(X)	(NA)
36992 42	Over 500 watts.....	1	(X)	⁽²³⁾	(X)	(NA)
36992 60	Other lasers, including dye lasers.....	33	(X)	²³ 558,405	(X)	(NA)
36995 —	Ultrasonic equipment, n.e.c.....	20	(X)	137,503	(X)	127,255
36999 —	Other electronic systems and equipment, n.e.c.....	189	(X)	1,258,287	(X)	1,256,457
36999 51	Consumer electronic equipment, n.e.c.....	24	(X)	^a 351,478	(X)	¹ 357,338
36999 55	Scientific electronic equipment, n.e.c.....	23	(X)	100,962	(X)	91,387
36999 61	Industrial electronic equipment, n.e.c.....	38	(X)	95,529	(X)	82,309
36999 65	All other electronic equipment, n.e.c.....	107	(X)	^a 710,318	(X)	¹ 725,423
	Selected nonmanufacturing revenues of this establishment:					
50650 00	Supplies and accessories shipped without further manufacture, for use with communication equipment.....	62	(X)	287,302	(X)	242,875
99980 49	Research and development, testing, and evaluation of systems and components.....	40	(X)	730,413	(X)	598,686
73700 00	Software sold with communications systems shipped by manufacturers.....	36	(X)	369,271	(X)	279,392
73730 00	Systems integration revenues, including configuration installation and site preparation, and custom programming.....	55	(X)	^a 179,228	(X)	162,299
73790 00	Other nonmanufacturing revenues associated with computer systems.....	33	(X)	348,432	(X)	¹ 334,757

¹Data for product code 36611 41 are included with product code 36611 43 to avoid disclosing data for individual companies.²Data for product code 36611 51 are included with product code 36611 55 to avoid disclosing data for individual companies.³For 1994, data for product codes 36613 01 and 36613 05 are included with product code 36613 09 to avoid disclosing data for individual companies.⁴For 1993, data for product code 36613 05 are included with product code 36613 09 to avoid disclosing data for individual companies.⁵For 1994, data for product code 36613 33 are included with product code 36613 36 to avoid disclosing data for individual companies.⁶Data for product code 36613 45 are included with product code 36613 49 to avoid disclosing data for individual companies.⁷For 1994, data for product codes 36613 51 and 36613 55 are included with product code 36613 59 to avoid disclosing data for individual companies.⁸For 1993, data for product code 36613 55 are included with product code 36613 59 to avoid disclosing data for individual companies.⁹Data for product code 36614 36 are included with product code 36614 38 to avoid disclosing data for individual companies.¹⁰Data for product code 36614 45 are included with product code 36614 47 to avoid disclosing figures for individual companies.¹¹For 1994, data for product code 36614 55 are included with product code 36614 97 to avoid disclosing figures for individual companies.¹²Data for product codes 36614 63 and 36614 65 are included with product code 36614 67 to avoid disclosing data for individual companies.¹³Of this total, space-based (satellite) accounted for \$1.9 billion in 1994 and \$1.4 billion in 1993, airborne and marine based accounted for \$370.3 million in 1994 and \$249.7 million in 1993, earth (fixed) based accounted for \$1.7 billion in 1994 and \$1.8 billion in 1993, and earth (mobile) portable based accounted for \$5.4 billion in 1994 and \$5.9 billion in 1993.¹⁴Data for product codes 36631 17 and 36631 19 are included with product code 36631 21 to avoid disclosing data for individual companies.¹⁵Data for product code 36631 27 are included with product code 36631 33 to avoid disclosing data for individual companies.¹⁶Data for product codes 36631 34 and 36631 35 are included with product code 36631 42 to avoid disclosing data for individual companies.¹⁷Data for 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.¹⁸Data for product codes 36632 22 and 36632 24 are included with product code 36632 25 to avoid disclosing data for individual companies.¹⁹Data for product code 36632 46 and 36632 49 are included with product code 36632 42 to avoid disclosing data for individual companies.²⁰Data for product code 36691 51 are included with product code 36691 59 to avoid disclosing data for individual companies.

Table 21—Con. (Footnotes)

²¹Data for product code 36692 45 are included with product code 36692 46 to avoid disclosing data for individual companies.
²²Data for product code 36692 16 are included with product code 36692 26 to avoid disclosing data for individual companies.
²³Data for product codes 36692 36 and 36992 42 are included with product code 36692 60 to avoid disclosing data for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified.
^rRevised by 5 percent or more from previously published figures. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated.
^bOver 25 percent of this item has been estimated.

Table 22. Shipments, Imports, and Exports of Communications Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment: 1994

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption (value) ²
36611 41, 43, 45, 49	Private branch telephonic exchange switching apparatus	908,248	209,708	43,329
36611 23, 28	Central office telephonic switching apparatus	4,457,730	181,346	159,706
36611 51, 55, 91	Telephonic switching apparatus, n.e.c.	2,417,351	99,225	30,235
36611 98	Parts, components, and subassemblies for telephone switching and switchboard apparatus	305,209	877,474	533,122
36613 01, 05, 09	Repeaters and line transceivers, carrier line equipment	441,945	17,319	57,906
36613 30, 33, 36, 41, 45, 49, 51, 55, 59	Carrier line equipment, n.e.c.	3,308,008	547,477	219,666
36614 21, 25, 29, 38	Telephone sets (except cordless handset telephones)	(³)	222,621	1,154,369
36614 36	Cordless handset telephones	³ 418,313	195,993	1,469,699
36613 61, 65	Modems, including auxiliary sets	1,930,746	501,166	314,337
36614 41, 43, 45, 47, 49, 51, 59, 97	Telephone and telegraphic equipment, n.e.c., including voice frequency equipment	(⁴)	567,532	250,301
36614 55	Telephone key systems	⁴ 7,056,560	11,163	15,167
36614 61, 63, 65, 67, 69	Telephone answering devices	794,503	114,946	332,983
36614 91	Facsimile communication equipment (complete)	140,858	(NA)	1,269,681
36614 99	Parts, components, and subassemblies for other telephone telephone equipment	236,854	881,586	732,256
36632 12	Audio amplifiers and preamplifiers (except consumer and P.A. types)	222,807	168,640	(NA)
36632 31, 34, 37	Transmitters, translators, RF power amplifiers, and related equipment	494,677	390,725	219,868
36631 35, 42, 44	Mobile radio systems and equipment, including transceivers, and portable receivers, transmitter and receiver, hand held	(D)	4,664,737	2,063,162
36632 13, 17	Other audio equipment (except consumer and P.A. types)	301,206	(NA)	(NA)
36693 12, 13	Intercommunications systems, including inductive paging systems (selective calling)	265,850	135,778	110,909
36632 24	Television cameras (except consumer and P.A. types)	(D)	83,388	19,775
36631 53, 55, 36632 43	Antennae systems, including broadcasting, transmitting, and community antennae systems	(D)	536,036	338,576
36632 41, 44, 46, 49	Cable TV and closed circuit TV systems and equipment, including AM and FM transmitters	(D)	286,659	947,201

See footnotes at end of table.

Table 22. **Shipments, Imports, and Exports of Communications Equipment, Including Telephone, Telegraph, and Other Electronic Systems and Equipment: 1994—Con.**

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption (value) ²
36691 48, 49, 50, 51, 52, 59	Intrusion detection alarm systems	932,016	42,270	206,430
36691 53	Smoke detection alarms, ionization type	125,041	13,779	68,435
36691 54	Smoke detection alarms, n.e.c., including photo cell type	261,709	34,526	26,154
36691 56-57	Central station and direct connect fire detection and prevention alarm systems	236,816	104,806	74,757
36692 42-43	Vehicular and pedestrian traffic control equipment	247,490	40,491	32,552
36692 45-46	Railway signals and attachments, electric	387,099	28,212	2,490
36991 81	Electronic trainers and simulators	750,184	232,109	146,179
36995 00	Ultrasonic equipment, n.e.c.	137,503	14,061	15,887

¹Source: Bureau of the Census report EM545, *U.S. Exports*.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. Value represents the c.i.f. (cost, insurance, and freight) value at the first point of entry in the United States plus U.S. import duties.

³Data for product codes 36614 21, 36614 25, 36614 29, 36614 36, and 36614 38 are combined to avoid disclosing data for individual companies.

⁴Data for 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 figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies.

NA Not available.

n.e.c. Not elsewhere classified.

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.

7.8 SEMICONDUCTORS, PRINTED CIRCUIT BOARDS, AND RELATED EQUIPMENT

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 1994, the total value of shipments of semiconductors, printed circuit boards, and other electronic components totaled \$77,675.6 million. This represents a 17.8 percent increase from the revised 1993 total of \$65,895.4 million. The 1994 figure includes: electron tubes and parts, \$2,742.6 million, an increase of 14.7 percent from 1993;

printed circuit boards, \$6,812.3 million, an increase of 8.6 percent from 1993; semiconductors and related devices, \$39,561.7 million, an increase of 24 percent over the revised total from 1993. Capacitors increased 12.6 percent to \$1,457.6 million; resistors increased by 6.6 percent, to \$763.8 million; coils and transformers had a value of \$1,174.5 million, a 4.7-percent increase from 1993; electronic connectors had a value of \$3,561.2 million in 1994, compared with \$3,340.5 million in 1993, an increase of 6.6 percent; and other electronic components increased to \$27,005.7 million, from a revised 1993 total of \$23,420.4 million, an increase of 15.3 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 23. Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components, by Class of Product: 1987 to 1994

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987
36713	Transmittal, industrial, and special-purpose electron tubes (except X-ray) . . .	746.1	677.6	868.4	1,072.5	1,096.5	1,163.2	1,126.2	1,139.2
36714	Electron tubes, receiving type	(¹)	27.1	24.6	21.6	24.2	(D)	35.2	43.8
36714	Cathode ray picture tubes, including rebuilt	1,262.7	2,231.5	2,022.8	1,903.5	1,344.1	1,346.5	1,086.2	960.9
36715	Electron tube parts	114.9	160.1	129.5	120.3	142.6	172.8	153.5	169.4
36720	Printed circuit boards	6,812.3	6,273.0	5,721.7	6,275.3	7,174.5	6,515.8	6,497.3	4,508.5
36741	Integrated microcircuits (semiconductor networks)	29,324.2	23,636.1	20,065.4	19,150.9	16,623.3	16,177.0	14,868.7	12,850.8
36742	Transistors	829.2	704.5	674.8	736.9	682.3	710.5	864.1	753.1
36743	Diodes and rectifiers	876.2	640.7	652.2	653.5	668.2	687.1	806.8	733.5
36749	Other semiconductor devices	8,532.0	6,908.2	5,899.2	5,760.8	5,741.0	4,706.0	3,253.8	2,482.1
36750	Capacitors for electronic applications . . .	1,457.6	1,294.3	1,288.0	1,224.0	1,391.5	1,526.1	1,540.2	1,304.2
36760	Resistors	763.8	716.5	708.3	721.5	799.8	812.2	880.1	848.8
36770	Coils, transformers, reactors, and chokes for electronic applications	1,174.5	1,121.4	1,095.3	1,006.6	975.6	1,099.7	1,183.1	1,148.9
36781	Coaxial connectors	502.4	419.0	424.5	384.4	420.0	405.0	454.3	470.4
36782	Cylindrical connectors	467.9	482.8	503.9	483.4	513.6	540.3	578.7	573.5
36783	Rack and panel connectors	493.2	427.6	461.9	484.9	500.0	537.2	513.6	499.8
36784	Printed circuit connectors	888.7	859.4	855.2	843.8	804.9	986.3	1,149.8	998.3
36785	Other connectors, including parts	1,209.0	1,152.8	1,123.3	1,068.9	1,085.0	1,123.7	1,051.5	1,087.2
36791	Filters (except microwave) and piezoelectric devices	665.1	534.3	448.8	451.5	457.4	442.6	624.1	627.2
36793	Microwave components and devices	1,184.1	1,136.3	1,258.4	1,178.5	1,368.7	1,178.6	1,178.2	1,256.9
36795	Transducers, electrical/electronic input or output	885.7	832.5	810.3	799.5	741.1	786.3	642.6	628.2
36796	Switches, mechanical types for electronic circuitry	606.3	572.6	541.7	545.1	579.4	644.3	624.7	691.8
36798	Printed circuit assemblies	17,514.8	15,087.1	13,745.8	12,590.4	8,269.3	7,304.0	5,794.2	4,965.1
36799	All other electronic components, n.e.c. . . .	6,149.7	5,257.6	5,260.3	5,997.3	4,898.3	4,734.4	3,631.7	4,108.4

¹"Electron tubes, receiving type" and "Cathode ray picture tubes, including rebuilt" are combined to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. [†]Revised by 5 percent or more from previously published figures.

Table 24. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3671- —	Electron tubes	(NA)	(X)	3,373,719	(X)	2,909,093
36713 —	Transmittal, industrial, and special-purpose electron tubes (except X-ray)	38	(X)	746,098	(X)	677,620
	Power and special-purpose tubes:					
36713 15	High vacuum tubes, including triodes, multi-grid external and internal anodes, diodes, and other	7	172	79,671	203	87,628
36713 24	Gas and vapor tubes, including thyratrons, ignitrona, gas duplexers, spark gaps, and other	9	1,062	34,102	1,741	33,084
36713 34	Klystrons, including amplifier, reflex, and other	6	653	56,861	787	62,245
36713 47	Magnetrons, including pulsed, fixed, tunable, cross-field, continuous wave, and other	7	43	55,864	30	40,664
	Traveling wave tubes (TWT):					
	Forward wave:					
	Continuous wave (CW):					
36713 55	Up to and including 10 watts CW power output rating	3	172	6,472	157	5,020
36713 61	Over 10 watts CW power output rating	6	1,852	93,648	1,291	73,198
	Pulsed power:					
36713 65	Up to and including 1 kW peak power output rating	4	1,221	17,672	970	15,148
36713 66	Over 1 kW peak power output rating	5	(¹)	(¹)	(D)	(D)
36713 92	Backward wave	2	¹ 1,432	¹ 96,882	(D)	(D)
	Light sensing tubes:					
36713 70	Camera tubes, photo emissive and photo conductive	4	31	25,538	35	26,652
36713 73	Image intensifiers and converters	2	(²)	(²)	(²)	(²)
36713 76	Photo multipliers and other	2	² 145	² 97,788	² 155	² 94,909
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	17	2,137	101,500	2,599	101,944
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.)	9	(X)	80,100	(X)	¹ 73,969
36714 —	Receiving type electron tubes and cathode ray picture tubes	(NA)	(X)	2,627,621	(X)	2,231,473
36714 01	Receiving type electron tubes, all types, including rebuilt	4	(D)	(D)	168	27,087
	Television tubes, including any defective tube that has been rebuilt:					
36714 09	Color having a video display diagonal of: 50 cm and under (20 inches and under)	7	9,763	725,087	9,418	706,500
36714 12	Over 50 cm, but not exceeding 63 cm (21 through 25 inches)	5	4,288	457,316	3,702	401,153
36714 14	Exceeding 63 cm (26 inches and over)	7	7,607	1,397,379	(³)	(³)
36714 27	Other, including rebuilt color and new and rebuilt black and white	3	(D)	(D)	³ 5,991	³ 1,096,713
36715 57	Electron tube parts (except glass blanks): bases, getters, cathodes, headers, and guns	20	(X)	114,937	(X)	¹ 160,072
36720- —	Printed-circuit (wiring) boards	531	(X)	6,812,252	(X)	6,273,017
36720 12	Single-sided glass printed	247	(X)	198,692	(X)	228,586
36720 14	Double-sided glass printed	358	(X)	1,189,537	(X)	1,091,299
36720 16	Multilayer glass printed	333	(X)	2,814,290	(X)	2,488,775
36720 18	Paper/mat/composite printed	25	(X)	77,931	(X)	57,322
36720 22	Flexible circuit printed	65	(X)	395,434	(X)	372,041
36720 24	Other rigid laminates	94	(X)	1,182,838	(X)	¹ 1,187,886
36720 26	Receipts for contract work on printed circuit boards (etching, dip-soldering, imprinting, etc.)	71	(X)	953,530	(X)	847,108

See footnotes at end of table.

Table 24. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3674- —	Semiconductors and related devices	(NA)	(X)	39,561,706	(X)	31,889,626
36741 —	Monolithic integrated circuits	180	10,220,420	29,324,233	8,387,069	23,636,139
	Monolithic integrated circuits, digital, nonsilicon (e.g., gallium arsenide):					
36741 19	Memory	6	(D)	(D)	(⁴)	(⁴)
36741 28	Logic and other	11	94,793	502,221	⁴ 82,862	⁴ 435,622
	Monolithic integrated circuits, digital, silicon:					
	Bipolar transistors, memory:					
36741 07	Static read-write random access (SRAM)	5	6,609	34,648	12,074	45,661
36741 09	Other memory	5	(D)	(D)	⁷ 70,514	⁷ 234,301
	Other bipolar transistors, including logic:					
36741 13	Transistor-transistor logic (TTL)	12	2,028,122	949,439	2,334,733	1,171,739
36741 14	Emitter coupled logic (ECL)	14	330,910	277,599	⁷ 292,672	323,874
36741 15	Other	14	678,186	1,154,441	⁷ 272,262	⁶ 684,712
	Metal oxide semiconductor (MOS) field effect transistors:					
	Volatile memory DRAM (dynamic read-write random access):					
36741 81	Not over 80 k	6	1,819	7,418	3,931	16,061
36741 82	Over 80 k but not over 300 k	7	(⁵)	(⁵)	(⁵)	(⁵)
36741 83	Over 300 k but not over 3 MB	13	⁵ 152,085	⁵ 1,320,897	⁵ 141,414	⁵ 1,195,457
36741 84	Over 3 MB but not over 15 MB	9	(⁶)	(⁶)	(⁶)	(⁶)
36741 85	Over 15 MB	6	⁶ 172,270	⁶ 2,509,655	⁶ 56,780	⁶ 825,473
	Volatile memory SRAM (static read-write random access):					
36741 91	Not over 40 k	13	22,412	191,868	32,938	224,549
36741 92	Over 40 k but not over 80 k	12	32,419	122,924	⁷ 34,759	⁷ 198,178
36741 93	Over 80 k but not over 300 k	19	48,468	350,847	62,020	370,154
36741 94	Over 300 k but not over 3 MB	10	(⁷)	(⁷)	(⁷)	(⁷)
36741 95	Over 3 MB	3	⁷ 37,456	⁷ 561,448	⁷ 35,181	⁷ 357,443
	Nonvolatile EEPROMs (electrically erasable programmable read-only memory):					
36741 96	Not over 80 k	9	236,242	192,674	⁷ 142,664	⁷ 127,622
36741 97	Over 80 k but not over 900 k	8	23,259	72,497	(⁷)	(⁷)
36741 98	Over 900 k	7	40,408	312,761	⁷ 58,243	⁷ 382,716
	Nonvolatile EPROMs (erasable, except electrically), programmable read-only memory):					
36741 86	Not over 80 k	8	13,172	54,580	12,973	62,968
36741 87	Over 80 k but not over 900 k	14	(⁸)	(⁸)	189,553	⁷ 518,174
36741 88	Over 900 k	7	⁸ 232,663	⁸ 829,905	⁷ 28,421	⁷ 176,154
36741 90	Other nonvolatile memory	19	110,977	895,922	67,289	571,625
	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	19	385,724	1,434,062	101,642	269,024
36741 38	Microprocessors having an internal data bus of 16 bits	17	96,266	944,884	79,723	1,068,495
36741 39	Microprocessors having an internal data bus of 32 bits or more	14	92,303	5,871,789	59,351	4,230,773
36741 18	Other (microcontrollers, ASIC's, PLA's, etc.)	36	967,278	3,018,979	791,357	⁷ 3,046,522
	Other digital, silicon, including bipolar combined with MOS:					
36741 20	Complementary BiMOS (BiCMOS)	2	(⁹)	(⁹)	(⁹)	(⁹)
36741 21	Other complementary (BiCMOS), including logic	8	⁹ 472,820	⁹ 239,327	⁹ 456,624	⁹ 309,572
36741 26	Other digital silicon IC's	23	1,081,990	514,665	145,369	339,887

See footnotes at end of table.

Table 24. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3674- — 36741 —	Semiconductors and related devices—Con. Monolithic integrated circuits—Con. Nondigital silicon monolithic integrated circuits (e.g., linear and analog):					
36741 49	Radio frequency	8	443,993	402,659	¹⁰	¹⁰
36741 02	Other, analog	27	1,194,274	1,546,016	¹⁰ 1,599,218	¹⁰ 1,996,547
36741 03	Other, including mixed signal (analog and digital), logic	4	¹¹	¹¹	¹¹	¹¹
36741 04	Other, including mixed signal (analog and digital), other	6	¹¹ 80,671	¹¹ 381,716	¹¹ 57,756	¹¹ 289,498
	Hybrid integrated circuits:					
36741 08	Radio frequency	23	58,002	243,886	¹¹ 83,337	¹¹ 275,153
36741 31	Other	51	137,379	776,596	117,155	691,847
36741 06	Other	44	935,932	3,550,588	¹¹ 964,254	¹¹ 3,196,338
36742 —	Transistors	39	(X)	829,203	(X)	704,506
36742 63	Signal (less than 1 watt dissipation)	24	(X)	364,486	(X)	264,415
36742 64	Power (1 watt or greater dissipation)	29	(X)	464,717	(X)	440,091
36743 —	Diodes and rectifiers.	47	2,623,967	876,230	2,122,700	640,749
36743 22	Signal diodes and assemblies thereof (maximum current 0.5 amps)	19	42,953	18,504	49,526	21,963
36743 42	Semiconductor rectifiers/power diodes and assemblies thereof (current rating greater than 0.5 amps)	26	592,980	470,615	269,891	264,990
36743 94	Zener diodes (voltage regulator and voltage reference diodes)	18	¹²	¹²	¹²	¹²
36743 12	Selenium rectifiers	4	¹² 1,833,435	¹² 194,063	¹² 1,662,206	¹² 173,142
36743 83	Microwave diodes (mixers, detectors, varactors, parametric, harmonic generators, etc.)	15	154,599	193,048	141,077	180,654
36749 —	Other semiconductor devices	169	(X)	8,532,040	(X)	¹¹ 6,908,232
36749 12	Light-sensitive and light-emitting devices:					
	Solar cells	10	(X)	47,937	(X)	44,081
	Light-emitting diodes (LED's):					
36749 14	Discrete, infrared and laser	15	(X)	¹³	(X)	(D)
36749 16	Alpha or numeric displays	9	(X)	¹³ 393,322	(X)	86,805
36749 22	Photodiodes, including infrared detectors	15	(X)	49,201	(X)	¹¹ 51,683
36749 24	Optical coupled isolators, including sensors and emitters	10	(X)	79,385	(X)	(D)
36749 29	Other light sensitive and light-emitting devices, including photovoltaic devices and photoelectric-magnetic devices	11	(X)	125,267	(X)	169,320
	Other semiconductor devices:					
36749 85	Thyristors (SCR's, triacs, PNP diodes)	11	(X)	¹⁴	(X)	¹⁴
36749 86	Hall effect devices	3	(X)	¹⁴ 150,799	(X)	¹⁴ 119,200
36749 87	All other semiconductor devices (tunnel diodes, thermoelectric semiconductor junctions, metal-oxide varistors, solidstate transducers, and special semiconductor devices, n.e.c.)	28	(X)	1,587,728	(X)	¹¹ 1,462,783
	Semiconductor parts:					
	Chips and wafers:					
36749 94	For integrated circuits (IC's)	53	(X)	3,480,632	(X)	2,715,995
36749 96	For discrete semiconductors	33	(X)	721,575	(X)	402,435
36749 97	All other semiconductor parts (headers, packages, heat sinks, other accessories, etc.) ..	45	(X)	1,896,194	(X)	1,470,472
36291 —	Paper, plastic (film), metalized, and dual (film/paper) dielectric capacitors, fixed ac types:					
36291 11	Less than 300 volts	14	10,195	20,460	5,658	13,038
36291 13	300 volts to 599 volts	17	70,716	103,580	78,393	120,633
36291 15	600 volts to 999 volts	11	7,982	13,669	7,804	12,873
36291 17	1,000 volts or over	9	4,411	13,069	3,394	10,098

See footnotes at end of table.

Table 24. **Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.**

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36750 —	Capacitors	84	(X)	1,457,612	(X)	1,294,313
	Capacitors having a reactive power handling capacity of 0.5 kVAR or less: dc types/other:					
36750 19	Axial lead	25	50,602	50,049	47,762	47,438
36750 21	Radial lead	13	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
36750 24	Chips and other leaded devices	2	¹⁵ 117,115	¹⁵ 22,156	¹⁵ 118,248	¹⁵ 22,772
	Tantalum electrolytic:					
36750 26	Metal case, including foil and wet	6	48,305	51,288	41,147	51,847
36750 28	Dipped	2	(¹⁶)	(¹⁶)	(¹⁷)	(¹⁷)
36750 31	Chips	5	(¹⁶)	(¹⁶)	¹⁷ 1,359,326	¹⁷ 235,492
36750 33	Other leaded (molded axial and molded radial)	2	¹⁶ 744,012	¹⁶ 187,320	(D)	(D)
	Aluminum electrolytic:					
36750 38	Less than 18 mm through 35 mm	5	(D)	(D)	(D)	(D)
36750 41	Small can style (over 35 mm through 51 mm)	4	(¹⁸)	(¹⁸)	1,423	5,014
36750 43	Other can style (over 51 mm)	4	(¹⁸)	(¹⁸)	(¹⁹)	(¹⁹)
36750 45	ac motor start	1	¹⁸ 19,552	¹⁸ 69,331	¹⁹ 27,269	¹⁹ 74,066
	Ceramic dielectric, single layer:					
36750 54	Axial and radial	8	(²⁰)	(²⁰)	(²⁰)	(²⁰)
36750 51	Chips	1	²⁰ 162,065	²⁰ 21,847	²⁰ 155,029	²⁰ 24,091
	Ceramic dielectric, multilayer:					
36750 53	Axial leads	3	(²¹)	(²¹)	(²¹)	(²¹)
36750 55	Radial leads	7	²¹ 3,037,396	²¹ 162,941	²¹ 2,547,999	²¹ 147,884
36750 57	Chips	12	20,796,092	438,882	15,556,015	365,798
	Other:					
36750 59	Mica dielectric	8	35,581	6,781	27,566	11,271
36750 61	All other fixed	18	134,751	65,439	128,473	63,929
	Variable:					
36750 63	Mica, ceramic or glass dielectric	5	26,259	31,278	28,896	36,114
36750 69	Other	5	1,293	6,707	1,643	6,358
36750 75	Parts of capacitors, including unfinished chips for further finishing and assembly	5	(X)	(D)	(X)	(D)
36760 —	Resistors	86	(X)	763,817	(X)	716,503
36760 11	Fixed carbon resistors, composition or film types.	8	154,123	48,319	¹ 229,264	45,254
	Other fixed resistors (power capacity 20W or less):					
	Surface mounted, having two terminals:					
36760 24	Flat resistor chips	13	502,720	59,907	417,516	38,220
36760 25	Cylindrical leadless resistors, including metal film, metal oxide, and thick cermet film	7	85,054	13,678	71,459	13,234
	Surface mounted, having more than two terminals (resistor networks):					
36760 28	Dual-in-line package	4	109,280	30,541	109,352	32,583
36760 32	Other, including flat packs	6	74,729	21,860	49,721	17,214
	Resistors, having two leads:					
36760 34	Wirewound	25	170,460	64,449	159,738	67,228
36760 36	Other, including metal film, metal oxide, and thick cermet film	16	1,592,018	86,484	1,632,898	87,410
	Resistor networks, having more than two leads:					
36760 38	Single-in-line	11	242,871	50,402	216,435	53,859
36760 42	Dual-in-line	8	51,335	16,420	58,476	19,399
36760 44	Other	9	9,644	22,118	13,769	18,622
	Variable, non-wirewound:					
	Trimmers:					
36760 51	Single-turn, carbon and other film	7	103,395	49,787	126,552	41,786
36760 54	Multi-turn, carbon and other film	5	(²²)	(²²)	(²²)	(²²)
36760 58	Surface mounted	1	²² 84,512	²² 65,275	²² 89,825	²² 61,771
	Potentiometers:					
36760 57	Precision type	12	12,042	62,584	¹ 12,084	56,023
36760 62	Panel type	4	7,960	8,994	7,310	7,860
36760 72	Variable, wirewound: Variable wirewound (except potentiometers), including non-precision and trimmers	7	5,403	9,823	3,009	8,258

See footnotes at end of table.

Table 24. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36760 —	Resistors—Con.					
36760 57	Potentiometers, precision type	12	(²³)	(²³)	(²³)	(²³)
36760 62	Potentiometers, panel type	4	²³ 4,084	²³ 24,067	²³ 8,825	²³ 38,155
	Miscellaneous:					
36760 75	Varistors	5	(²⁴)	(²⁴)	(²⁴)	(²⁴)
36760 77	Thermistors, bead type, disc, rod	14	²⁴ 366,181	²⁴ 121,674	²⁴ 301,254	²⁴ 104,414
36760 79	Parts for resistors	11	(X)	7,435	(X)	5,268
36770 —	Coils, transformers, reactors, and chokes for electronic applications	253	(X)	1,174,507	(X)	1,121,363
36770 32	Audio frequency (AF) transformers	94	38,737	110,468	¹ 31,951	¹ 106,254
36770 33	Low frequency (LF) chokes	91	8,235	48,880	¹ 6,130	¹ 50,370
36770 41	Plate and filament transformers, including auto-transformers (except toroidal)	70	14,426	133,386	13,188	127,663
36770 61	Pulse transformers, computer, and other types	96	57,002	155,810	¹ 35,800	¹ 139,447
36770 12	Radio frequency (RF) chokes	42	80,937	32,861	76,462	33,553
36770 13	Radio frequency (RF) coils	46	207,266	87,602	151,755	¹ 81,771
36770 14	Intermediate frequency (IF) transformers	29	7,444	36,943	¹ 6,632	¹ 34,390
36770 71	Television transformers and reactors (horizontal output, vertical deflection, focus coils, deflection yokes, etc.)	19	8,895	67,004	8,495	51,319
36770 91	Toroidal windings (transformers and reactors) (except complete magnetic amplifiers)	116	27,936	141,897	¹ 22,989	¹ 139,347
36770 92	Other (balun coils, permeability tuning devices, etc.) ..	90	(X)	359,656	(X)	¹ 357,249
3678- —	Electronic connectors	(NA)	(X)	3,561,054	(X)	2,913,136
36781 —	Coaxial (RF) connectors	45	532,308	502,389	433,394	418,151
36781 21	Miniature (BNC, PNC, MHB)	23	73,029	89,012	58,634	75,695
36781 22	Subminiature (SMA, SMB, SMC)	23	26,256	68,726	22,864	62,878
36781 24	Other standard and precision	34	433,023	344,651	351,896	279,578
36782 —	Cylindrical connectors	35	154,488	467,882	166,186	482,786
36782 25	Heavy duty and standard	27	72,324	276,155	¹ 67,623	267,755
36782 29	Miniature	14	11,170	85,970	¹ 13,342	96,400
36782 31	Subminiature	9	70,994	105,757	¹ 85,221	118,631
36783 —	Rack and panel (rectangular) connectors	30	970,291	493,179	850,537	427,634
36783 35	Integral shell, Mil-C-22857 (8434) and similar types	18	194,839	150,648	188,785	160,394
	Subminiature:					
36783 42	Ribbon, including planar cable type	10	26,233	59,885	22,864	56,912
36783 44	D-Subminiature, including planar cable type	15	745,245	258,466	635,411	188,382
36783 46	Microminiatures	7	3,974	24,180	¹ 3,477	21,946
36784 —	Printed circuit connectors	48	4,396,777	888,664	4,942,005	859,356
36784 44	Card insertion types	23	1,133,660	188,662	1,184,585	239,663
	Two-piece types:					
36784 48	Post, header and receptacle type	29	3,076,465	547,232	3,637,889	486,575
36784 49	Other two-piece types	16	186,652	152,770	¹ 119,531	133,118
36785 —	Other connectors, including parts	86	(X)	1,208,940	(X)	1,152,843
36785 41	Hermetic sealed (except single-contact and coaxial types)	26	172,648	117,865	¹ 165,054	¹ 122,964
36785 51	Plate module types	6	7,463	28,261	6,795	25,776
36785 53	Fiber optic connectors	10	(²⁵)	(²⁵)	4,076	62,270
36785 59	Other planar cable (flat conductor or ribbon cable), excluding rack and panel (rectangular) types	15	²⁵ 724,344	²⁵ 308,842	832,703	250,389
36785 54	Miscellaneous special purpose	48	3,497,105	639,069	3,077,225	576,260
36785 56	Parts for connectors (connectors shipped but still requiring further manufacture)	21	(X)	114,903	(X)	122,449
3679- —	Electronic components and subassemblies, n.e.c.	(NA)	(X)	27,005,727	(X)	23,420,523
36791 —	Filters (except microwave) and piezoelectric devices	108	(X)	665,118	(X)	534,330
	Filters (except microwave)	(NA)	100,173	385,860	¹ 63,212	284,375
36791 11	Mechanical, excluding optical lenses (germanium silicon, fused quartz, rock salt, and other)	3	85	12,471	80	13,171
	Radio frequency interference/electro- magnetic interference (RFI/EMI) control filters:					
36791 13	Ceramic dielectric	13	69,712	222,353	39,910	142,952
36791 15	Combination or other dielectric	17	29,299	113,831	¹ 22,188	97,176

See footnotes at end of table.

Table 24. **Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.**

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36791 —	Filters (except microwave) and piezoelectric devices—Con.					
36791 21	Electronic wave filters (LC band and high pass)	26	1,077	37,205	1,034	31,076
	Piezoelectric devices	(NA)	(X)	279,258	(X)	249,955
	Oscillator crystals:					
36791 31	AT-cut	31	12,462	49,460	9,856	48,042
36791 33	Other	11	16,581	34,704	12,973	30,563
	Crystal oscillators:					
36791 35	Oven	8	139	27,868	82	21,892
36791 37	TCXO/VCXO	11	339	26,307	176	15,367
36791 39	Hybrid	14	4,393	26,682	3,997	30,597
36791 41	Other	10	2,337	32,957	2,605	31,170
	Crystal filters:					
36791 43	Monolithic, including filter crystals and/or monolithic filter units not assembled into filters	10	872	9,242	898	9,650
36791 45	Packaged AT-cut (packaged, including monolithic, tandem monolithic, and resonator filter assemblies)	11	347	8,463	510	8,304
36791 47	Other	6	613	27,835	537	22,582
	Crystal blanks:					
36791 51	AT-cut	8	3,052	6,018	2,837	6,483
36791 55	Other	9	7,105	29,722	5,839	25,305
36793 —	Microwave components and devices (except antenna), tubes, and semiconductors	136	(X)	1,184,060	(X)	1,136,310
36793 11	Ferrite, microwave components including yttrium garnets (circulators, isolators, phase shifters, attenuators, equalizers, limiters, mixers, etc.)	37	(X)	249,195	(X)	225,596
	Microwave devices, other than ferrite and solid state:					
36793 21	Attenuators (dummy loads, high and low-power terminations, etc.)	40	(X)	57,339	(X)	50,581
36793 23	Cavities (amplifier cavities, coaxial tuned cavities, etc.)	13	(X)	59,677	(X)	61,198
36793 25	Couplers (directional couplers, hybrid junctions, etc.)	34	(X)	49,437	(X)	42,334
36793 27	Reactive microwave components, n.e.c.	44	(X)	143,984	(X)	124,288
36793 29	Switches, coaxial and waveguide	38	(X)	72,674	(X)	68,697
36793 31	Rigid waveguide and fittings (bend and twists, couplings, flanges, other simple waveguide components, n.e.c.)	26	(X)	44,208	(X)	46,467
36793 33	Flexible waveguides and fittings	16	(X)	29,504	(X)	26,584
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.)	45	(X)	136,360	(X)	182,736
36793 71	Microwave subassemblies, including parametric amplifiers and other solid-state assemblies	35	(X)	341,682	(X)	307,829
36795 —	Transducers, electrical/electronic I/O, n.e.c.	87	73,684	885,692	66,643	832,500
36795 11	Electroacoustic (sonar, ultrasonic, vibration*, etc.)	16	17,936	110,157	19,512	99,108
	Electromechanical:					
36795 21	Accelerometers*	17	2,523	108,187	1,666	106,260
36795 23	Pressure*	39	35,107	367,745	28,841	328,157
36795 25	Strain gauges and other mechanical*	22	776	106,225	792	96,531
36795 31	Thermoelectric (pyrometers, thermocouples*, etc.)	9	1,475	40,375	1,365	40,275
36795 98	Other (optical, chemical, magnetic, nuclear*, etc.)	23	15,867	153,003	14,467	162,169

See footnotes at end of table.

Table 24. Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36796 —	Switches, mechanical types for electronic circuitry . . .	65	(X)	606,261	(X)	572,632
36796 15	Slide, including rocker, miniature and sub-miniature*	12	(X)	62,884	(X)	53,519
36796 19	Rotary selector, including lever and jog-lever, miniature and subminiature*	19	(X)	75,807	(X)	75,352
36796 21	Keyboard*	6	(X)	45,261	(X)	44,193
36796 25	Pushbutton*	20	(X)	48,884	(X)	42,918
36796 29	Snap-action*	10	(X)	28,497	(X)	22,054
36796 31	Thumbwheel*	7	(X)	15,462	(X)	19,393
36796 14	Membrane	12	(X)	52,244	(X)	49,308
36796 12	Toggle standard type	13	(X)	44,532	(X)	56,551
36796 13	Toggle miniature and subminiature	4	(X)	(²⁶)	(X)	1,236
36796 33	DIP	5	(X)	²⁶ 59,654	(X)	(²⁷)
36796 39	Other	25	(X)	173,036	(X)	²⁷ 208,108
36798 —	Printed circuit assemblies (loaded boards, subassemblies and modules) ²⁸	531	(X)	17,514,845	(X)	15,087,127
36798 31	Under \$1,000 (MLP) ²⁹	31	(X)	1,170,589	(X)	690,980
36798 33	\$1,000 to \$4,900 (MLP)	37	(X)	1,044,173	(X)	577,921
36798 35	\$5,000 to \$14,999 (MLP)	19	(X)	315,739	(X)	23,659
36798 37	\$15,000 to \$49,999 (MLP)	10	(X)	40,308	(X)	42,140
36798 39	\$50,000 to \$249,000 (MLP)	6	(X)	(³⁰)	(X)	(³⁰)
36798 41	\$250,000 to \$1,000,000 (MLP)	2	(X)	(³⁰)	(X)	(³⁰)
36798 43	Over \$1,000,000 (MLP)	3	(X)	(³⁰)	(X)	(³⁰)
36798 15	Computer processors (systems boards, array processors, etc.), not specified by MLP	62	(X)	³⁰ 2,530,718	(X)	³⁰ 2,003,930
36798 11	Memory boards, including boards for adding memory to peripherals	127	(X)	2,682,985	(X)	1,990,755
36798 13	Peripheral controller boards (graphics boards, I/O controllers)	143	(X)	667,910	(X)	774,340
36798 17	Instrumentation boards (D/A converters, and frequency counters)	91	(X)	2,765,365	(X)	2,673,278
36798 19	Communication boards (FAX, modems, and LAN adaptors)	119	(X)	1,012,069	(X)	807,429
36798 21	Other board level products for use within a computer system	38	(X)	720,268	(X)	1,449,503
36798 22	Other boards	151	(X)	2,477,373	(X)	1,971,877
36798 29	Receipts for contract work by contract assemblers, board stuffers, and related job shops	130	(X)	2,087,348	(X)	2,081,315
36799 —	Electronic components and subassemblies, n.e.c.	553	(X)	6,149,751	(X)	5,257,624
36799 07	Antenna systems (except structural towers sold separately):					
36799 08	Home antenna	9		18,120	11,214	109,788
36799 09	Auto antenna	8		14,764	14,832	62,502
36799 11	Antenna accessories, sold separately (pedestals, drives, passive reflectors, rotators, radomes, etc.)	26	(X)	141,930	(X)	128,732
36799 13	Delay lines (distributed constant, lumped constant, magnetostrictive, ultrasonic, etc.)	19		4,444	4,579	27,676
36799 20	Oscillators (except instrumentation and crystal types)	15		12,391	8,158	109,271
36799 21	Magnetic recording and reproducing heads, including audio, video, digital and instrumentation	18	(D)	(D)	62,629	875,406
36799 22	Static power supply converters for electronic applications, sold separately:					
36799 21	Regulated	89		151,511	131,419	833,340
36799 22	Other (unregulated, variable frequency, ac, dc, converters and inverters, vibrator, etc.)	61	(X)	546,584	(X)	487,894
36799 31	Electronic cable harnesses and cable assemblies	237	(X)	1,355,452	(X)	1,233,931
36799 33	Cryogenic cooling devices (cryostats, etc.) for infrared detectors, masers	6	(X)	42,424	(X)	43,125
36799 51	Liquid crystal displays (LCD's) and other liquid devices	11	(X)	129,324	(X)	82,643

See footnotes at end of table.

Table 24. **Quantity and Value of Shipments of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994 and 1993—Con.**

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36799 —	Electronic components and subassemblies, n.e.c.—Con.					
36799 55	Magnetic cores	14	(X)	224,091	(X)	185,379
	Electronic parts, n.e.c., and specialized electronic hardware:					
	Sockets for electronic component insertion:					
36799 66	Integrated circuit sockets	10	(X)	(D)	(X)	'237,412
36799 62	Other, including tube, relay, discrete semiconductors, ac and dc converters and inverters, etc.	13	(X)	50,301	(X)	56,548
36799 98	All other electronic parts and specialized electronic hardware, n.e.c.	134	(X)	1,151,333	(X)	'783,977
	Electronic research, development, testing, and evaluation (receipts or billings, not reported as shipments of specific products):					
99980 42	Systems	23	(X)	215,394	(X)	193,898
99980 43	Equipment and subassemblies	38	(X)	(D)	(X)	432,192
99980 44	Component parts	41	(X)	100,498	(X)	'88,114
99980 46	Basic scientific electronic research	23	(X)	241,868	(X)	233,281
99980 47	Design and engineering services	40	(X)	(D)	(X)	(³¹)
99980 48	Software	10	(X)	(D)	(X)	(³¹)
99980 49	Testing	3	(X)	(D)	(X)	³¹ 763,756
99980 50	Supplies and accessories sold with components	9	(X)	1,247	(X)	6,300

¹Product codes 36713 66 and 36713 92 are combined to avoid disclosing figures for individual companies.
²Product codes 36713 73 and 36713 76 are combined to avoid disclosing figures for individual companies.
³For 1993, product codes 36714 14 and 36714 27 are combined to avoid disclosing figures for individual companies.
⁴For 1993, product codes 36741 19 and 36741 28 are combined to avoid disclosing figures for individual companies.
⁵Product codes 36741 82 and 36741 83 are combined to avoid disclosing figures for individual companies.
⁶Product codes 36741 84 and 36741 85 are combined to avoid disclosing figures for individual companies.
⁷Product codes 36741 94 and 36741 95 are combined to avoid disclosing figures for individual companies.
⁸For 1994, product codes 36741 87 and 36741 88 are combined to avoid disclosing figures for individual companies.
⁹Product codes 36741 20 and 36741 21 are combined to avoid disclosing figures for individual companies.
¹⁰For 1993, product codes 36741 49 and 36741 02 are combined to avoid disclosing figures for individual companies.
¹¹Product codes 36741 03 and 36741 04 are combined to avoid disclosing figures for individual companies.
¹²Product codes 36743 94 and 36743 12 are combined to avoid disclosing figures for individual companies.
¹³For 1994, product codes 36749 14 and 36749 16 are combined to avoid disclosing figures for individual companies.
¹⁴Product codes 36749 85 and 36749 86 are combined to avoid disclosing figures for individual companies.
¹⁵Product codes 36750 21 and 36750 24 are combined to avoid disclosing figures for individual companies.
¹⁶For 1994, product codes 36750 28, 36750 31, and 36750 33 are combined to avoid disclosing figures for individual companies.
¹⁷For 1993, product codes 36750 28 and 36750 31 are combined to avoid disclosing figures for individual companies.
¹⁸For 1994, product codes 36750 41, 36750 43, and 36750 45 are combined to avoid disclosing figures for individual companies.
¹⁹For 1993, product codes 36750 43 and 36750 45 are combined to avoid disclosing figures for individual companies.
²⁰Product codes 36750 54 and 36750 51 are combined to avoid disclosing figures for individual companies.
²¹Product codes 36750 53 and 36750 55 are combined to avoid disclosing figures for individual companies.
²²Product codes 36760 54 and 36760 58 are combined to avoid disclosing figures for individual companies.
²³Product codes 36760 67 and 36760 74 are combined to avoid disclosing figures for individual companies.
²⁴Product codes 36760 75 and 36760 77 are combined to avoid disclosing figures for individual companies.
²⁵For 1994, product codes 36785 53 and 36785 59 are combined to avoid disclosing figures for individual companies.
²⁶For 1994, product codes 36796 13 and 36796 33 are combined to avoid disclosing figures for individual companies.
²⁷For 1993, product codes 36796 33 and 36796 39 are combined to avoid disclosing figures for individual companies.
²⁸These 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*.
²⁹MLP Manufacturer's list price.
³⁰Product codes 36798 39, 36798 41, and 36798 43, and 36798 15 are combined to avoid disclosing figures for individual companies.
³¹For 1993, product codes 99980 47, 99980 48, and 99980 49 are combined to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified. 'Revised by 5 percent or more from previously published figures. X Not applicable.

*Similar products are collected on Current Industrial Report forms MA36A, *Switchgear, Switchgear Apparatus, Relays, and Industrial Controls* and MA36K, *Wiring Devices and Supplies*.

Table 25. Shipments, Imports, and Exports of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994

[Value in thousands of dollars]

Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption (value in foreign country) ^{2,3}
High vacuum tubes	79,671	29,869	17,940
Gas and vapor tubes	34,102	8,595	1,656
Klystrons, including amplifiers, reflex, and other	56,861	6,740	14,935
Magnetrons, including pulsed, fixed, tunable, cross-field, continuous wave and other	55,864	11,608	63,952
Receiving type electron tubes, including rebuilt	(D)	3,642	7,923
Television tubes, color and black and white, new and rebuilt	2,579,782	298,171	-
Television tubes, n.e.c.	(D)	121,628	2,588
Electron tube parts (except glass blanks)	114,937	110,642	137,834
Printed circuit boards	6,812,252	1,376,943	1,564,933
Monolithic integrated circuits, digital (except memory and silicon)	502,221	598,317	-
Monolithic integrated circuits, digital, memory (except silicon)	(D)	44,284	-
Monolithic integrated circuits, digital, silicon, bipolar transistors, memory, static random access memory (SRAM)	34,648	42,775	42,229
Monolithic integrated circuits, digital, silicon, bipolar transistors, memory (except static random access memory (SRAM))	(D)	23,818	71,469
Monolithic integrated circuits, digital, silicon, bipolar transistors (except memory, emitter logic (ECL))	277,599	43,973	116,837
Monolithic integrated circuits, digital, silicon, bipolar transistors (except memory, transistor-transistor logic (TTL))	949,439	99,672	487,485
Monolithic integrated circuits, digital, silicon, bipolar transistors (except memory, n.e.c.)	1,154,441	251,640	153,057
Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors:			
With volatile memory DRAM's, not over 300 k	(⁴)	155,870	136,185
With volatile memory DRAM's, over 300 k	⁴ 3,837,970	825,945	6,754,646
With volatile memory SRAM's, not over 300 k	665,639	91,542	596,483
With volatile memory SRAM's, over 300 k	561,448	74,201	419,989
Except volatile memory, electrically (EEPROM)	577,932	280,489	469,647
Except volatile memory (except electrically (EEPROM))	829,905	103,435	486,809
Except volatile memory, n.e.c.	884,485	389,467	1,128,117
Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors (except memory type):			
Microprocessors 8 bits or less	1,434,062	404,079	945,559
Microprocessors 16 bits	944,884	108,011	282,816
Microprocessors 32 bits or more	5,871,789	1,034,308	1,327,019
Other (microcontrollers, ASIC's, PLA's, etc.)	3,018,979	854,276	4,322,160
Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors, complementary BiMOS, memory type	(D)	38,603	84,730
Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors, complementary BiMOS (except memory type)	(D)	83,950	179,916
Monolithic integrated circuits, digital, silicon, metal oxide (MOS) field effect transistors, complementary BiMOS, n.e.c., including logic type (except memory types)	514,665	375,692	289,352
Monolithic integrated circuits, nondigital, silicon, including linear, analog, radio frequency, etc.	2,330,319	760,644	1,294,443
Hybrid integrated circuits	1,020,455	281,408	710,107
Parts for integrated circuit packages	(D)	611,089	515,123
Capacitors, fixed, tantalum electrolytic, metal case, including foil and wet	51,288	10,463	16,091
Capacitors, fixed, tantalum electrolytic, dipped	(⁵)	16,835	122,824
Capacitors, fixed, tantalum electrolytic, chips	(⁵)	75,962	84,198
Capacitors, fixed, tantalum electrolytic, n.e.c., including leaded	⁵ 187,320	29,646	31,777
Capacitors, fixed, aluminum electrolytic, not exceeding 35 mm	(D)	36,606	174,383
Capacitors, fixed, aluminum electrolytic, over 35 mm	69,331	4,824	19,144
Capacitors, fixed, ceramic dielectric, single layer, chips	(⁶)	11,586	3,996
Capacitors, fixed, ceramic dielectric, single layer, axial and radial	⁶ 21,847	3,203	37,445
Capacitors, fixed, ceramic dielectric, multilayer, axial	(⁷)	19,933	42,431
Capacitors, fixed, ceramic dielectric, multilayer, radial	⁷ 162,941	17,913	71,779
Capacitors, fixed, ceramic dielectric, multilayer, chips	438,882	122,173	90,819
Capacitors, fixed, mica dielectric	6,781	871	5,513
Capacitors, fixed, n.e.c.	65,439	198,040	63,578
Capacitors, variable, mica/ceramic/glass dielectric	31,278	9,273	7,611
Capacitors, variable, n.e.c.	6,707	22,347	15,602
Capacitors, parts, including unfinished chips for further finishing	(D)	215,536	32,032
Capacitors, fixed, ac type, less than 300 volts	20,460	4,280	59,104
Capacitors, fixed, ac type, 300 - 599 volts	103,580	822	6,499
Capacitors, fixed, ac type, 600 - 999 volts	13,669	304	2,705
Capacitors, fixed, ac type, 1,000 volts or more	13,069	18,907	5,168
Capacitors, fixed, dc type, axial	50,049	628	5,426
Capacitors, fixed, dc type, radial	(⁸)	210	39,678
Capacitors, fixed, dc type, chips and other leaded	⁸ 22,156	12,632	44,843
Transistors, signal, less than 1 watt dissipation	364,486	58,238	55,702
Transistors, power, 1 watt or greater dissipation	464,177	146,752	86,679
Signal diodes and assemblies	18,504	8,109	71,697
Zener diodes	(⁹)	24,376	87,213
Diodes and rectifiers, n.e.c.	⁹ 664,678	78,322	261,617
Microwave diodes	193,048	24,907	32,510
Solar cell	47,937	68,109	28,262

See footnotes at end of table.

Table 25. Shipments, Imports, and Exports of Semiconductors, Printed Circuit Boards, and Other Electronic Components: 1994—Con.

[Value in thousands of dollars]

Product description	Manufacturers' shipments (value, f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption (value in foreign country) ^{2,3}
Light emitting diodes	393,322	61,003	270,387
Optical coupled isolators	79,385	15,938	58,185
Other light-sensitive and light-emitting devices	125,267	55,632	73,620
Thyristors, SCR's, triacs, and PNP diodes (D)	16,608	16,608	117,724
Chips and wafers for integrated circuits	3,480,632	8,156,207	1,653,595
Chips and wafers for discreet semiconductors	721,575	731,228	42,117
Other semiconductor parts	1,896,194	133,021	67,971
Carbon resistors, fixed, composition or film types, designed for surface mounting (SMD), having two terminals, including both flat resistor chips, and cylindrical leadless resistors	48,319	19,725	87,310
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	73,585	4,431	46,957
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	52,401	6,949	11,256
Resistors, fixed, with a power capacity of 20 watts or less, wirewound, having two leads	64,449	10,928	26,401
Resistors, fixed, with a power capacity of 20 watts or less, other than wirewound, having two leads	86,484	26,499	41,273
Resistors, fixed, with a power capacity of 20 watts or less, resistor networks, having more than two leads	88,940	12,925	68,532
Resistors, variable, wirewound, including rheostats and potentiometers, for a power handling capacity not exceeding 20 watts	33,890	3,968	17,980
Resistors, variable, n.e.c.	308,317	57,960	190,391
Resistors, parts	7,435	109,865	-
Piezoelectric devices (except crystal blanks)	243,518	106,624	356,572
Piezoelectric devices, crystal blanks	35,740	6,112	6,297
Television transformers and reactors	67,004	44,083	8,085
Coils, transformers, reactors, and chokes for electronic applications, n.e.c.	1,025,762	120,011	420,888
Connectors, coaxial	502,389	56,380	90,865
Connectors, cylindrical	467,882	25,532	35,214
Connectors, rack and panel	493,179	55,029	11,564
Connectors, printed circuit	888,664	120,375	74,413
Magnetic recording and reproducing heads (D)	10,349	10,349	28,501
Switches, rotary selector	75,807	8,926	20,453
Switches, pushbutton	48,884	21,541	72,673
Switches, snap-action	28,497	66,571	63,613
Switches, other	173,036	613,174	-

¹Source: Bureau of the Census report EM545, *U.S. Exports*.

²Source: Bureau of the Census report IM145, *General Imports for Consumption*.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry into the United States.

⁴Manufacturers' shipments data for "Volatile memory, DRAM's, not over 300 k" and "Volatile memory, DRAM's, over 300 k" are combined to avoid disclosing figures for individual companies.

⁵Manufacturers' shipments data for "Tantalum electrolytic, fixed capacitors, dipped," "Tantalum electrolytic, fixed capacitors, chips," and "Tantalum electrolytic, fixed capacitors, n.e.c., including leaded" are combined to avoid disclosing figures for individual companies.

⁶Manufacturers' shipments data for "Ceramic dielectric, fixed capacitors, single layer, chips" and "Ceramic dielectric, fixed capacitors, single layer, axial and radial" are combined to avoid disclosing figures for individual companies.

⁷Manufacturers' shipments data for "Ceramic dielectric, fixed capacitors, multilayer, axial leads" and "Ceramic dielectric, fixed capacitors, multilayer, radial leads" are combined to avoid disclosing figures for individual companies.

⁸Manufacturers' shipments data for "Capacitors, fixed, dc type, radial lead" and "Capacitors, fixed dc type, chips and other leaded" are combined to avoid disclosing figures for individual companies.

⁹Manufacturers' shipments data for "Zener diodes" and "Diodes and rectifiers, n.e.c." are combined to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

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 Richard Keach, 301-457-4800.

7.9 SELECTED INSTRUMENTS AND RELATED PRODUCTS

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 2,222 companies are included. No estimate is derived for the small firms excluded from the survey.

SUMMARY OF FINDINGS

During 1994, the total value of shipments of selected instruments and related products totaled \$62.9 billion, down 1 percent from the 1993 value of \$63.8 billion. The 1994 figure includes automatic regulating, control, and solenoid valves, \$2.2 billion, an increase of 8 percent from 1993; search, detection, navigation, guidance, aeronautical, and nautical systems, instruments, and equipment, \$27.8 billion, a decrease of 10 percent from 1993; laboratory apparatus and furniture; \$1.7 billion, an increase of 4 percent from 1993; controls for monitoring residential and commercial environments, and appliance regulating controls, \$2.5 billion, an increase of 7 percent from 1993; process control instruments, \$6.2 billion, an increase of 4 percent from 1993; fluid meters and counting devices, \$3.4 billion, an increase of 19 percent from 1993; instruments to measure electricity, \$8.3 billion, an increase of 9 percent from 1993; analytical and scientific instruments (except optical), \$4.9 billion, an increase of 3 percent from 1993;

optical instruments and lenses, \$2.2 billion, virtually unchanged from 1993; measuring and controlling devices, n.e.c., \$3.8 billion, virtually unchanged from 1993.

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—Non-Unified 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 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 26. Value of Shipments of Selected Instruments and Related Products, by Product Code: 1985 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
34918	Automatic regulating and control valves	1,801.5	1,647.5	1,579.3	1,537.4	1,418.0	1,331.0	1,261.9	1,221.0	1,302.3	1,324.3
34919	Solenoid-operated valves (except nuclear and fluid power transfer)	419.2	406.0	404.7	360.1	345.9	374.3	338.3	326.9	284.8	280.1
38121	Aeronautical, nautical, and navigational instruments	1,998.2	2,121.2	2,517.4	2,671.6	2,517.5	2,521.4	2,365.2	2,269.7	1,788.9	1,592.0
38122	Search and detection, navigation and guidance systems and equipment ¹	25,761.5	28,604.4	31,311.2	31,773.8	32,420.2	30,840.2	31,144.9	30,910.9	29,503.7	27,056.8
38210	Laboratory apparatus and laboratory furniture ²	1,655.4	1,597.8	1,714.8	1,612.0	1,675.0	1,697.9	1,564.9	1,549.1	1,329.9	1,138.1
38220	Controls for monitoring residential and commercial environments and appliance regulating controls	2,461.8	2,309.9	2,196.6	1,982.2	1,982.0	2,224.4	2,207.2	2,092.7	1,965.9	1,925.6
38230	Process control instruments	6,165.0	5,934.9	5,731.4	5,229.6	5,223.5	4,743.2	4,347.9	4,083.6	3,894.5	3,963.2
38242	Integrating and totalizing meters for gas and liquids	853.7	777.0	727.4	697.8	724.6	647.3	609.6	589.3	525.8	548.6
38243	Counting devices	340.4	285.4	273.4	226.3	209.8	206.0	192.5	197.8	177.4	174.9
38244	Motor vehicle instruments ³	2,187.5	1,768.1	1,576.3	1,329.5	1,456.6	637.4	681.6	232.1	197.3	(NA)
38251	Integrating instruments, electrical	486.2	461.0	439.3	389.6	396.1	401.4	387.6	400.5	402.9	402.6
38252	Test equipment for testing electrical, radio and communication circuits, and motors	7,227.6	6,571.6	6,493.0	6,524.5	6,156.0	6,133.8	6,248.0	6,143.6	5,592.1	5,698.9
38253	Instruments to measure electricity	550.9	525.8	557.9	584.0	586.4	620.3	663.2	646.5	617.3	603.0
38260	Analytical and scientific instruments (except optical)	4,923.4	4,766.1	4,885.9	4,519.1	4,411.8	4,042.2	3,442.2	3,046.1	2,531.6	2,716.0
38271	Sighting, tracking, and fire control equipment, optical type	652.4	768.6	770.9	547.2	580.8	595.1	609.4	726.1	651.2	556.3
38274	Optical instruments and lenses ^{4 5}	1,559.0	1,455.8	1,322.4	1,292.3	1,251.8	1,273.8	1,269.8	1,214.8	1,245.2	1,345.8
38291	Aircraft engine instruments (except flight)	490.5	551.6	590.3	682.0	579.0	508.0	504.5	520.0	505.4	393.1
38292	Physical properties and kinematic testing equipment	1,236.5	1,174.7	1,148.6	1,023.7	1,012.4	946.0	893.9	859.4	775.1	660.8
38294	Nuclear radiation detection and monitoring instruments	521.5	519.4	533.4	570.4	566.7	606.0	654.3	637.2	587.2	542.2
38295	Commercial, geophysical, meteorological, and general purpose instruments ⁶	1,276.4	1,271.4	1,361.0	1,335.1	1,139.8	1,034.7	1,072.4	358.0	316.5	354.4
38296	Surveying and drafting instruments ²	317.9	301.4	255.1	234.6	273.9	270.2	269.5	246.5	229.9	379.5

¹Prior 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*.

²Starting in 1987, product code 38210 (formerly 38112) includes laboratory furniture. Prior to 1987, laboratory furniture had been included in product code 38296 (formerly 38113).

³The revision for 1990 in product code 38244, "Motor vehicle instruments," is due to the 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."

⁴Prior to 1987, "Binoculars and astronomical instruments" and "Other optical instruments and lenses" were combined under product code 38235.

⁵Beginning 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.

⁶Beginning 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*.

NA Not available. [†]Revised by 5 percent or more from previously published figures.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
34918 —	Automatic valves (regulating and control type, except nuclear)	146	(X)	1,801,545	(X)	1,647,526
	Automated control valves:					
	Pneumatic actuated	(NA)	(X)	563,869	(X)	532,402
	Sliding stem valves	(NA)	(S)	245,778	(S)	223,686
34918 01	Globe body	22	698,044	187,477	688,404	169,190
34918 02	All other types	17	(S)	58,301	(S)	54,496
	Rotary valves	(NA)	(S)	135,185	(S)	130,365
34918 03	Ball	15	(S)	67,223	(S)	68,026
34918 04	Butterfly	15	33,441	43,003	30,074	37,267
34918 07	All other rotary valves, including eccentric disc	10	16,394	24,959	15,750	25,072
34918 08	All other pneumatic power-operated control valves	22	(S)	71,939	(S)	70,423
34918 09	Parts for pneumatic-actuated valves (sold separately)	30	(X)	110,967	(X)	107,928
	All other actuation, including electric-actuated and electrohydraulic-actuated	(NA)	(X)	227,672	(X)	202,331
	Sliding stem valves	(NA)	(S)	32,836	(S)	26,323
34918 11	Globe body	9	(S)	14,491	(S)	12,236
34918 12	All other types	16	(S)	18,345	(S)	14,087
	Rotary valves	(NA)	(S)	53,879	(S)	46,042
34918 13	Ball	10	(X)	(1)	(X)	(1)
34918 14	Butterfly	7	(X)	(1)	(X)	(1)
34918 17	All other rotary valves, including eccentric disc	3	(S)	153,879	(S)	146,042
34918 18	All other power-operated (except pneumatic) control valves	18	3,825,821	124,645	3,685,466	117,402
34918 21	Parts for all other power-operated (except pneumatic) control valves	12	(X)	16,312	(X)	12,564
34918 23	Valve actuators (sold separately)	17	126,216	83,576	139,713	89,343
	Regulator valves:					
34918 25	Remote-sensing direct-actuated temperature regulators ²	19	4,148	83,996	2,983	70,060
34918 30	Self-contained direct-actuated pressure regulators (except instrument type and safety relief valves) ²	34	4,722	229,692	4,319	210,796
34918 35	Pilot (internal and external)-actuated pressure regulators ²	29	188	66,198	164	61,019
34918 41	Self-contained direct-acting precision and instrument-type pneumatic (air and gas) pressure regulators ²	12	535	45,080	517	42,550
34918 45	Flow regulators for gas, vapors, or liquids ²	45	18,719	193,866	14,990	169,035
34918 48	Other regulator valves ²	35	4,431	251,295	3,708	218,122
34918 49	Parts for regulator valves (sold separately)	34	(X)	56,301	(X)	51,868
34919 —	Solenoid-operated valves (except nuclear and fluid power transfer)	46	(X)	419,238	(X)	406,027
	Solenoid-operated valves (except nuclear and fluid power transfer valves):					
	Commercial/industrial types:					
34919 56	Two-way ²	31	5,951	194,990	5,509	194,189
34919 58	Three-way ²	16	616	23,747	568	22,994
34919 59	Other ²	15	(3)	(3)	(3)	(3)
34919 61	Household appliance type ²	2	320,242	3152,680	319,137	3144,680
34919 79	Parts, components, and operators for solenoid-operated valves (except nuclear and fluid power transfer valves, sold separately)	24	(X)	47,821	(X)	44,164
38121 —	Aeronautical, nautical, and navigational instruments (except aircraft engine instruments)	90	(X)	1,998,240	(X)	2,121,223
	Flight and navigation sensors, transmitters, and displays:					
38121 01	Compasses (magnetic and gyroscopic)	15	(X)	253,672	(X)	291,214
38121 08	Altimeters (except radio and radar altimeters)	10	(X)	23,172	(X)	38,890
38121 10	Airspeed indicators, including machmeters and air data computers	16	(X)	277,777	(X)	280,190
38121 12	Acceleration indicators and systems components	7	(D)	(D)	(D)	(D)
38121 13	Rate-of-climb indicators	6	(S)	2,631	(S)	4,697
38121 15	Angle-of-attack indicators	7	(S)	13,933	(S)	10,890

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38121 —	Aeronautical, nautical, and navigational instruments (except aircraft engine instruments)—Con.					
38121 18	Artificial horizon flight instruments	8	8,353	14,594	6,861	14,674
38121 20	Other aerospace and navigational instruments	30	(X)	(D)	(X)	^r (D)
	Gyroscopes sold separately:					
38121 21	Vertical	5	1,930	8,102	^r 2,155	^r 8,822
38121 23	Directional	5	7,939	20,900	10,061	24,379
38121 25	Free, torqued and untorqued	2	(X)	⁽⁴⁾	(X)	⁽⁴⁾
38121 26	Rate, inertial grade	4	(X)	⁴ 72,104	(X)	⁴ 81,281
38121 28	Rate, noninertial grade	6	(X)	63,502	(X)	99,705
	Airframe equipment instruments:					
38121 61	Position indicators (mechanical, as for landing gear, cowl flaps, stabilizers, etc.)	13	(X)	17,334	(X)	27,456
38121 63	Hydraulic system (both electrical and mechanical measuring means, as for liquid level and temperature and pressure indicators)	11	(X)	20,043	(X)	20,501
38121 64	Cabin environmental measuring and control instruments (air-conditioning and heating, cabin pressure, oxygen, etc.)	12	(X)	57,137	(X)	53,473
38121 80	Other aerospace flight instruments	23	(X)	465,775	(X)	429,379
38121 85	Nautical instruments (all types, including temperature, speed, pitch, and roll instruments and system components, etc.)	13	285,679	68,664	^a 373,653	^a 73,345
38121 89	Parts and components for aeronautical, nautical, and navigational instruments (except aircraft engine instruments, sold separately)	26	(X)	140,823	(X)	^r 139,729
38122 —	Search and detection systems and navigation and guidance systems and equipment ⁵	233	(X)	25,761,456	(X)	28,604,447
38122 11	Light reconnaissance and surveillance electronic systems and equipment (infrared, ultraviolet, and visible light)	47	(X)	2,337,009	(X)	2,556,919
38122 13	IFF equipment	10	(X)	92,684	(X)	82,718
38122 15	Proximity fuses	6	(X)	149,510	(X)	256,698
	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	25	(X)	1,429,991	(X)	1,551,811
38122 19	Ship (marine) radar	20	(X)	1,067,977	(X)	902,334
38122 21	Ground radar	25	(X)	605,035	(X)	488,906
	Tracking radar systems and equipment (fire control, bombing, bombing navigational radar, aircraft and missile tracking radar, etc.):					
38122 23	Airborne and missile/space radar	15	(X)	1,236,712	(X)	1,402,869
38122 25	Ship (marine) radar	17	(X)	312,499	(X)	347,990
38122 27	Ground radar	20	(X)	1,335,777	(X)	1,307,019
	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)	100,176	(X)	110,946
38122 31	Ground radar	8	(X)	105,842	(X)	^r 139,449
38122 33	Electronic checkout, monitoring, evaluation, and other electronic support equipment for radar systems	22	(X)	280,483	(X)	430,400

See footnotes at end of table.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38122 —	Search and detection systems and navigation and guidance systems and equipment ⁵ —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)	314,836	(X)	464,190
38122 37	Submarine applications	24	(X)	721,324	(X)	1,048,161
38122 39	Airborne	16	(X)	304,567	(X)	369,858
38122 41	Electronic checkout, monitoring, evaluation, and other electronic support equipment for sonar systems and submerged fixed systems	9	(X)	160,420	(X)	174,827
38122 43	Specialized command and control data processing and display equipment, sold separately from complete systems	25	(X)	1,030,588	(X)	1,101,803
38122 45	Search, detection, identification, and tracking systems and equipment, n.e.c.	31	(X)	1,385,489	(X)	1,520,142
	Electronic warfare systems and equipment: Countermeasures equipment:					
38122 47	Jamming equipment, communications, and radar	32	(X)	1,370,204	(X)	1,521,338
38122 49	Underwater countermeasures equipment	9	(X)	223,086	(X)	231,942
38122 51	Other active countermeasures equipment, excluding passive materials such as chaff, window, needles, and rope	14	(X)	339,703	(X)	472,568
38122 53	Specialized electronic and communication intelligence equipment, including specially designed DF equipment, signal reduction and processing equipment, and signal analyzers and display equipment	42	(X)	2,191,432	(X)	2,192,378
	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	47	(X)	3,723,450	(X)	4,155,873
38122 57	Nonmissile and space vehicle guidance equipment (ground, ship, or airborne command guidance systems, etc.)	11	(X)	479,977	(X)	684,977
38122 59	Electronic checkout, launching, and other missile and space vehicle support systems (ground, ship, and air) .	17	(X)	242,098	(X)	363,811
	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)	421,596	(X)	333,808
38122 63	Airborne integrated data systems/flight recorders	10	(X)	232,006	(X)	¹ 266,100
38122 65	Distance measuring equipment (DME)	10	(X)	81,564	(X)	83,349
38122 67	Flight directors/situation display	8	(X)	281,631	(X)	⁶
38122 69	Heads-up display (HUD) systems	11	(X)	102,831	(X)	⁶ 427,832
38122 71	Inertial navigation systems	8	(X)	341,541	(X)	518,597
38122 73	Proximity warning/collision avoidance equipment	8	(X)	193,389	(X)	¹ 200,301
38122 75	Complete automatic pilots	5	(X)	234,441	(X)	¹ 230,181
38122 77	Other airborne navigational systems	31	(X)	923,244	(X)	1,124,362
38122 79	Surface (ship and ground) navigational systems	36	(X)	455,220	(X)	577,116
38122 81	Underwater navigational systems	7	(X)	118,350	(X)	140,943
38122 83	Electronic checkout, monitoring, evaluation, and other electronic support equipment for navigational systems and equipment	40	(X)	834,774	(X)	821,931

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38210 —	Laboratory apparatus and laboratory furniture	163	(X)	1,655,381	(X)	1,597,778
	Laboratory balances and scales:					
38210 11	Sensitivity of 5 centigrams or better	11	50,590	33,845	⁷ (⁷)	⁷ (⁷)
38210 13	Sensitivity of less than 5 centigrams	9	26,263	9,343	⁷ 77,579	⁷ 44,529
38210 15	Laboratory furnaces and ovens	24	(X)	28,936	(X)	25,401
	Laboratory centrifuges:					
38210 17	Table-top type	16	⁸ (⁸)	⁸ (⁸)	⁸ (⁸)	⁸ (⁸)
38210 19	Floor type	5	⁸ 32,819	⁸ 121,138	⁸ 28,443	⁸ 115,498
38210 27	Laboratory evaporation and distillation apparatus	14	(X)	18,747	(X)	18,701
38210 28	Laboratory sterilizers and autoclaves	10	(X)	82,503	(X)	66,836
38210 29	Laboratory burners and hot plates	13	(X)	11,850	(X)	11,831
38210 31	Laboratory granulators, mills, and other particle size reduction apparatus	8	(X)	6,088	(X)	6,540
38210 33	Laboratory dryers	9	(X)	9,625	(X)	9,596
38210 35	Laboratory blenders, mixers, shakers, dispensers, fraction collectors, and other liquid sample preparation apparatus	32	(X)	104,286	(X)	^b 91,588
38210 36	Laboratory incubators	13	12,403	41,332	14,890	^b 48,412
38210 37	Environmental test chambers	15	20,216	45,241	¹ 16,807	¹ 36,650
38210 38	Laboratory freezers	8	10,004	39,531	8,435	32,615
38210 42	Microtomes	5	557	3,909	¹ 634	¹ 3,862
38210 81	Laboratory furniture, including cabinets, cases, benches, tables, stools, and reagent shelves	24	(X)	⁹ (⁹)	(X)	⁹ (⁹)
38210 88	Parts and components for laboratory furniture (sold separately)	7	(X)	⁹ 316,189	(X)	⁹ 296,976
38210 98	All other laboratory and scientific apparatus not specified above, including wet and dry baths, and melting point apparatus; excluding analytical instruments	90	(X)	598,975	(X)	587,682
38210 99	Components, parts and accessories for laboratory and scientific apparatus (sold separately)	60	(X)	183,843	(X)	201,061
38220 —	Controls for monitoring residential and commercial environments and appliance regulating controls	107	(X)	2,461,845	(X)	2,309,379
	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 ²	37	38,623	340,627	¹ 35,831	329,182
38220 22	Pneumatic ²	6	6,895	55,668	8,274	70,340
38220 25	Pressure responsive (pressurestats) ²	10	5,348	47,849	¹ 4,742	41,692
38220 30	Hydronic responsive ²	6	2,362	44,934	2,017	39,159
38220 35	Humidity responsive (humidistats) ²	7	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾
38220 40	Light responsive ²	3	¹⁰ 6,699	¹⁰ 23,558	¹⁰ 6,677	¹⁰ 24,034
38220 50	Liquid level ²	6	(S)	7,529	(S)	⁽¹¹⁾
38220 60	Igniters ²	8	⁽¹²⁾	⁽¹²⁾	⁽¹²⁾	⁽¹²⁾
38220 65	Inherent motor protectors ²	4	¹² 181,191	¹² 280,909	¹² 151,354	¹² 220,324
38220 66	Microprocessor-based load programmers for buildings: energy control ²	11	424	81,156	370	¹ 72,002
38220 70	Computerized energy control systems for buildings	14	(S)	405,674	(S)	355,087
38220 74	Other	15	(X)	290,365	(X)	¹¹ 311,668
	Controls for major appliances such as domestic laundry and cooking appliances, refrigerators and freezers, vending machines, and air-conditioners:					
38220 75	Temperature responsive ²	22	229,160	378,853	194,502	360,837
38220 81	All other controls for appliances ²	19	37,753	266,065	36,178	255,845
38220 98	Parts and components for controls monitoring residential and commercial environments and for appliance regulating controls (sold separately)	33	(X)	238,658	(X)	229,209

See footnotes at end of table.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38230 —	Process control instruments	527	(X)	6,164,999	(X)	5,934,872
	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)	46	347,378	199,813	325,455	179,211
38230 36	Recorders, with or without self-contained set-point stations	23	(S)	70,221	(S)	82,331
38230 37	Indicators, with or without self-contained set-point stations	27	66,893	25,657	62,812	25,198
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)	32,055	(S)	¹ 22,896
38230 07	Electronic systems - non-unified architecture type	70	(X)	1,353,783	(X)	1,307,307
38230 12	Industrial multifunction process computers	67	(X)	422,189	(X)	389,546
	Pneumatic systems, including all system-type control, display, and computing instruments actuated from standardized pneumatic transmission signals:					
38230 39	Controllers (recording, indicating, or blind)	18	78,394	22,962	¹ 62,394	¹ 19,190
38230 40	Recorders, with or without self-contained set-point stations	3	(S)	⁽¹³⁾	(S)	⁽¹³⁾
38230 41	Indicators, with or without self-contained set-point stations	4	(S)	¹³ 11,380	(S)	¹³ 8,236
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	^b 50,636	^b 16,834	^b ¹ 67,430	^b 18,043
38230 43	Receiver-type gauges, analog and digital	10	(S)	7,643	(S)	5,433
38230 44	Annunciators, industrial; electromechanical and solid-state types	10	13,418	38,920	12,451	¹ 35,916
	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)	6	253,235	4,782	253,296	4,776
38230 46	Direct-deflecting types (indicators and recorders for all types of electrical temperature sensors)	13	(S)	4,561	(S)	6,887
38230 47	Electromechanical self-balancing types (electric or pneumatic controllers for all types of electrical temperature sensors)	2	(S)	⁽¹⁴⁾	(S)	⁽¹⁴⁾
38230 48	Electromechanical self-balancing types (indicators, recorders, and integrators for all types of electrical temperature sensors)	5	(S)	¹⁴ 9,982	(S)	¹⁴ 22,841
38230 49	Electronic controllers for all types of electrical temperature sensors	25	414,591	95,082	405,741	91,808
38230 50	Digital indicators for all types of electrical temperature sensors, excluding data loggers	40	101,293	33,885	89,887	35,692
	Transmitters, producing standardized electric or pneumatic analog transmission signals for all types of electrical temperature sensors:					
38230 54	Electric	21	119,374	38,748	¹ 110,120	¹ 35,002
38230 55	Pneumatic	5	503	391	¹ 889	¹ 526
	Mechanical measuring types, filled systems (liquid filled, vapor pressure, gas filled, and mercury filled types):					
38230 52	Indicating or recording controllers	11	292,050	41,292	289,969	38,251
38230 53	Recorders, noncontrol	15	537,921	22,900	¹ 507,776	¹ 21,640
38230 56	Indicators only, excluding indoor-outdoor and other household or appliance type thermometers	18	699,344	19,264	696,482	¹ 20,172
38230 57	Transmitters producing standardized electric or pneumatic analog transmission signals	12	27,131	9,787	22,269	7,573

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38230 —	Process control instruments—Con.					
38230 59	Primary temperature sensors, excluding aircraft types: Thermocouples and thermocouple lead wire.....	64	(X)	251,289	(X)	'235,428
38230 60	All other types (resistance temperature detectors, radiation and optical sensors, thermistors, etc.).....	45	(X)	115,176	(X)	'105,612
	Pressure (gauge, absolute vacuum) and draft measuring instruments, excluding general-purpose, receiver-type instruments:					
38230 61	Indicating or recording controllers	17		99,407		90,567
38230 62	Recorders, noncontrol	9		7,731		6,313
	Indicators only, excluding receiver-type gauges:					
38230 20	3-inch diameter and over ²	26		2,631		2,349
38230 21	Under 3-inch diameter ²	18	(S)	83,494		24,964
	Transmitters producing standardized analog transmission signals:					
38230 24	Transmitters producing standardized electronic analog transmission signals ²	35		3,870		3,232
38230 25	Transmitters producing standardized pneumatic analog transmission signals	5		5,401		2,292
	Flow and liquid level measuring instruments, excluding general-purpose, receiver-type instruments:					
	Differential pressure types:					
38230 65	Indicating or recording controllers	11		41,453		38,906
38230 66	Recorders, noncontrol; and indicators, noncontrol....	15		57,587		62,651
	Transmitters producing standardized analog transmission signals:					
38230 27	Transmitters producing standardized electronic analog transmission signals	27		246,526		239,626
38230 28	Transmitters producing standardized pneumatic analog transmission signals	10		15,513		14,979
38230 29	Primary pressure sensors (load cells, strain gauges, etc.)	9		52,842		'57,155
38230 68	Primary flow elements, including orifice plates, venturi tubes, flow tubes, flow nozzles, and pitot tubes	18		354,072		321,341
	Electromagnetic flowmeters:					
38230 03	Primary device (magnetic flow tube)	14		40,929		41,564
38230 01	Secondary device (magnetic transmitter, recorder, indicator, or controller that receives signal directly from primary device)	13		37,997		41,681
38230 04	Capacitance, ultrasonic, and other electronic types, including magnetic resonance, vortex-precession, and vortex-shedding type elements	35		200,442		179,539
38230 71	Variable area-controlling, recording, indicating, and transmitting instruments and associated primary flow elements ²	16		603		'554
38230 72	Float and displacement (controlling, recording, indicating, and transmitting instruments and associated primary flow elements) ²	25		2,147		2,544
38230 81	Turbine and propeller: controlling, recording, indicating, and transmitting instruments and associated primary flow elements	11		64,384		61,582
38230 82	Mass flow (controlling, thermal): controlling, recording, indicating, and transmitting instruments and associated primary flow elements	11		40,461		38,836
38230 83	Other types: controlling, recording, indicating, and transmitting instruments and associated primary flow elements	10		86,995		95,135
38230 74	Humidity instruments (controlling, recording, indicating, and transmitting, and associated primary humidity elements, excluding home and general-purpose type) ...	15		42,564		42,695

See footnotes at end of table.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
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	11	4,602	65,966	¹ 4,410	¹ 64,607
38230 76	Infrared analyzers	15	6,559	63,474	¹ 6,208	¹ 55,849
38230 77	Oxygen analyzers	18	24,268	53,485	26,713	55,524
38230 78	Other gas analyzers	26	48,413	116,765	¹ 55,220	125,476
38230 79	Ph analyzers	14	63,846	33,205	¹ 62,934	¹ 31,099
38230 80	Other liquid analyzers	23	80,565	67,136	¹ 64,026	¹ 51,994
	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	4,024	9,611	4,316	8,821
38230 08	Electromechanical self-balancing electric or pneumatic controllers, indicators, recorders, and integrators	4	(S)	2,675	(S)	2,416
38230 85	Digital indicators	19	19,084	29,336	⁽¹⁵⁾	⁽¹⁵⁾
38230 86	Transmitters producing standardized electric or pneumatic analog transmission signals	10	14,984	19,923	¹⁵ 30,865	¹⁵ 43,174
	Mechanical measuring types:					
38230 84	Indicating or recording controllers and recorders, non-control	7	15,708	4,266	15,737	4,387
38230 89	Indicators only	5	69,403	11,148	70,940	¹ 12,252
38230 90	Transmitters producing standardized electric or pneumatic analog transmission signals	16	181,025	46,330	¹ 172,175	44,316
	All other industrial process instruments:					
38230 91	Other temperature instruments	32	(X)	135,472	(X)	135,939
38230 92	Other flow and liquid level instruments	28	(X)	130,658	(X)	¹ 132,092
38230 93	Other continuous process instruments	36	(X)	212,272	(X)	194,567
38230 94	Other industrial type instruments	61	(X)	598,373	(X)	593,176
	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	19	(X)	26,011	(X)	24,770
38230 96	Primarily designed for flow and liquid level instruments	30	(X)	67,634	(X)	¹ 58,111
38230 97	Primarily designed for continuous process instruments	27	(X)	98,626	(X)	¹ 99,694
38230 99	Primarily designed for industrial type instruments	34	(X)	101,731	(X)	97,468
38242 —	Integrating and totalizing meters for gas and liquids	43	(X)	853,659	(X)	¹ 777,015
	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) ²	5	2,256	110,482	2,023	99,742
38242 24	Other sizes, including commercial and industrial	5	105,084	33,807	100,924	31,879
38242 28	Turbine type (all sizes)	8	⁽¹⁶⁾	⁽¹⁶⁾	⁽¹⁶⁾	⁽¹⁶⁾
38242 29	Other gas meters, consumption registering	1	¹⁶ 39,759	¹⁶ 50,272	¹⁶ 36,177	¹⁶ 45,523
	Liquid meters, positive displacement with registers and counters:					
	Water meters, consumption registering:					
38242 33	Small meters, up to and including 1 inch ²	10	4,132	169,909	3,857	154,130
38242 35	Intermediate meters, over 1 inch, up to and including 2 inches	11	(S)	31,589	146,625	30,584
38242 37	Large meters, over 2 inches	9	59,206	63,306	55,029	55,734
38242 41	Liquid fuel dispensing meters, excluding service station dispensing pumps	6	⁽¹⁷⁾	⁽¹⁷⁾	⁽¹⁷⁾	⁽¹⁷⁾
38242 98	Other liquid meters; industrial bulk plants, pipeline, batching, and treatment facilities	16	¹⁷ 888,593	¹⁷ 236,485	¹⁷ 774,111	¹⁷ 211,711
38242 99	Parts, components, and accessories for gas and liquid meters (sold separately)	31	(X)	157,809	(X)	¹ 147,712

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38243 —	Counting devices, excluding motor vehicle instruments	44	(X)	340,441	(X)	285,381
38243 21	Mechanical input	11	2,514	32,804	¹ 1,692	25,405
38243 23	Electrical input ²	16	1,649	39,842	¹ 1,398	¹ 37,436
38243 25	Electronic input	17	569,955	57,249	470,106	50,629
38243 85	All other counting devices not specified above, including toll meters, fare collection equipment (systems), and parking lot systems, but excluding parking meters.	14	(X)	205,761	(X)	¹ 167,304
38243 88	Components and parts for counting devices (except parking meters, sold separately)	7	(X)	4,785	(X)	4,607
38244 —	Motor vehicle instruments	31	(X)	2,187,545	(X)	1,768,080
	Speedometers (speedometers, including odometers, are classified as speedometers)	11	(X)	9,685	(X)	¹ 9,298
38244 21	Tachometers	11	(X)	31,660	(X)	¹ 30,340
38244 31	Odometers (speedometers, including odometers, are classified as speedometers)	4	(X)	1,300	(X)	1,245
38244 41	Fuel level gauges	7	(X)	⁽¹⁸⁾	(X)	⁽¹⁸⁾
38244 45	Water temperature gauges	8	(X)	¹⁸ 15,721	(X)	¹⁸ ¹ 13,558
38244 51	Ammeters	10	(X)	7,265	(X)	¹ 7,390
38244 55	Oil pressure gauges	7	(X)	2,986	(X)	2,418
38244 60	Instrument panels, including cluster modules	13	(X)	2,023,061	(X)	¹ 1,629,890
38244 99	Other motor vehicle instruments	20	(X)	95,867	(X)	73,941
38251 —	Integrating instruments, electrical	21	(X)	486,212	(X)	461,025
	ac watt-hour meters:					
38251 12	Single phase ²	6	4,301	109,596	4,130	99,594
38251 15	Polyphase	8	265,430	33,113	¹ 196,924	27,575
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	9	588,933	130,450	⁵ 587,512	124,349
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)	122,304	(X)	126,743
38251 61	Parts and accessories for electric integrating meters, including meter mountings and registers (sold separately)	9	(X)	90,749	(X)	82,764
38252 —	Test equipment for testing electrical, radio and communication circuits, and motors	378	(X)	7,227,626	(X)	6,571,601
	Voltage, current, and resistance measuring equipment (except multimeters):					
	Electronic:					
38252 20	Digital	29	(X)	287,378	(X)	259,995
38252 21	Analog	30	(X)	31,506	(X)	34,259
38252 22	Electrical, excluding panel meters	18	(X)	45,527	(X)	¹ 36,580
	Multimeters:					
38252 23	Electronic, digital and analog	16	(X)	⁽¹⁹⁾	(X)	⁽¹⁹⁾
38252 30	Electrical	5	(X)	¹⁹ 124,528	(X)	¹⁹ 126,233
	Power and energy measuring equipment:					
	Electronic:					
38252 25	Analog	11	(X)	5,827	(X)	⁶ 6,211
38252 26	Digital	17	(X)	90,303	(X)	62,537
38252 27	Electrical power measuring equipment, excluding electrical integrating instruments (sold separately)	5	(X)	7,189	(X)	7,587
	Frequency counters, timers, and other frequency and time measuring equipment, excluding standards:					
38252 31	Universal counters with time interval measuring capability	8	(X)	12,113	(X)	14,711
38252 33	Other frequency counters	7	(X)	4,400	(X)	5,079
38252 34	Frequency meters	7	(X)	⁽²⁰⁾	(X)	⁽²⁰⁾
38252 39	Other frequency counting and time measuring equipment	12	(X)	²⁰ 86,805	(X)	²⁰ ¹ 74,141
	Waveform measuring and/or analyzing equipment:					
38252 13	Oscilloscopes and plug-in accessories	10	(X)	⁽²¹⁾	(X)	⁽²¹⁾
38252 18	Spectrum analyzers	6	(X)	84,180	(X)	113,558
38252 16	Other waveform measuring and analyzing equipment	23	(X)	²¹ 586,687	(X)	²¹ 574,016

See footnotes at end of table.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38252 —	Test equipment for testing electrical, radio, and communication circuits, and motors—Con.					
	Signal generating equipment:					
38252 56	Audio	12	(X)	13,899	(X)	9,548
38252 58	RF (over 20 KHz to 890 MHz)	17	(X)	(²²)	(X)	(²²)
38252 59	Microwave (890 MHz and above)	13	(X)	²² 396,346	(X)	²² 342,409
	Field strength and intensity measuring equipment, including RFI measuring equipment:					
38252 91	Electronic	12	(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.	10	(X)	21,818	(X)	20,731
38252 94	Standing wave measuring equipment (slotted lines, sliding shorts, reflectometers, and other SWR equipment)	8	(X)	16,385	(X)	17,704
38252 97	X-Y plotters (recorders), electronic	5	(X)	4,809	(X)	5,184
	Automatic test and measuring equipment:					
38252 44	Combination and/or group test sets	38	(X)	577,646	(X)	482,133
	Component part test sets:					
38252 45	Electron tube test equipment	2	(X)	(D)	(X)	(D)
	Semiconductor component test equipment:					
38252 61	Memory	17	(X)	145,652	(X)	126,940
38252 63	Linear	11	(X)	149,724	(X)	112,427
38252 65	Microprocessor	9	(X)	246,220	(X)	251,451
38252 67	Other semiconductor component test equipment ..	42	(X)	744,457	(X)	566,558
38252 69	Circuit board loaded test equipment	19	(X)	218,028	(X)	199,099
38252 47	Other component part test sets and equipment ..	20	(X)	317,895	(X)	252,700
38252 48	Equipment and subassembly test equipment, n.e.c., including disc drive testers, and power supply testers .	31	(X)	319,589	(X)	278,254
	Standards and calibration equipment for test measuring equipment, including laboratory types (metered benchtop, rack mountable, or plug-in equipment):					
38252 72	Electronic	33	(X)	96,888	(X)	108,649
38252 74	Electrical	10	(X)	60,181	(X)	62,148
	Analyzers for testing characteristics of internal-combustion engines, excluding aircraft:					
38252 37	Portable	7	(X)	208,631	(X)	(²³)
38252 38	Other	6	(X)	68,432	(X)	²³ 296,130
	Communications test equipment, n.e.c.:					
38252 81	Network analyzers	21	(X)	371,169	(X)	298,609
38252 83	Cable backplane and other continuity testers	14	(X)	31,881	(X)	41,740
38252 85	Fiber optics test equipment (OTDR, optical S/N meters, etc.)	10	(X)	118,249	(X)	94,947
38252 87	Other communications test, monitoring, and control equipment (except microwave)	41	(X)	351,268	(X)	352,088
38252 52	Microwave test equipment, n.e.c. (1,300 MHz and above)	14	(X)	26,978	(X)	30,207
	Logic test, development, and analysis equipment:					
38252 01	Logic analyzers, and similar logic state, timing, and signature analyzers	7	(X)	(²⁴)	(X)	(²⁴)
38252 03	Microprocessor development systems	7	(X)	²⁴ 243,160	(X)	²⁴ 212,818
38252 05	Pulse, function, and data generators and similar metered frequency synthesizers	12	(X)	91,763	(X)	85,902
38252 08	Other field service test and measurement equipment, logic probes, clips, and pulsters	7	(X)	9,343	(X)	9,103
38252 02	Other measuring and checking instruments for testing electrical, radio, and communication circuits, and motors	37	(X)	371,717	(X)	340,386
38252 19	Other analyzing instruments for checking electrical quantities	9	(X)	175,964	(X)	126,089
38252 99	Parts and components for test equipment for testing electrical, radio, and communication circuits, and motors (sold separately)	52	(X)	250,534	(X)	305,972

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38253 — 38253 08	Instruments to measure electricity	91	(X)	550,908	(X)	525,814
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	22	462,534	53,525	410,619	49,072
38253 12	Analog solid state panel meters (generally of plus or minus 2-percent accuracy) with LED, LCD, or neon gas discharge display	5	28,223	4,734	27,925	4,693
38253 13	Panel types other than ruggedized or sealed (generally of 2-percent accuracy): ac, including moving iron vane and dynamometer types	10	298,351	6,691	285,572	6,197
38253 11	dc, including rectifier- and self-contained thermocouple types ³	14	1,198	27,268	1,243	26,239
38253 14	Panel types ruggedized or sealed (generally of 2-percent accuracy)	9	42,338	7,122	46,778	7,809
38253 19	Panel types with control or signal initiating means, including instrument relays	5	108,115	7,825	70,536	5,518
38253 23	All other panel type instruments, including ammeters and voltmeters for motor vehicles ²	12	4,773	47,084	4,092	38,889
38253 25	Switchboard instruments that are generally of 1-percent accuracy: ac, including moving iron vane and dynamometer types	3	(²⁵)	(²⁵)	(²⁵)	(²⁵)
38253 27	dc, including rectifier and thermocouple types	5	²⁵ 31,571	²⁵ 3,760	²⁵ 37,153	²⁵ 4,097
38253 24	Elapsed time meters (with and without reset)	9	843,374	30,366	¹ 846,815	¹ 28,652
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	474,867	42,812	360,779	32,489
38253 60	Electrical recording instruments (portable and for panel mounting): Direct deflecting (direct acting) (except temperature calibrated instruments)	4	36,253	7,182	36,537	7,376
38253 72	Oscillographic recorders, pen or stylus, and light beam type	6	(X)	(²⁶)	(X)	(²⁶)
38253 74	Other electrical recording instruments	24	(X)	²⁶ 223,806	(X)	²⁶ 229,278
38253 75	Parts and accessories for indicating and recording instruments: Transducers for volts, amperes, watts, vars, frequency, temperature, and power factor	17	(X)	42,153	(X)	40,003
38253 76	Tachometer generators (except aerospace types)	4	(X)	(²⁷)	(X)	(²⁷)
38260 —	Other, including instrument shunts	18	(X)	²⁷ 46,580	(X)	²⁷ 45,502
38260 01	Analytical and scientific instruments (except optical)	267	(X)	4,923,402	(X)	4,766,098
38260 03	Electrochemical instruments: Ph electrodes and meters	19	(X)	47,482	(X)	¹ 45,292
38260 04	Ion selective electrodes and meters	12	(X)	27,350	(X)	32,421
38260 05	Electrophoresis instruments	17	(X)	85,876	(X)	89,809
38260 07	Other (except process type), including photometers	13	(X)	40,414	(X)	46,479
38260 08	Chromatographic instruments: Gas	15	(S)	(²⁸)	(S)	(²⁸)
38260 09	Liquid	25	102,145	483,923	108,429	457,630
38260 24	Other, including paper, gel, and thin layer	3	(X)	²⁸ 250,140	(X)	²⁸ 232,734
38260 25	Spectrophotometric instruments: Atomic absorption	4	(X)	(²⁹)	(X)	(²⁹)
38260 27	Optical emission, including spark, arc, and glow, spectrographs, and all other (except ICP)	4	(X)	(²⁹)	(X)	(²⁹)
38260 27	Optical emission, including laser excited source, which includes laser microprobe source emission, laser source Raman, and laser microprobe source Raman spectrometers	3	(X)	(²⁹)	(X)	(²⁹)

See footnotes at end of table.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38260 —	Analytical and scientific instruments (except optical)—Con.					
38260 28	Optical emission with inductively coupled plasma, ICP..	2	(X)	²⁹ 113,297	(X)	²⁹ 112,122
38260 30	Infrared, including Fourier transfer methods	19	(X)	142,825	(X)	¹ 176,662
38260 31	Ultraviolet, visible and colorimeters	20	(X)	128,041	(X)	¹ 142,589
38260 33	Fluorescent instruments, including fluorometers (except chemicals)	11	(X)	76,443	(X)	77,490
38260 35	Color measuring devices	9	(X)	94,139	(X)	96,843
38260 36	Other, including vacuum ultraviolet, Raman, light scattering reflectors, helium glow, and light measuring	16	(X)	38,646	(X)	45,273
38260 37	Thermal analysis instruments, including thermogravimetric analyzers (TGA), quantitative thermal analyzers (QTA) and differential thermal analyzers (DTA)	11	(X)	79,495	(X)	68,753
38260 38	Nuclear magnetic resonance spectrometers, including electron paramagnetic spin types (EP)	3	(³⁰)	(³⁰)	(³⁰)	(³⁰)
38260 39	Microscopes, scanning type, including electron and proton	7	219	88,716	¹ 221	¹ 80,986
38260 53	Particle beam excitation instruments, including electron microprobes, augers, energy ion spectroscopes, secondary ion mass spectrometers (SIMS), and ion microprobes	4	³⁰ 651	³⁰ 98,035	³⁰ 591	³⁰ 90,382
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)	11	2,100	73,095	2,217	68,683
38260 61	Mass spectroscopy instrumentation	16	(X)	235,262	(X)	206,709
38260 71	Clinical laboratory instrumentation, including instruments used in the clinical laboratory for measuring, analyzing, and processing clinical specimens	(NA)	(X)	667,222	(X)	¹ 647,260
38260 72	Chemistry (measure and identify substances, e.g., metabolites, enzymes, and drugs)	11	8,360	131,514	7,116	131,836
38260 73	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)	6	7,465	299,288	¹ 5,706	261,670
38260 74	Microbiology (enumerate or identify pathogenic organisms or measure their susceptibility to anti-microbial agents)	2	(³¹)	(³¹)	(³¹)	(³¹)
38260 75	Histology (process tissue and cells, e.g., tissue processors and cell stainers)	2	³¹ 162	³¹ 1,266	³¹ 239	³¹ 1,952
38260 76	Blood bank and immunology (process blood and specimens for testing; measure and identify, using immunoassay, substances in clinical specimens)	6	7,367	99,024	¹ 8,400	¹ 123,981
38260 77	Other clinical laboratory instrumentation not specified above	10	(X)	136,130	(X)	¹ 127,821
38260 78	Organic elemental analysis instruments, including carbon, hydrogen, nitrogen, oxygen, and sulphur	17	21,621	84,995	22,146	83,950
38260 92	Amino acid, protein, and/or peptide analyzers, including chromatographic type	6	362	20,563	¹ 280	¹ 16,093
38260 93	Gas detectors	23	60,135	56,610	50,680	¹ 49,972
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 breatholizers	111	(X)	786,065	(X)	774,993
38260 98	Parts, components, and accessories for analytical and scientific instruments (sold separately), including photo tubes, thermal conductivity sensors, and thermopiles	117	(X)	1,204,768	(X)	¹ 1,122,973

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
38271 — 38271 01	Sighting, tracking, and fire control equipment, optical type .. Made from lenses, prisms, etc., produced in the same plant.	44	(X)	652,408	(X)	'768,612
38271 02	Made from purchased lenses, prisms, etc.	17	(X)	173,184	(X)	182,932
38271 99	Parts and accessories	24	(X)	455,076	(X)	'558,865
38274 — 38274 01	Optical instruments and lenses	10	(X)	24,148	(X)	26,815
38274 03	Binoculars, prismatic and nonprismatic, and terrestrial and celestial telescopes.	173	(X)	1,559,010	(X)	'1,455,777
38274 09	Other astronomical instruments, excluding radio astronomy.	11	(X)	81,670	(X)	85,921
38274 12	Parts and accessories, including mountings, for binoculars, optical telescopes and other astronomical equipment.	3	(X)	8,741	(X)	12,158
38274 15	Optical test and inspection equipment, including standard sources, modulators, optical comparators, and interferometers (except optical microscopes)	9	(X)	4,482	(X)	2,906
38274 17	Optical microscopes	36	(X)	96,151	(X)	'114,054
38274 21	Optical components: Filters, including parts and accessories thereof	9	(X)	34,010	(X)	30,352
38274 22	Lenses (except ophthalmic focus lenses): Unmounted lenses	32	(X)	74,236	(X)	63,060
38274 23	Mounted lenses: Photographic lenses	38	(X)	106,457	(X)	95,620
38274 29	Other mounted lenses	5	(X)	(³²)	(X)	(³²)
38274 59	Other (prisms, mirrors, etc.)	15	(X)	³² 170,182	(X)	³² 120,860
38274 39	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.	47	(X)	117,432	(X)	109,718
38274 49	Parts and accessories for other optical instruments	51	(X)	681,684	(X)	'647,948
38291 —	Aircraft engine instruments (except flight)	10	(X)	17,283	(X)	'18,939
38291 45	Temperature sensors, transmitters, and displays	16	(X)	166,682	(X)	'154,241
38291 46	Pressure ratio sensors, displays, and controls	47	(X)	490,529	(X)	551,607
38291 47	Pressure and vacuum sensors, transmitters, and displays	23	(X)	88,883	(X)	108,730
38291 58	Fuel and oil flow rate sensors, transmitters, and displays, including mixture controls	8	(X)	(³³)	(X)	44,599
38291 60	Fuel and oil quantity sensors, transmitters, and displays, including densitometers	12	(X)	³³ 66,310	(X)	21,114
38291 62	Tachometer generators and indicators	10	(X)	46,043	(X)	42,714
38291 98	All other not specified above	11	(X)	99,658	(X)	105,387
38291 99	Parts and components for aircraft engine instruments, (except flight (sold separately))	11	(X)	21,953	(X)	23,233
38292 —	Physical properties testing and inspection equipment and kinematic testing and measuring equipment	19	(X)	162,379	(X)	200,095
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	7	(X)	5,303	(X)	5,735
38292 34	Other	169	(X)	1,236,474	(X)	1,174,702
38292 39	Parts for physical properties testing equipment (sold separately)	30	(X)	258,153	(X)	251,113
		57	(X)	283,921	(X)	261,275
		27	(X)	24,521	(X)	'25,761

See footnotes at end of table.

Table 27. Quantity and Value of Shipments of Selected Instruments and Related Products: 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
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.....	26	(X)	159,236	(X)	156,246
38292 54	Measuring and checking flow of fluids.....	11	(X)	40,167	(X)	39,527
38292 56	Other.....	41	(X)	220,993	(X)	210,343
38292 58	Parts for physical properties inspection equipment (sold separately).....	20	(X)	36,206	(X)	32,137
38292 90	Kinematic testing and measuring equipment, including vibration, acceleration, and other motion testing equipment.....	37	(X)	209,926	(X)	195,725
38292 98	Parts for kinematic testing and measuring equipment (sold separately).....	7	(X)	3,351	(X)	2,575
38294 —	Nuclear radiation detection and monitoring instruments.....	54	(X)	521,453	(X)	519,354
38294 02	Radiation detecting elements, including ion chambers.....	17		181,419	179,439	85,544
38294 04	Solid state detectors.....	7		23,905	20,377	34,941
38294 06	Nuclear monitoring instruments, including environmental, personal dosimetry, and medical monitors, both stationary and portable types.....	15	(X)	88,549	(X)	(³⁴)
38294 09	Sample and flow counting systems, manual and automatic.....	11	(X)	33,880	(X)	32,309
38294 19	Scalers.....	7	(³⁵)	(³⁵)	(³⁵)	(³⁵)
38294 21	Special amplifiers for nuclear applications.....	3		³⁵ 10,259	³⁵ 11,265	³⁵ 7,561
	Pulse analyzers, including nuclear spectrometers:					
38294 22	Single channel pulse height analyzers.....	7		3,086	3,334	3,492
38294 23	Multichannel pulse height analyzers.....	5		1,378	1,556	11,092
38294 25	Count rate meters.....	10		9,003	9,317	4,792
38294 29	Measurement and control devices using beta, gamma, or neutron gauge technology.....	10	(X)	104,142	(X)	102,864
38294 30	Nuclear power supplies.....	6	(X)	7,032	(X)	(³⁴)
38294 32	Neutron and photon activation analysis systems.....	5	(X)	5,629	(X)	(³⁶)
38294 34	Nuclear instrument modules, n.e.c.....	10	(X)	35,884	(X)	³⁶ 39,162
38294 39	Other nuclear radiation detection and monitoring instruments.....	11	(X)	71,477	(X)	³⁴ 174,542
38294 98	Parts and components for nuclear radiation detection and monitoring instruments (sold separately).....	10	(X)	21,637	(X)	23,055
38295 —	Commercial, geophysical, meteorological, and general-purpose instruments.....	167	(X)	1,276,393	(X)	1,271,370
38295 20	Barometers and barographs, aneroid and mercurial types, including recorders, wall, pendant, meteorological, hygro-thermographs, and barometer-thermometer-humidity combinations.....	18	(X)	9,741	(X)	7,911
38295 21	Hydrometers, glass, all types, including thermohydrometers ²	6		291	254	2,149
38295 22	Liquid-in-glass thermometers: Engraved (etched) stem, thermoregulators, deep-sea reversing, laboratory, encased glass, ASTM standards, pocket case, and max-min registering (except clinical thermometers).....	16	(X)	9,208	(X)	7,419
38295 23	Threaded and flanged types, fixed and adjustable angle, inline and duct installations, for process, food, air-conditioning, and refrigeration installations ²	10		513	471	7,565
38295 24	Household and commercial thermometers such as wall, outdoor, domestic science, cupcase, filled systems, and indoor-outdoor ²	12		(³⁷)	(³⁷)	(³⁷)
38295 34	Clinical (fever) thermometers, including digital ²	1		³⁷ 11,652	³⁷ 18,126	³⁷ 11,957

See footnotes at end of table.

Table 27. **Quantity and Value of Shipments of Selected Instruments and Related Products: 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
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 ²	18	1,398	28,733	1,439	¹ 28,565
38295 26	Domestic science, commercial general test, indoor, outdoor, desk models, oven, and refrigerator ²	11	6,172	23,608	5,208	¹ 18,705
38295 28	Humidity indicating and recording instruments such as bi-hygroscopic and hygroscopic element, indicators, psychrometers, wet and dry bulb, hygrographs, and indicating hygrometers	15	(X)	9,694	(X)	9,608
38295 29	Other thermometers (infrared, meteorological, commercial, and industrial)	17	(X)	34,889	(X)	¹ 32,452
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)	23	(X)	266,585	(X)	322,224
38295 31	Other meteorological instruments, including speed and direction instruments, rain gauges, thermographs, and parts (sold separately)	19	(X)	31,908	(X)	¹ 32,699
38295 40	Seismic instruments	14	(X)	243,632	(X)	¹ 167,200
38295 45	All other geophysical instruments and equipment	21	(X)	197,356	(X)	¹ 195,407
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)	52	(X)	386,687	(X)	418,971
38295 39	Parts and accessories for meteorological and commercial and industrial instruments	17	(X)	6,075	(X)	4,314
38296 —	Surveying and drafting instruments and associated equipment	34	(X)	317,936	(X)	301,361
38296 11	Surveying instruments, including alidades, transits, plumb bobs, sextants, theodolites, surveyors, compasses, surveyor's levels, and tapes	18	(X)	238,238	(X)	218,412
38296 19	Parts and components for surveying instruments (sold separately)	8	(X)	12,536	(X)	10,153
38296 21	Drafting instruments and machines, manual and automatic, drafting tables, plotting instruments, slide rules, T-squares, drafting templates, rules, etc.	14	(X)	59,839	(X)	66,474
38296 29	Parts and components for drafting instruments and machines (sold separately)	1	(X)	⁽³⁸⁾	(X)	⁽³⁸⁾
38296 31	Photogrammetric and geodetic equipment, excluding cameras	2	(X)	⁽³⁸⁾	(X)	⁽³⁸⁾
38296 39	Parts and components for photogrammetric and geodetic equipment (sold separately)	2	(X)	³⁸ 7,323	(X)	³⁸ 6,322

For footnotes see page 7-84.

Footnotes for table 27—Con.

¹Data for product codes 34918 13, 34918 14, and 34918 17 are combined to avoid disclosing figures for individual companies.

²The quantity in this product code is in thousands of units.

³Data for product codes 34919 59 and 34919 61 are combined to avoid disclosing figures for individual companies.

⁴Data for "Value" in product codes 38121 25 and 38121 26 combined to avoid disclosing figures for individual companies.

⁵Prior to 1989, data for product code 38122 were published in the Current Industrial Report MA36P, *Communication Equipment, Including Telephone, Telegraph and Other Electronic Systems and Equipment*.

⁶In 1993 data for "Value" in product codes 38122 67 and 38122 69 are combined to avoid disclosing figures for individual companies.

⁷In 1993 data for product codes 38210 11 and 38210 13 are combined to avoid disclosing figures for individual companies.

⁸Data for product codes 38210 17 and 38210 19 are combined to avoid disclosing figures for individual companies.

⁹Data for "Value" in product codes 38210 81 and 38210 88 are combined to avoid disclosing figures for individual companies.

¹⁰Data for product codes 38220 35 and 38220 40 are combined to avoid disclosing figures for individual companies.

¹¹In 1993 data for "Value" in product codes 38220 50 and 38220 74 are combined to avoid disclosing figures for individual companies.

¹²Data for product codes 38220 60 and 38220 65 are combined to avoid disclosing figures for individual companies.

¹³Data for product codes 38230 40 and 38230 41 are combined to avoid disclosing figures for individual companies.

¹⁴Data for product codes 38230 47 and 38230 48 are combined to avoid disclosing figures for individual companies.

¹⁵In 1993 data for product codes 38230 85 and 38230 86 are combined to avoid disclosing figures for individual companies.

¹⁶Data for product codes 38242 28 and 38242 29 are combined to avoid disclosing figures for individual companies.

¹⁷Data for product codes 38242 41 and 38242 98 are combined to avoid disclosing figures for individual companies.

¹⁸Data for product codes 38244 41 and 38244 45 are combined to avoid disclosing figures for individual companies.

¹⁹Data for product codes 38252 23 and 38252 30 are combined to avoid disclosing figures for individual companies.

²⁰Data for product codes 38252 34 and 38252 39 are combined to avoid disclosing figures for individual companies.

²¹Data for product codes 38252 13 and 38252 16 are combined to avoid disclosing figures for individual companies.

²²Data for product codes 38252 58 and 38252 59 are combined to avoid disclosing figures for individual companies.

²³In 1993 data for "Value" in product codes 38252 37 and 38252 38 are combined to avoid disclosing figures for individual companies.

²⁴Data for product codes 38252 01 and 38252 03 are combined to avoid disclosing figures for individual companies.

²⁵Data for product codes 38253 23 and 38253 25 are combined to avoid disclosing figures for individual companies.

²⁶Data for product codes 38253 60 and 38253 72 are combined to avoid disclosing figures for individual companies.

²⁷Data for product codes 38253 75 and 38253 76 are combined to avoid disclosing figures for individual companies.

²⁸Data for product codes 38260 07 and 38260 09 are combined to avoid disclosing figures for individual companies.

²⁹Data for product codes 38260 27 and 38260 28 are combined to avoid disclosing figures for individual companies.

³⁰Data for product codes 38260 38 and 38260 53 are combined to avoid disclosing figures for individual companies.

³¹Data for product codes 38260 73 and 38260 74 are combined to avoid disclosing figures for individual companies.

³²Data for product codes 38274 22 and 38274 23 are combined to avoid disclosing figures for individual companies.

³³In 1994 data for "Value" in product codes 38291 46 and 38291 47 are combined to avoid disclosing figures for individual companies.

³⁴In 1993 data for "Value" in product codes 38294 06 and 38294 30 are combined with product code 38294 39 to avoid disclosing figures for individual companies.

³⁵Data for product codes 38294 19 and 38294 21 are combined to avoid disclosing figures for individual companies.

³⁶In 1993 data for "Value" in product codes 38294 32 and 38294 34 are combined to avoid disclosing figures for individual companies.

³⁷Data for product codes 38295 24 and 38295 34 are combined to avoid disclosing figures for individual companies.

³⁸Data for product codes 38296 29 and 38296 31 are combined with product code 38296 39 to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified. [†]Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated. ^bOver 25 percent of this item has been estimated.

Table 28. Shipments, Imports and Exports of Selected Instruments and Related Products: 1994

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value of f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption (value) ²
34918 01-04, 07-09	Pneumatic actuated automatic valves	563,869	42,395	23,934
34918 11-14, 17-18, 21, 23	All other control valves, including electric and electrohydraulic . . .	311,248	272,802	368,635
34918 25, 30, 35, 41, 45, 48	Self-generating power-actuated regulator valves	870,127	79,918	210,828
34919 56, 58-59, 61, 79	Solenoid-operated valves (except nuclear and fluid transfer)	419,238	66,719	394,036
38121 01	Compasses (magnetic and gyroscopic)	253,672	51,739	21,845
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)	4,323,951	561,888	216,876
38122 17, 19, 21, 23, 25, 27, 29, 31, 33	Radar systems and equipment	6,474,492	395,072	89,098
38122 61	Radio navigational aid receivers and displays	421,596	200,659	89,839
38122 75	Automatic pilots	234,441	52,558	16,948
38122 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 63, 65, 67, 69, 71, 73, 75, 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.)	16,051,724	121,821	45,409
38220 21-22, 75	Temperature responsive automatic controls (thermostats)	775,148	92,571	189,030
38220 25, 30, 35, 40, 50, 60, 65-66, 74, 81	Pressure responsive automatic, hydraulic automatic, pneumatic automatic, and automatic controls, n.e.c.	1,042,365	865,497	729,845
38220 98	Parts and components for automatic controls (sold separately) . . .	238,658	(NA)	(NA)
38230 00	Process control instruments	6,164,999	370,494	352,287
38242 22, 24, 26, 28, 29	Gas meters, consumption registering (except parts)	194,561	21,697	8,798
38242 33, 35, 37, 41, 98	Liquid meters (except parts)	501,289	75,970	2,960
38242 99	Parts, components, and accessories for gas and liquid meters (sold separately)	157,809	64,191	20,244
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	3,564,638	345,644	932,599

See footnotes at end of table.

Table 28. Shipments, Imports and Exports of Selected Instruments and Related Products: 1994—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) ¹	Imports for consumption (value) ²
38251 00	Electricity meters	486,212	31,328	2,063
38252 20-22	Voltage, current, and resistance measuring equipment (except multimeters)	364,411	225,370	84,532
38252 25-26, 77	Power and energy testing equipment	(NA)	293,223	59,125
38252 37-38	Analyzers for testing characteristics of internal-combustion engines (except aircraft)	277,063	149,293	97,919
38252 56, 58, 59	Signal generating equipment	410,245	92,555	26,699
38252 01-03, 05, 12-13, 16, 18, 23, 30, 31, 33, 34, 39, 44-45, 47-48, 52, 61, 63, 65, 69, 72, 74, 81, 83, 85, 87, 91, 92, 93, 94	Test equipment for testing multimeters, electrical, radio, and communication circuits, and motors, n.e.c.	5,636,747	912,926	206,781
38210 00, 38260 00	Laboratory, analytical, and scientific instruments	6,578,783	1,371,133	468,542
38271 00	Sighting, tracking, and fire-control equipment, optical type	652,408	19,255	70,757
38274 01, 03, 09	Binoculars and astronomical instruments and parts and accessories	94,893	70,427	216,798
38274 12, 17, 21-23, 29, 39, 49, 59	Optical instruments and lenses, n.e.c.	1,430,107	298,387	80,391
38274 15	Microscopes, optical	34,010	(NA)	(NA)
38292 00	Physical properties testing and inspection equipment, and kinematic testing and measuring equipment	1,236,474	531,295	56,661
38294 00	Nuclear radiation detection and monitoring instruments, and equipment	521,453	270,770	35,309
38295 34	Liquid-in-glass thermometers, clinical	(³)	1,308	3,358
38295 22-24	Liquid-in-glass thermometers, n.e.c.	³ 35,643	12,117	6,823
38295 25-26, 29	Thermometers (except liquid-in-glass type)	87,230	(NA)	(NA)
38295 45	Geophysical instruments and equipment	197,356	161,055	21,422
38295 40	Seismic instruments	243,632	11,451	6,375
38295 20, 28, 51, 31	Commercial, geophysical, meteorological, and general-purpose instruments, n.e.c.	317,928	175,068	86,015
38296 11, 19	Surveying instruments (except photogrammetrical and geodetic equipment)	250,774	76,125	54,250
38296 21	Drafting instruments and machines, manual and automatic	59,839	10,057	175,133

¹Source: Bureau of the Census report, EM545, *U.S. Exports*.²Source: Bureau of the Census report, IM145, *U.S. Imports for Consumption*.³Products have been combined to avoid disclosing figures for individual companies.

NA Not available n.e.c. Not elsewhere classified.

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.

7.10 ELECTROMEDICAL EQUIPMENT AND IRRADIATION EQUIPMENT (INCLUDING X-RAY)

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 272 companies are included. No estimate is derived for the small firms excluded from the survey.

SUMMARY OF FINDINGS

During 1994, the total value of shipments of electromedical and irradiation equipment increased by 7.7 percent to

\$9.4 billion, from the 1993 level of \$8.7 billion. X-ray and other irradiation equipment increased slightly from its 1993 level. Electromedical equipment increased 10.6 percent to \$6.9 billion, from the 1993 level of \$6.2 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 29. Value of Shipments of Electromedical and Irradiation Equipment, by Class of Product: 1989 to 1994

[Value in millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989
38440	X-ray and other irradiation equipment.	2,489.5	2,480.0	2,270.2	2,205.2	1,870.4	1,745.2
38450	Electromedical equipment ¹	6,880.0	6,222.0	6,273.1	5,673.8	4,849.6	4,594.2

¹Starting in 1992, product code 38450, "Electromedical equipment" includes "Medical laser equipment," which was formerly shown in product code 36992, "Laser systems and equipment (except communication)," published in Current Industrial Report MA36P, *Communication Equipment, Including Telephone, Telegraph and Other Electronic Systems and Equipment*.

Table 30. Quantity and Value of Shipments of Electromedical and Irradiation Equipment: 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
	Medical diagnostic equipment:					
	X-ray equipment:					
38440 02	Digital radiography equipment	4	774	56,657	725	47,680
38440 03	Computerized axial tomography (CT or CAT scan)	7	(¹)	(¹)	(¹)	(¹)
38440 09	Dental	4	(¹)	(¹)	(¹)	(¹)
38440 05	Conventional	10	¹ 19,838	¹ 1,028,950	¹ 17,874	¹ 1,022,560
38440 11	All other medical diagnostic X-ray equipment	16	(X)	236,321	(X)	¹ 209,700
38440 06	Nuclear medicine equipment (all equipment used for nuclear in vivo studies)	8	1,151	312,992	1,024	240,175
38450 18	Magnetic Resonance Imaging (MRI) equipment	9	1,450	691,105	1,335	665,439
38450 17	Ultrasound scanning devices	12	8,878	828,578	8,947	739,978
38450 11	Electrocardiograph (EGG)	17	57,795	246,082	46,234	215,542
38450 13	Electroencephalograph (EEG)	4	(²)	(²)	(²)	(²)
38450 15	Electromyograph (EMG)	4	² 1,063	² 37,557	² 1,042	² 29,227
38450 21	Audiological equipment	9	(X)	12,302	(X)	10,298
38450 23	Endoscopic equipment (bronchoscope, cystoscope, proctosigmoidoscope, colonoscope, etc.)	6	2,312	19,908	2,322	21,197
38450 25	Respiratory analysis equipment	6	3,592	38,658	4,008	40,229
38450 29	All other medical diagnostic equipment	29	(X)	112,683	(X)	¹ 135,790
	Patient monitoring equipment:					
38450 51	Intensive care/coronary care units, including component modules such as temperature, blood pressure, and pulse	29	(X)	508,865	(X)	¹ 522,257
38450 53	Prenatal monitoring	8	(X)	137,442	(X)	93,658
38450 55	Respiratory monitoring	6	(X)	22,913	(X)	18,720
38450 57	All other patient monitoring	37	(X)	711,217	(X)	516,501
	Medical therapy equipment:					
38450 43	Ultrasound therapy	8	(X)	31,269	(X)	33,145
38450 31	Pacemakers	9	¹ 161,158	562,267	¹ 130,161	557,542
38450 33	Defibrillators	12	51,961	481,616	42,445	372,189
38450 37	Diathermy apparatus (short wave and microwave)	2	(X)	(³)	(X)	(³)
38450 39	Dialyzers, including machines and equipment	4	(X)	247,738	(X)	¹ 253,814
38450 41	Medical laser equipment	18	(X)	439,714	(X)	413,276
38450 34	Extracorporeal lithotripters	2	(X)	(³)	(X)	(³)
38440 32	Radiation therapy (linear accelerators, X-ray, cobalt 60, brachtherapy)	9	(X)	(⁴)	(X)	(⁴)
38450 49	All other medical therapy equipment	33	(X)	³ 463,189	(X)	³ 380,908
	All other irradiation and electromedical equipment:					
38440 13	Industrial and scientific X-ray equipment	18	1,571	117,727	1,485	109,359
38440 21	X-ray tubes (sold separately)	13	45,471	328,822	48,576	366,184
38440 23	Other non-medical irradiation equipment, including gamma- and beta-ray equipment, n.e.c.	4	(X)	14,020	(X)	¹ 10,564
38440 27	Parts and accessories for X-ray equipment and other non-medical irradiation equipment, n.e.c.	28	(X)	⁴ 394,004	(X)	¹ 473,742
	Surgical systems:					
38450 35	Electrosurgical equipment	14	(X)	244,466	(X)	¹ 250,054
38450 71	Heart-lung machines, excluding iron lungs	3	(⁵)	(⁵)	(⁵)	(⁵)
38450 73	Blood flow systems	8	⁵ 2,302	⁵ 255,948	⁵ 2,669	⁵ 245,732
38450 75	All other surgical support systems	13	(X)	288,896	(X)	273,483
38450 83	Other electromedical equipment (except diagnostic and therapeutic), n.e.c.	8	(X)	22,592	(X)	19,951
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c.	39	(X)	474,897	(X)	413,891

See footnotes at end of table.

Table 30. Quantity and Value of Shipments of Electromedical and Irradiation Equipment: 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
50650 00	Selected nonmanufacturing revenues: Supplies and accessories for use with irradiation and electromedical equipment (resales)	21	(X)	155,523	(X)	¹ 145,694
73720 00	Software services, including receipts from all nonhardware-related activities	4	(X)	⁽⁶⁾	(X)	⁽⁶⁾
73731 00	Medical picture archiving and communications equipment (MED-PACS)	5	(X)	⁽⁶⁾	(X)	⁽⁶⁾
73732 00	Systems integration revenues, including configuration, installation and site preparation, and custom programming	3	(X)	5,617	(X)	14,932
99980 00	Other nonmanufacturing revenues	23	(X)	⁶ 680,159	(X)	⁶ 579,628

¹Product codes 38440 03 and 38440 09 are combined with 38440 05 to avoid disclosing figures for individual companies.²Product code 38450 13 is combined with 38450 15 to avoid disclosing figures for individual companies.³Product codes 38450 37 and 38450 34 are combined with 38450 49 to avoid disclosing figures for individual companies.⁴Product code 38440 32 is combined with 38440 27 to avoid disclosing figures for individual companies.⁵Product code 38450 71 is combined with 38450 73 to avoid disclosing figures for individual companies.⁶Product codes 73720 00 and 73731 00 are combined with 99980 00 to avoid disclosing figures for individual companies.n.e.c. Not elsewhere classified. [†]Revised by 5 percent or more from previously published figures. (X) Not applicable.

Table 31. Shipments, Exports, and Imports of Electromedical and Irradiation Equipment: 1994

[Value in thousands of dollars]

Product code	Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise (value at port) ¹	Imports for consumption (value) ²
38440 02, 03	Medical X-ray and nuclear equipment, diagnostic and therapeutic	³ 637,611	554,062	699,129
38440 13	Industrial and scientific X-ray equipment	117,727	65,274	41,410
38440 21	X-ray tubes sold separately	328,822	131,723	70,085
38440 27	Parts and accessories for X-ray equipment and other non-medical irradiation equipment, n.e.c.	125,796	186,336	178,321
38440 23	Non-medical irradiation equipment, including gamma- and beta-ray equipment, n.e.c.	14,020	15,313	7,472
38450 11	Electrocardiograph (ECG), diagnostic	246,082	61,121	10,475
38450 13	Electroencephalographs (EEG's)	21,849	15,712	6,724
38450 17	Ultrasound scanning devices, diagnostic	828,578	267,441	-
38450 31	Pacemakers, therapeutic	562,366	136,907	10,205
38450 18, 21, 23	Diagnostic electromedical equipment, n.e.c.	⁴ 723,315	794,936	426,859
38450 33	Therapeutic electromedical equipment, n.e.c.	481,616	173,309	16,970
38450 71, 73	Electromedical equipment and irradiation equipment, including X-ray, n.e.c.	255,948	295,809	261,909
38450 39	Dialyzers, machines and equipment	247,738	80,699	35,206
38450 51	Patient monitoring equipment	508,865	223,143	28,363
38450 43	Therapeutic ultrasound equipment	31,289	37,535	1,798
38450 35	Electrosurgical equipment	244,466	277,385	37,878
38450 89	Electromedical parts and accessories, including diagnostic and therapeutic, n.e.c.	474,897	456,057	386,437

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.³Product codes 38440 02 and 38440 03 are combined to avoid disclosing figures for individual companies.⁴Product codes 384450 18, 21, and 23 are combined to avoid disclosing figures for of individual companies.

- Represents zero. n.e.c. Not elsewhere classified.

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 Milbren Thomas, 301-457-4821.

Chapter 8. Consumer Durables

8.1 ELECTRIC HOUSEWARES AND FANS

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 100 companies.

SUMMARY OF FINDINGS

In 1994, manufacturers' shipments of electric fans totaled \$552.3 million, an 11.8 percent increase from the 1993 value of shipments of \$494.1 million. The 1994 value of

shipments of small household electric appliances totaled \$2.1 billion, an increase of 6.1 percent from the 1993 total. Shipments of parts and attachments decreased 12.2 percent, from \$136.5 million in 1993 to \$119.9 million in 1994.

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: 1985 to 1994**

[Millions of dollars]

Year	Electric fans (except industrial type)	Small household electric appliances	Parts and attachments for electric housewares and fans
1994	552.3	2,061.7	119.9
1993	494.1	1,945.0	136.5
1992	511.4	1,895.0	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
1985	500.7	1,940.4	152.7

Table 2. Quantity and Value of Shipments of Electric Housewares and Fans, by Product: 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
36341 —	Electric fans (except industrial)	20	24,263,503	552,292	20,857,816	494,066
36341 31	Desk and wall bracket	2	(¹)	(¹)	(¹)	(¹)
36341 71	Window (household) permanent, portable, and roll-about	6	7,435,367	111,772	6,199,744	91,977
36341 91	Ceiling (paddle) fans	7	^b 1,410,454	^b 86,467	1,580,140	96,640
36341 97	All other electric fans (except industrial), including electric range hoods, oven hoods, ventilating, and exhaust fans	13	¹ 15,417,682	¹ 354,053	¹ 13,077,932	¹ 305,449
36345 —	Small electric household appliances (except fans) . .	73	(X)	2,063,605	(X)	1,795,928
	Electrothermal type	58	(X)	1,303,015	(X)	1,217,921
36345 11	Broilers	6	418,146	13,858	407,415	12,853
	Coffee makers:					
36345 18	Drip type	6	5,921,064	118,043	7,905,203	148,521
36345 19	Percolator or vacuum type	5	1,188,911	18,724	1,329,246	19,986
36345 21	Urn type	4	953,082	28,853	905,691	28,402
36345 23	Deep fat fryers, excluding covers and controls shipped separately	6	2,515,202	36,029	2,639,517	37,829
36345 24	Ovens, including toaster ovens and roasters (with or without broiler attachments)	10	^a 5,146,939	^a 200,142	^r 4,998,594	^r 196,927
36345 29	Hot plates and disc stoves, 1650 watts and less (except built-in units)	5	1,235,415	16,999	1,099,230	15,403
36345 39	Waffle irons, sandwich grills, griddles, and combinations	11	3,434,946	72,168	3,053,288	62,007
36345 42	Frying pans and skillets, excluding covers and controls shipped separately	7	2,968,010	63,823	3,092,771	68,087
	Air space heaters:					
	Portable room heaters:					
36345 43	Fan-forced type	15	2,829,082	70,611	2,972,701	^r 69,423
36345 44	Other than fan-forced type (convector, radiant, etc.)	10	850,971	28,723	733,080	25,319
	For fixed installation, all types:					
36345 45	Baseboard, excluding glass panel type	7	1,090,234	25,254	1,050,551	23,373
36345 47	Other than baseboard, excluding warm air furnaces	6	^a 1,292,763	^a 68,660	^a 1,176,649	^a 62,667
36345 51	Corn poppers	2	(²)	(²)	(²)	(²)
	Electric irons:					
36345 50	Steam and spray (standard household)	2	(D)	(D)	(D)	(D)
36345 63	Other than steam auto type (standard household and travel irons)	-	-	-	-	-
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	^b 1,353,558	^b 17,233	^b 1,437,146	^b 18,254
36345 96	Portable humidifiers, including vaporizers	8	4,442,111	65,123	3,318,405	50,239
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	10	² 22,091,599	² 331,826	² 20,701,992	² 278,191
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	7,518,068	126,946	5,443,497	100,440
	Electromechanical type, including cordless	29	23,155,082	581,513	23,953,189	578,007
	Household food mixers, including value of standard attachments sold with mixers:					
36345 71	Hand (portable)	4	(^{a 3})	(^{a 3})	(³)	(³)
36345 75	Stand type	3	³ 2,743,859	³ 158,834	³ 2,344,785	³ 145,218
36345 76	Blenders (liquefiers)	6	4,594,799	94,156	7,134,237	157,236
36345 83	Household food processors, including food choppers, slicers, and shredders	7	^b 1,197,616	^a 30,559	1,091,281	30,863

See footnotes at end of table.

Table 2. Quantity and Value of Shipments of Electric Housewares and Fans, by Product: 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
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	^b 1,627,362	^a 48,018	1,373,929	32,015
36345 95	Portable air purifiers and portable dehumidifiers.	7	^b 105,710	^b 2,461	114,738	4,665
36349 —	Other small electromechanical appliances, including knife sharpeners, scissors, tooth-brushes, vibrators, electric razors, dry shavers, and can openers	16	^b 12,885,736	^b 247,485	^b 11,894,219	^b 208,010
36349 13	Parts and attachments for small household electric appliances	24	(X)	119,870	(X)	136,494
36349 18	Electrothermal in operation (value only)	12	(X)	86,596	(X)	^a 103,496
36349 89	Electromechanical in operation (value only)	9	(X)	11,979	(X)	12,206
36349 89	Other (value only)	7	(X)	21,295	(X)	20,792

¹Product code 36341 31 is included with product code 36341 97 to avoid disclosing data for individual companies.

²Product code 36345 51 is included with product code 36345 97 to avoid disclosing data for individual companies.

³Product code 36345 71 is included with product code 36345 75 to avoid disclosing data for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ^fRevised by 5 percent or more from previously published figures. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated. ^bOver 25 percent of this item has been estimated.

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Electric Housewares and Fans: 1994

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

Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value
Electric fans (except industrial and electric range hoods and oven hoods)	24,263,503	552,292	1,103,579	39,583	37,941,844	781,193
Coffee makers	8,063,057	165,620	(NA)	23,246	4,602,766	96,169
Air space heaters, portable and fixed installation types	6,063,050	193,248	702,596	8,629	14,025,644	161,102
Standard household electric irons	(D)	(D)	449,210	5,209	2,292	30
Electric bed coverings	(D)	(D)	909,195	26,159	14,677,397	230,350
Electrothermal household appliances, n.e.c.	49,897,353	951,534	3,742,388	112,427	91,237,795	573,220
Electromechanical household food mixers (except blenders)	⁽⁴⁾	⁽⁴⁾	135,529	6,302	1,766,868	40,580
Electromechanical household food mixers	2,743,859	⁴ 158,834	(NA)	(NA)	7,493,247	53,339
Household blenders and liquifiers	4,594,799	94,156	(NA)	(NA)	4,870,929	62,897
Household food preparation appliances, including food processors (except food mixers)	2,824,978	78,577	1,730,969	47,265	(NA)	(NA)
Electromechanical portable air purifiers, and portable dehumidifiers	⁽⁵⁾	⁽⁵⁾	410,553	21,655	8,509,866	114,451
Small electromechanical appliances, n.e.c.	12,991,446	⁵ 249,946	2,380,196	89,469	14,979,181	120,571

¹For a comparison of SIC-based codes with Schedule B export numbers and HTSUSA imports, see "Contact for Data Users" at the end of this subsection.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. General Imports for Consumption*.

⁴Data are combined with "Electromechanical household food mixers" to avoid disclosing data for individual companies.

⁵Data are combined with "Small electromechanical appliances, n.e.c." to avoid disclosing data for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified.

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. Histori-

cal 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.

8.2 MAJOR HOUSEHOLD APPLIANCES

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 100 companies.

SUMMARY OF FINDINGS

In 1994, manufacturers' shipments of major household appliances totaled \$14.6 billion, a 10-percent increase from \$13.3 billion in 1993. Shipments of household cooking

equipment, including parts and accessories, totaled \$3.3 billion in 1994, a 6-percent increase from the 1993 value of \$3.1 billion. The value of household refrigerators and freezers, including parts and attachments, increased 15 percent, from \$4.3 billion in 1993 to \$5.0 billion in 1994. Shipments for household laundry equipment and parts increased 3 percent, from \$3.4 billion in 1993 to \$3.5 billion in 1994. The value of shipments of household appliances, not elsewhere classified, increased 14 percent, from \$2.5 billion in 1993 to \$2.8 billion in 1994.

EXPLANATION OF TERMS

See the Introduction for an explanation of terms.

Table 4. Value of Shipments of Major Household Appliances by Class of Products: 1984 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984
36311	Electric household ranges, ovens, and surface cooking units, equipment, and parts	1,796.0	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	2,263.4
36313	Gas household ranges, ovens, and surface cooking units, equipment, and parts	649.6	621.5	599.6	609.5	739.4	710.0	648.5	666.5	667.8	585.6	542.1
36314	Other household ranges, and cooking equipment and outdoor cooking equipment, including parts and accessories	866.4	786.1	750.0	657.4	581.1	560.3	577.0	533.5	465.6	484.0	465.8
36321	Household refrigerators, including combination refrigerator-freezers	14,969.0	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	2,573.4
36322	Food freezers, complete units, for freezing and/or storing frozen food (household type)	(¹)	(¹)	(¹)	277.4	226.6	226.1	252.7	228.0	230.7	251.4	279.1
36323	Parts and attachments for household refrigerators and freezers	84.7	73.7	78.7	127.9	134.0	131.0	136.4	75.5	105.4	88.1	(²)
36330	Household laundry machines and parts	3,479.0	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	³ 2,078.9
36391	Water heaters, electric	513.8	473.4	401.0	446.7	433.8	417.3	398.0	382.7	383.2	383.8	397.9
36392	Water heaters (except electric)	748.8	700.0	586.5	616.1	577.2	569.9	543.6	523.6	518.3	474.2	514.7
36395	Household appliances, n.e.c., and parts	1,570.0	¹ 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	³ 1,023.7

¹Product code 36322 is included with product code 36321 to avoid disclosing data for individual companies.

²Before 1985, data were not collected for product code 36323.

³For 1984 and earlier years, product codes 36330 and 36395 did not include parts.

n.e.c. Not elsewhere classified. ¹Revised by 5 percent or more from previously published figures.

Table 5. Quantity and Value of Shipments of Major Household Appliances: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36311 —	Major household appliances	100	(X)	14,592.6	(X)	13,317.7
	Electric ranges, ovens, and surface cooking units, equipment, and parts	21	7,883.2	1,796.0	8,057.9	1,731.3
	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	118.3	20.7	109.6	19.2
36311 17	23 (58.4 cm) inches up to and including 32 (81.3 cm) inches in width	7	2,782.1	824.8	2,547.7	756.6
36311 35	33 (83.8 cm) inches and over in width, all types	4	4.2	2.0	4.1	2.1
	Other than free-standing:					
	Built-in ranges:					
	Built-in ovens:					
36311 53	Single oven	7	272.9	106.7	309.0	117.2
36311 55	Two ovens	4	97.9	68.9	78.2	50.3
36311 61	Surface cooking tops	8	414.2	82.2	395.1	75.6
36311 65	Drop-in ranges	6	124.7	51.2	121.1	51.4
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	80.9	55.5	74.4	50.1
36311 74	Microwave ovens, including counter top, built-in, and wall or cabinet-hung ovens	5	3,350.5	422.8	3,781.0	459.3
36311 79	Other electric and electronic ranges and ovens not listed above	1	(X)	(¹)	(X)	(¹)
36311 20	Parts and accessories for household electric ranges and ovens, such as burners, rotisseries, oven racks, and broiler pans (sold separately)	17	(X)	¹ 161.2	(X)	¹ 149.4
36313 —	Gas household ranges, ovens, and surface cooking units, equipment, and parts	18	2,158.4	649.6	2,077.3	621.5
	Standard type, free-standing:					
36313 11	Over 32 (81.3 cm) inches cooking top and oven	7	57.2	34.9	58.6	31.3
36313 13	Over 24 (61 cm) inches to 32 (81.3 cm) inches cooking top and oven	7	1,301.2	364.7	1,221.4	349.4
36313 15	Apartment ranges, 24 (61 cm) inches cooking top and under	4	178.3	32.2	173.1	32.3
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	211.9	56.1	242.1	51.1
36313 22	Nonstandard types, including wall hung, slide-in, or drop-in	7	342.4	88.5	¹ 315.3	¹ 82.7
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)	15	(X)	40.7	(X)	39.9
36314 —	Other household ranges and cooking equipment (except gas and electric) and outdoor cooking equipment, including parts and accessories	25	12,300.1	866.4	11,804.2	786.1
	Barbecuers, grills, stoves, braziers, etc., for outdoor cooking and other cooking:					
	Portable units:					
36314 22	Gas fuel or both gas and other fuel	12	5,674.4	524.9	¹ 5,487.5	¹ 475.5
36314 24	Solid fuel (charcoal, wood, coal, etc.)	9	5,599.0	129.1	5,185.5	113.8
36314 26	Liquid fuel (oil, kerosene, etc.)	5	801.1	87.8	¹ 733.7	¹ 76.3
36314 28	All other outdoor and other cooking equipment	8	225.5	22.2	^b 397.5	^a 29.7
36314 20	Parts and accessories for outdoor and other cooking equipment (sold separately)	15	(X)	102.4	(X)	90.8

See footnotes at end of table.

Table 5. Quantity and Value of Shipments of Major Household Appliances: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36321 —	Major household appliances —Con. Household refrigerators, including combination refrigerator-freezers	15	² 11,275.6	² 4,969.0	² 10,313.5	² 4,310.3
	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)	4	(³)	(³)	(³)	(³)
36321 09	9.5 to 13.4 cu. ft. (269 liters but under 382 liters)	4	³ 270.9	³ 72.0	³ 245.6	³ 64.8
36321 12	13.5 to 15.4 cu. ft. (382 liters but under 438 liters)	4	1,520.7	482.3	1,419.3	433.5
36321 14	15.5 to 17.4 cu. ft. (438 liters but under 495 liters)	5	693.9	229.9	691.3	225.0
36321 19	17.5 to 19.4 cu. ft. (495 liters but under 552 liters)	6	2,289.8	932.4	2,031.9	806.8
36321 24	19.5 to 21.4 cu. ft. (552 liters but under 608 liters)	7	1,557.4	813.5	1,408.8	683.7
36321 26	21.5 to 24.4 cu. ft. (608 liters but under 693 liters)	6	1,864.5	1,524.2	(⁴)	(⁴)
36321 28	24.4 cu. ft. and over (693 liters and over)	4	230.2	237.8	⁴ 1,932.9	⁴ 1,481.4
	Compression type, fitted with only one external door:					
36321 63	6.4 cu. ft. and under (under 184 liters)	8	853.5	115.2	790.8	102.8
36321 64	6.5 cu. ft. and over (184 liters and over)	6	(D)	(D)	(D)	(D)
36321 79	Other household refrigerators	3	(D)	(D)	(D)	(D)
36322 —	Food freezers, complete units, for freezing and/or storing frozen food (household type)	6	(²)	(²)	(²)	(²)
36322 05	Upright type freezers	6	(D)	(D)	(D)	(D)
36322 50	Chest type freezers	3	(D)	(D)	(D)	(D)
36323 —	Parts and attachments for household refrigerators and freezers, excluding compressors and condensing units and ice- making machines	18	(X)	84.7	(X)	73.7
36330 —	Household laundry machines (household type defined as having dry linen capacity not exceeding 10 kg (22 lb))	5	12,112.7	3,479.0	11,520.4	3,389.4
	Washing machines, mechanical (electric):					
36330 11	Coin-operated	4	219.7	90.2	217.2	92.6
36330 31	Non-coin-operated	5	6,599.6	1,841.1	6,282.5	1,782.8
36330 37	Other washing machines, including machines with built-in centrifugal drier and gasoline driven	3	281.2	156.8	239.2	¹ 158.4
	Dryers, mechanical (incorporating heat):					
36330 51	Gas (non-coin-operated)	5	1,219.0	310.7	1,207.7	297.9
36330 55	Electric (non-coin-operated)	5	3,679.2	792.2	3,446.0	741.5
36330 15	Coin-operated	4	114.0	41.8	127.9	52.1
36330 59	Other drying equipment (not incorporating heat), including centrifugal wringers and spinners	-	-	-	-	-
	Parts, accessories, and attachments for household laundry equipment (sold separately)	11	(X)	123.1	(X)	132.0
36330 96	For household washing machines	10	(X)	111.5	(X)	108.9
36330 97	For household drying machines	5	(X)	11.6	(X)	² 23.2
36391 —	Water heaters, electric (for permanent installation)	10	4,003.9	513.8	3,747.1	473.4
	Storage type:					
36391 11	34 gallons and under (under 132 liters)	8	721.6	79.3	860.6	91.8
36391 12	35 to 44 gallons (132 liters but under 170 liters)	8	1,325.1	162.7	1,090.2	128.3
36391 14	45 to 54 gallons (170 liters but under 208 liters)	7	1,330.1	173.9	1,207.4	153.7
36391 15	55 gallons and over (208 liters and over)	7	379.0	65.8	350.8	60.8
36391 98	Other types, including circulating and portable storage	7	248.1	^b 32.1	238.1	^c 38.7

See footnotes at end of table.

Table 5. Quantity and Value of Shipments of Major Household Appliances: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
36392 —	Major household appliances —Con.					
	Water heaters (except electric).....	14	4,841.8	748.8	4,635.8	700.0
	Direct-fired water heaters:					
36392 12	Gas	8	4,682.9	715.4	4,493.9	671.6
36392 24	Oil.....	4	28.1	9.9	27.3	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	130.7	23.5	114.5	18.6
36395 —	Other household type appliances and parts, n.e.c.	18	9,356.1	1,570.0	8,350.9	1,305.6
	Dishwashing machines:					
36395 12	Portable type, including convertible type ...	3	206.8	59.1	162.5	46.4
36395 14	Built-in type.....	4	4,448.1	1,076.2	3,861.2	882.3
36395 63	Floor-waxing, polishing, scrubbing, and shampooing machines (for household use only).....	3	975.0	131.0	(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.	1	(X)	(D)	(X)	(D)
	Parts for other household appliances, n.e.c.:					
36395 91	For electric water heaters (value only)	8	28.6	21.1	31.1	20.0
36395 92	For non-electric water heaters (value only) .	6	(X)	(X)	(X)	(X)
36395 93	For dishwashing machines (value only)	7	(X)	37.7	(X)	33.8
36395 97	For other major household appliances, n.e.c. (value only)	3	(X)	(D)	(X)	(D)

¹Product code 36311 79 is included with product code 36311 20 to avoid disclosing data for individual companies.²Product code 36322 00 is included with product code 36321 00 to avoid disclosing figures for individual companies.³Product code 36321 02 is included with product code 36321 09 to avoid disclosing data for individual companies.⁴For 1993, product code 36321 26 is included with product code 36321 28 to avoid disclosing data for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified.

†Revised by 5 percent or more from previously published figures. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated. ^bOver 25 percent of this item has been estimated.

Table 6. Shipments, Exports, and Imports of Major Household Appliances: 1994

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

Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3 4}	
	Quantity	Value	Quantity	Value	Quantity	Value
Electric ranges, ovens, and surface cooking units	4,451.8	1,168.0	143.6	47.7	2,425.1	224.4
Microwave ovens	3,431.4	478.3	428.9	66.1	7,103.5	637.9
Parts and accessories for electric ranges and ovens	(X)	⁵ 152.7	(X)	15.0	(X)	140.2
Gas ranges, ovens, and surface cooking units	2,158.4	608.9	1,439.4	45.2	1,182.8	248.5
Parts and accessories for gas ranges and ovens and other cooking equipment	(X)	40.7	(X)	12.1	(X)	37.9
Other cooking equipment (portable):						
Gas fuel or both gas and other fuel	5,674.4	524.9	565.9	37.0	554.6	10.7
Solid fuel (charcoal, wood, coal, etc.)	5,599.0	129.1	76.8	8.5	2,113.0	12.7
Liquid fuel (oil, kerosene, etc.)	801.1	87.8	547.1	28.4	32.0	0.8
All other outdoor cooking equipment	225.5	22.2	49.1	6.2	133.6	4.3
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)	(⁶)	(⁶)	34.2	14.9	98.9	17.3
9.5 to 13.4 cu. ft. (269 liters but under 382 liters)	⁶ 270.9	⁶ 72.0	33.1	9.2	56.0	16.5
13.5 cu. ft. and over (382 liters and over)	8,156.4	4,220.2	687.6	377.5	172.1	12.4
Compression type refrigerators, fitted with one external door:						
6.4 cu. ft. and under (under 184 liters)	853.5	115.2	53.6	25.7	1,059.2	99.8
6.5 ft. and over (184 liters and over)	(D)	(D)	295.1	168.2	1,257.7	109.8
Other household refrigerators, non-compression, fitted with one external door	(D)	(D)	160.2	49.3	28.2	10.9
Freezers, upright type	(D)	(D)	66.5	25.7	77.3	14.6
Freezers, chest type	(D)	(D)	114.2	37.2	296.1	52.8
Fully automatic electric washing machines (coin-operated)	219.7	90.2	22.0	8.9	3.4	1.7
Fully automatic electric washing machines (non-coin-operated)	6,599.6	1,841.1	868.5	256.4	453.1	36.6
Other washing machines	281.2	156.8	63.0	25.2	29.9	4.4
Dryers (non-coin-operated) and other drying equipment	4,898.2	1,102.9	206.8	50.4	902.9	32.8
Dryers (coin-operated)	114.0	41.8	9.3	4.6	2.0	0.4
Water heaters, electric, storage type	3,755.8	481.7	(NA)	(NA)	(NA)	(NA)
Water heaters, electric, other	248.1	32.1	(NA)	(NA)	(NA)	(NA)
Water heaters, gas	4,692.9	715.4	(NA)	(NA)	(NA)	(NA)
Water heaters, non-electric, other than gas	158.9	33.4	(NA)	(NA)	(NA)	(NA)
Other household appliances, n.e.c.:						
Dishwashing machines, household	4,655.0	1,135.4	278.0	66.0	504.5	35.2
Floor polishers	975.0	131.0	81.5	11.8	23.2	1.6
Food waste disposers	(D)	(D)	267.8	19.3	35.8	0.8
Other major household appliances	(D)	(D)	43.6	11.3	2,303.1	263.8
Parts for other major household appliances	28.6	74.4	(X)	7.7	(X)	35.6

¹For 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.²Source: Bureau of the Census report EM545, *U.S. Exports*.³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.⁴Dollar value represents the c.i.f. (cost, insurance, and freight) value at the first point of entry into the United States.⁵Product code 36311 79 is included with product code 36311 20 to avoid disclosing data for individual companies.⁶Product codes 36321 01 and 36321 03 are included with product code 36321 09 to avoid disclosing data for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified. X Not applicable.

Note: Detail may not add to totals due to 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.

8.3 CONSUMER ELECTRONICS

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 160 companies are

included. No estimate is derived for the small firms excluded from the survey.

SUMMARY OF FINDINGS

During 1994, the total value of shipments for consumer electronics was \$8.2 billion, an increase of 12.4 percent from the 1993 value of \$7.3 billion. The 1994 figure includes automotive audio equipment, \$750.0 million; television receivers, \$5.1 billion; other consumer audio and video equipment, \$340.5 million; and loudspeakers, microphones, kits, and public address systems, \$1.9 billion. From 1985 to 1994, consumer electronics has increased 48.4 percent.

EXPLANATION OF TERMS

See the Introduction for an explanation of terms.

Table 7. Value of Shipments of Consumer Electronics, by Selected Products: 1985 to 1994

[Millions of current dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
36511	Consumer electronics	8,205.4	7,299.8	7,324.8	6,494.5	6,567.3	6,659.6	5,774.6	5,478.4	5,586.2	5,529.9
36512	Automotive audio equipment (except speakers) . . .	750.0	630.5	607.6	340.2	307.4	322.0	248.2	463.3	601.9	678.5
36514	Household television receivers, including combinations	5,148.1	4,691.1	4,865.4	4,562.0	4,642.6	4,737.7	3,986.2	3,729.3	4,000.1	3,970.2
36515	Other consumer audio and video equipment (except speakers)	340.5	224.9	207.2	294.5	347.4	373.4	385.4	289.5	151.1	154.5
	Speakers, microphones, and home-type electronic kits	^a 1,966.8	1,753.3	1,644.6	1,297.8	1,269.9	1,226.5	1,154.8	996.3	833.1	726.7

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated.

Table 8. Quantity and Value of Shipments of Consumer Electronics: 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
36511 —	Automotive audio equipment (except speakers) . . .	17	8,277,634	749,968	6,898,232	630,504
36511 34	AM-FM radios with tape player combinations . . .	6	3,243,529	427,217	2,314,542	339,576
36511 39	CD players and radio/CD combinations	2	(¹)	(¹)	(¹)	(¹)
36511 41	Other automobile audio equipment, including equalizers and amplifiers, excluding speakers .	13	¹ 5,034,105	¹ ^a 322,751	¹ 4,583,690	¹ 290,928
36512 —	Household television receivers, including combinations	15	13,881,300	5,148,097	13,679,359	4,691,123
36512 18	High-definition television	1	(²)	(²)	(²)	(²)
36512 31	Projection television	10	² 526,721	² 760,987	² ¹ 417,741	² ¹ 553,809
	CRT-based color television:					
36512 41	50 cm. (19.7 inches) and under	5	2,007,620	344,667	² 2,090,732	¹ 378,470
36512 51	Over 50 cm. (19.7 inches)	12	11,346,959	4,042,443	11,170,886	3,758,844
36512 61	Other household television receivers	-	-	-	-	-
36514 —	Other consumer audio and video equipment (except speakers) ³	55	1,176,819	340,461	830,126	224,908
36514 52	Coin-operated audio equipment	4	(D)	(D)	(D)	(D)
36514 61	Compact and video disc players	8	58,499	43,462	¹ 6,274	¹ 8,286
36514 78	Power amplifiers, including pre-amplifiers	31	241,840	100,176	198,365	93,869
36514 81	Receivers, tuners, and other consumer audio equipment incorporating radio reception.	6	(D)	(D)	¹ 2,720	1,353
36799 07	Earphones, headsets, and phonograph cartridges, pickups, needles, and styli	15	(X)	41,888	(X)	35,858
36514 67	Equalizers	9	23,334	^a 5,554	30,519	7,085
36514 69	Audio tape recorders and players	4	(D)	(D)	(D)	(D)
36514 83	Other consumer audio and video equipment (except speakers)	26	720,327	81,245	502,489	49,580
36515 —	Speakers, microphones, and home-type electronic kits	100	^a 115,602,459	^a 1,966,812	105,948,844	1,753,252
36515 51	Single loudspeakers mounted in an enclosure . .	27	2,267,535	211,235	2,469,467	232,367
36515 52	Multiple loudspeakers mounted in an enclosure .	44	^a 6,961,121	^a 573,591	6,059,211	472,363
36515 53	Other loudspeakers, including unmounted speakers sold separately	42	^a 103,067,801	^b 900,469	94,106,247	802,418
36515 55	Microphones	15	2,422,359	133,103	2,422,846	121,358
36515 67	Home-type electronic kits designed for consumer assembly	2	(⁴)	(⁴)	(⁴)	(⁴)
36515 94	Public address systems, including musical instrument amplifiers.	27	⁴ 883,643	⁴ 148,414	⁴ 891,073	⁴ 124,746

¹Product code 36511 39 is included with product code 36511 41 to avoid disclosing data for individual companies.²Product code 36512 18 is included with product code 36512 31 to avoid disclosing data for individual companies.³Totals for product code 36514 do not include product code 36799 07.⁴Product code 36515 67 is included with product code 36515 94 to avoid disclosing data for individual companies.- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ¹Revised by 5 percent or more from previously published figures. X Not applicable.Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated. ^bOver 25 percent of this item has been estimated.

Table 9. Shipments, Exports, and Imports of Consumer Audio and Video Electronics: 1994

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

Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Imports for consumption ²	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value ³
Automotive audio equipment	8,277,634	749,968	2,599,837	401,969	20,770,473	1,736,110
Household television receivers	13,881,300	5,148,097	-	-	1,878,417	120,600
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)	1,176,819	340,461	3,835,691	476,928	44,300,628	2,394,155
Single loud speakers mounted in an enclosure	2,267,535	211,235	6,104,989	153,091	35,475,655	242,903
Multiple loud speakers mounted in an enclosure	^a 6,961,121	^a 573,591	1,699,705	103,483	7,830,003	211,418
Other loud speakers	^a 103,067,801	^b 900,469	(X)	228,510	136,289,239	551,712
Microphones	2,422,359	133,103	(X)	60,298	22,961,336	104,781
Home-type electronic kits designed for consumer assembly and public address systems, including musical instrument amplifiers	883,643	148,414	(X)	131,421	5,429,392	584,486
Earphones, headsets, and phonograph cartridges, pickups, needles, and styli	(X)	41,888	(NA)	40,014	61,571,435	214,004

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.³This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first point of entry into the United States plus U.S. import duties.

- Represents zero. NA Not available. Data not collected separately or not adequately comparable. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item has been estimated. ^bOver 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 Milbren Thomas, 301-457-4821.

Chapter 9. Industrial Equipment

9.1 STEEL SHIPPING DRUMS AND PAILS

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 42 companies.

SUMMARY OF FINDINGS

During 1994, the value of shipments of steel pails totaled \$210.2 million, up 3.8 percent from the 1993 value of \$202.5 million. Shipments of steel drums increased by

0.4 percent, from \$672.9 million in 1993 to \$675.6 million in 1994.

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 plastic 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: 1985 to 1994**

[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
1994.....	86,520	210,204	34,579	675,589
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
1985.....	80,601	193,608	35,412	595,156

Table 2. Total Shipments of Steel Pails and Drums: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
	Steel pails.....	16	86,520	210,204	^r 85,899	^r 202,460
	11 1/4-inch diameter.....	(NA)	82,487	196,231	^r 81,922	^r 189,782
34121 01	Full removable head.....	12	^b 71,628	^b 163,458	^r 70,254	^r 155,917
34121 06	Tight head (standard and dome top).....	11	^c 10,859	^c 32,773	^r 11,668	^r 33,865
34121 11	14-inch diameter.....	6	^a 813	^a 5,863	^r 628	^r 4,170
34121 13	All other diameters.....	7	3,220	8,110	^r 3,349	8,508
	Steel drums and barrels.....	29	34,579	675,589	^r 33,474	^r 672,948
	14-inch diameter, all gauges.....	(NA)	2,133	21,130	^r 1,965	19,505
34122 01	Tight head.....	7	^a 171	^a 1,976	^r 212	^r 2,535
34122 03	Open head, full or partial.....	11	^a 1,962	^a 19,154	^r 1,753	16,970
	All other (except 14-inch diameter).....	(NA)	32,446	654,459	^r 31,509	653,443
	20 gauge and heavier.....	(NA)	29,108	609,464	^r 28,225	^r 610,057
	50 gallon and larger, 18 gauge and heavier.....	(NA)	12,047	269,391	10,974	^r 272,189
34122 05	Tight head.....	23	^b 7,298	^b 158,740	^a 6,783	^r 168,931
34122 07	Open head.....	25	^c 4,749	^c 110,651	^a 4,191	^a 103,258
	50 gallon and larger, 19 and 20 gauge, including 20/18.....	(NA)	15,939	314,933	^r 16,116	^r 317,498
34122 09	Tight head.....	24	^b 11,697	^b 229,651	^r 11,703	^r 221,309
34122 11	Open head.....	25	^b 4,242	^b 85,282	^r 4,413	96,189
34122 13	30 to 49 gallon.....	15	^b 745	^b 18,534	^r 791	^r 14,498
34122 15	Under 30 gallon.....	11	^a 377	^a 6,606	^r 344	^r 5,872
	Lighter than 20 gauge.....	(NA)	3,338	44,995	3,284	43,386
34122 17	30 gallon and larger.....	9	2,142	34,714	2,096	33,362
34122 19	Under 30 gallon.....	4	1,196	10,281	^r 1,188	^r 10,024

NA Not available. ^rRevised by 5 percent or more from previously published figures.Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of this item is estimated. ^b26 to 50 percent of this item is estimated. ^cOver 50 percent of this item is estimated.

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Steel Shipping Pails and Drums: 1994 and 1993

[Value in thousands of dollars]

Product description	Manufacturers' shipments (value f.o.b. plant) ¹	Exports of domestic merchandise ²		Percent exports to manufacturers' shipments	Imports for consumption ^{4 5}	Apparent consumption ⁶	Percent imports to apparent consumption
		Value at port	Estimated producers' value ³				
Steel shipping pails:							
1994.....	210,204	82,950	75,733	39	38,714	165,968	23
1993.....	202,460	134,010	122,351	66	40,308	108,758	37
Steel shipping drums and barrels:							
1994.....	675,589	13,985	12,768	2	14,080	675,684	2
1993.....	672,948	14,145	12,914	2	14,031	672,834	2

¹For 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.²Source: Bureau of the Census report EM545, *U.S. Exports*.³These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors are based on data for 1989 that are published in *Exports from Manufacturing Establishments*, AR89-1, appendix B. The derived adjustment factor for this report is 0.9130.⁴Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.⁵Represents c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus U.S. import duties.⁶Apparent 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.

FUNDING

The MA34K survey is funded, in part, by the Steel Shipping Container Institute.

CONTACT FOR DATA USERS

For additional information about these data, contact Larry Blumberg, 301-457-4744.

9.2 SELECTED INDUSTRIAL AIR POLLUTION CONTROL EQUIPMENT

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 110 companies.

SUMMARY OF FINDINGS

Shipments (and on-site construction in certain instances) of industrial air pollution devices in 1994 totaled \$711.4 million, of which \$453.3 million were particulate emissions collectors, \$206.5 million were gaseous emissions control devices, and \$51.6 million were other types of air pollution control equipment. Shipments decreased by 7 percent from the 1993 level of \$762.3 million.

New orders decreased by 5 percent in 1994 to \$630.7 million. Backlog of orders decreased by 16 percent in 1994 to \$408.7 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 devices 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 Absorber. A device for the removal of air contaminants by absorption on a surface-active solid, such as activated carbon or molecular sieves. Depending on the application, the absorbent is either discarded or regenerated.

Table 4. New Orders, Shipments, and Backlog of Orders for Selected Industrial Air Pollution Control Equipment: 1994 and 1993

[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
1994								
	Selected industrial air pollution control equipment	110	69,532	630,689	67,927	711,390	7,738	408,655
	Particulate emissions collectors	90	56,392	477,873	54,744	453,261	6,987	226,340
35646 51	Electrostatic precipitators	19	530	161,817	552	136,763	100	104,802
35646 54	Fabric filters	59	48,551	207,221	47,213	211,340	5,772	50,085
35646 55	Mechanical collectors	39	5,999	63,511	5,692	68,028	844	22,907
35646 58	Wet scrubbers	31	1,312	45,324	1,287	37,130	271	48,546
	Gaseous emissions control devices ..	38	1,198	103,822	1,169	206,546	356	153,402
35646 70	Catalytic oxidation systems	10	145	30,363	(S)	28,267	(S)	15,501
35646 71	Nitric oxide (NO) control systems ..	3	(D)	(D)	(D)	(D)	(S)	(S)
35646 72	Thermal and direct oxidation systems	14	300	34,419	272	30,878	48	12,084
35646 73	Scrubbers (gas adsorber, non-FGD ¹)	11	687	14,441	658	13,997	181	4,163
35646 74	Wet flue gas desulfurization systems	5	(D)	(D)	(S)	105,821	(S)	103,570
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)	27	4,562
35646 79	Other types of industrial air pollution control equipment	19	11,942	48,994	12,014	51,583	395	28,913
1993								
	Selected industrial air pollution control equipment	110	66,335	660,665	65,736	762,324	6,133	¹ 489,356
	Particulate emissions collectors	87	54,641	447,360	54,257	466,429	5,339	¹ 201,728
35646 51	Electrostatic precipitators	18	¹ 493	129,798	¹ 469	171,771	¹ 122	¹ 79,748
35646 54	Fabric filters	54	47,927	215,516	47,287	205,391	4,434	¹ 54,204
35646 55	Mechanical collectors	¹ 40	5,045	57,766	5,225	48,083	¹ 537	27,424
35646 58	Wet scrubbers	31	1,176	44,280	1,276	41,184	246	40,352
	Gaseous emissions control devices ..	¹ 37	¹ 1,066	146,756	¹ 1,097	227,980	¹ 327	¹ 256,126
35646 70	Catalytic oxidation systems	¹ 12	¹ 108	18,502	¹ 146	20,549	¹ (S)	¹ (S)
35646 71	Nitric oxide (NO) control systems ..	2	(D)	(D)	(D)	(D)	(D)	(D)
35646 72	Thermal and direct oxidation systems	¹ 16	278	33,890	302	33,399	¹ 20	8,543
35646 73	Scrubbers (gas adsorber, non-FGD ¹)	¹ 12	603	12,254	554	11,360	152	3,719
35646 74	Wet flue gas desulfurization systems	5	(D)	(D)	¹ 22	109,687	(D)	(D)
35646 75	Dry flue gas desulfurization systems	4	(D)	(D)	(D)	(D)	17	¹ (S)
35646 76	Gas adsorbers	8	34	5,927	(D)	(D)	(D)	(D)
35646 79	Other types of industrial air pollution control equipment	22	10,628	66,549	10,382	67,915	467	31,502

¹FGD - Flue gas desulfurization.

D Data withheld to avoid disclosing figures for individual companies. ¹Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census.

Table 5. Value of Shipments of Selected Air Pollution Control Equipment, by End Use: 1994 and 1993

[Thousands of dollars]

Product description	Particulate emissions collectors		Gaseous emissions control devices		Other types of industrial air pollution control equipment	
	1994	1993	1994	1993	1994	1993
Shipments.....	453,261	466,429	206,546	227,980	51,583	67,915
Steam electric utility power plants.....	69,086	88,696	113,434	98,466	(¹)	(¹)
Steam industrial power plants.....	13,272	11,680	(D)	² 54,183	(D)	(D)
Coal mining and cleaning.....	1,596	1,670	(D)	(²)	-	-
Petroleum refining.....	(D)	24,795	(D)	(²)	(D)	(D)
Foundries.....	4,697	5,005	(D)	(D)	-	-
Iron and steel mills.....	16,096	16,380	(³)	(³)	(D)	-
Primary nonferrous metal smelting plants.....	8,152	3,614	³ 1,702	³ 1,140	(D)	(D)
Chemical and fertilizer production.....	49,319	43,719	5,548	4,643	¹ 21,016	¹ 39,336
Cement manufacturing.....	6,196	10,744	(D)	-	(D)	(D)
Grain milling and handling.....	3,528	4,081	(⁴)	-	(D)	(D)
Pulp and paper mill operations.....	31,771	53,480	⁴ 476	(D)	996	924
Municipal waste combusters.....	(D)	2,995	589	(D)	(D)	(D)
Other end use industries.....	187,448	176,265	63,047	(D)	24,430	(D)
End use not specified.....	26,059	23,305	5,037	⁵ 7,709	3,317	4,699

¹Data for "Electric utility steam power plants," and "Chemical and fertilizer production" are combined for "Other types of industrial air pollution control devices" for 1993 and 1994, to avoid disclosing data for individual companies.

²Data for the "Industrial steam power plants, coal mining and cleaning," and "Petroleum refining" are combined for "Gaseous emissions control devices" for 1993, to avoid disclosing data for individual companies.

³Data for "Iron and steel mills" and "Primary nonferrous metal smelting plants" are combined for "Gaseous emissions control devices" for 1993 and 1994, to avoid disclosing data for individual companies.

⁴Data for "Grain milling and handling" and "Pulp and paper mill operation" are combined for "Gaseous emissions control devices" for 1994, to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ⁵Revised by 5 percent or more from previously published figures.

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.

9.3 AIR-CONDITIONING AND REFRIGERATION EQUIPMENT

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 351 companies.

SUMMARY OF FINDINGS

In 1994, the value of shipments of heat transfer equipment increased by 11 percent to \$5,508.9 million, compared with the 1993 figure of \$4,951.0 million. Unitary air-conditioners increased by 9 percent to \$4,339.4 million, from the 1993 level of \$3,936.5 million. Compressors and compressor units increased by 17 percent to \$3,717.5 million, compared with \$3,101.2 million in 1993. The value of shipments of condensing units, refrigeration (complete), increased by 13 percent to \$276.7 million, from the 1993 level of \$239.7 million. Room air-conditioners showed an increase of 25 percent in 1994 with \$1,105.8 million shipped, compared with the \$824.5 million shipped in 1993. Nonelectric warm air furnaces and humidifiers had a value of shipments for 1994 of \$1,425.9 million, a 6-percent increase from the 1993 value of \$1,334.2 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 preconditioned 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.

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 of 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: 1994 and 1993**

[Value in thousands of dollars]

Product code	Product description	1994	1993
35851 —	Heat transfer equipment	5,508,938	'4,951,008
35852 —	Unitary air-conditioners	4,339,428	3,936,501
35853 pt.	Commercial refrigeration equipment	220,257	182,893
35854 —	Compressors and compressor units	3,717,458	3,101,174
35855 —	Condensing units, refrigeration (complete).....	276,691	'239,720
35856 —	Room air-conditioners and dehumidifiers	1,105,844	'824,477
3585C pt.	Nonelectric warm air furnaces and humidifiers	1,425,935	1,334,215

pt. Partial. 'Revised by 5 percent or more from previously published figures.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 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
35851 —	Heat transfer equipment (except room and unitary air-conditioners)	153	(X)	5,508,938	(X)	4,951,008
35851 01	Packaged terminal air-conditioners ¹	9	100,595	56,145	79,433	46,371
35851 03	Packaged terminal heat pumps	8	75,552	39,631	57,225	32,807
	Evaporative condensers	(X)	2,724	49,803	2,865	51,056
35851 04	100 tons and under	8	747	4,269	560	3,562
35851 07	Over 100 tons	8	1,977	45,534	2,305	47,494
	Room fan-coil air-conditioning units	(X)	215,387	109,787	262,159	124,937
35851 08	Vertical stack	5	24,498	8,484	24,510	7,931
35851 09	Vertical	8	97,064	63,129	133,599	76,908
35851 10	Horizontal	8	93,825	38,174	104,050	40,098
35851 11	Room air induction units	3	(D)	(D)	(D)	(D)
	Central station air-handling units (motor-driven fan type)	(X)	82,455	387,247	76,804	389,786
35851 13	Draw through	23	60,213	317,596	55,418	316,442
35851 15	Blow through	14	9,850	46,978	8,262	45,520
35851 17	Heating and ventilating	17	12,392	22,673	13,124	27,824
	Coolers (refrigeration):					
	Ceiling, wall-mounted, and floor-mounted unit coolers	(X)	185,088	120,715	190,554	120,281
35851 16	4,000 Btuh and under	12	61,202	14,188	70,242	13,085
35851 21	4,001 to 6,000 Btuh	8	11,120	3,187	11,322	3,257
35851 22	6,001 to 8,000 Btuh	8	17,473	5,872	18,202	9,698
35851 23	8,001 to 12,000 Btuh	9	38,938	18,033	35,518	20,302
35851 24	12,001 to 18,000 Btuh	10	27,768	18,982	26,395	13,605
35851 25	Over 18,000 Btuh	14	28,587	60,453	28,875	60,334
	Air-cooled refrigerant condensers (remote type)	(X)	27,890	57,791	23,255	53,096
35851 30	Under 30 tons	13	22,261	19,203	17,649	17,792
35851 32	30 to 50 tons	11	1,992	8,053	2,050	7,918
35851 34	Over 50 tons	12	3,637	30,535	3,556	27,386
	Miscellaneous heat transfer equipment:					
	Shell-and-tube, shell-and-coil, shell-and-u-tube, tube-in-tube	(X)	(X)	64,831	(X)	71,237
35851 35	Condensers	9	(X)	38,258	(X)	40,579
35851 36	Liquid coolers	12	(X)	26,573	(X)	30,658
35851 37	Liquid-suction heat exchangers and refrigerant liquid receivers	7	(X)	(D)	(X)	(D)
	Central system finned coils (air-conditioning and refrigeration type)	(X)	(X)	86,868	(X)	80,685
35851 38	Standard steam and steam distributing tube	14	(X)	13,876	(X)	13,687
35851 39	Standard water cooling and/or heating and cleanable tube water	21	(X)	66,218	(X)	61,445
35851 40	Volatile refrigerant cooling	13	(X)	6,774	(X)	5,553
	Coil sales by original equipment manufacturers intended for resale or assembly into equipment by other manufacturers (all types)	(X)	(X)	385,305	(X)	321,341
35851 42	Copper and aluminum	22	(X)	269,608	(X)	210,902
35851 43	Aluminum (only)	10	(X)	52,623	(X)	51,707
35851 46	Other, including steel and copper	11	(X)	63,074	(X)	58,732
35851 45	Factory-assembled, refrigeration type, finned gravity coils, including wetted-surface dehumidifiers	5	(X)	12,618	(X)	11,169
	Centrifugal liquid chilling packages, hermetic and open types	(X)	5,551	389,698	4,765	315,112
35851 51	200 hp and under	6	1,217	35,815	1,080	31,544
35851 54	201 to 300 hp	4	1,211	61,025	1,140	56,787
35851 56	301 to 400 hp	4	843	54,043	785	51,120
35851 58	Over 400 hp	4	2,280	238,815	1,760	175,661

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 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
35851 —	Heat transfer equipment (except room and unitary air-conditioners)—Con.					
	Ice-making machines	(X)	212,608	300,671	187,839	268,550
	Self-contained ice-cube makers	(X)	131,743	130,837	120,732	126,630
35851 62	Automatic, 200 lb and under	7	79,518	50,150	73,979	44,919
35851 64	Automatic, 201 lb and over	4	52,225	80,687	46,753	81,711
	Self-contained flake or chip machines	(X)	10,164	34,859	9,911	35,967
35851 68	300 lb and under	5	5,481	6,277	5,860	6,320
35851 70	Over 300 lb	11	4,683	28,582	4,051	29,647
35851 71	Not self-contained	8	46,503	82,283	41,753	72,184
35851 75	Combination ice makers and ice dispensers . .	7	24,198	52,692	15,443	33,769
35851 74	Absorption refrigeration and dehydration systems	7	2,155	83,280	2,123	83,065
35851 78	Mechanical refrigeration systems used on all types of vehicles	10	75,148	700,334	64,922	592,576
	Mobile vehicle mechanical air-conditioning systems	(X)	17,504,353	2,018,032	12,372,649	1,829,464
35851 79	Air-conditioning units and systems for passenger automobiles ²	18	13,511,488	1,435,773	9,009,680	1,333,589
35851 80	Air-conditioning units and systems for trucks, buses, construction, and agriculture machinery and other vehicles	17	3,992,865	582,259	3,362,969	495,875
	Reciprocating air and reciprocating water cooled, air-cooled screw, air-cooled scroll, and water-cooled scroll machines	(X)	25,850	372,989	16,983	356,408
35851 91	20 hp and under	23	12,651	48,637	5,346	32,474
35851 93	21 to 49 hp	17	2,304	28,633	2,168	26,199
35851 95	50 to 75 hp	15	2,672	48,190	2,235	38,101
35851 97	Over 75 hp	14	8,223	247,529	7,234	259,634
35851 92	Factory-fabricated water cooling towers	11	10,839	135,077	9,788	109,987
35852 —	Unitary air-conditioners	63	(X)	4,339,428	(X)	3,936,501
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)	242,352	485,615	206,800	420,035
	Horizontal	(X)	212,685	400,542	176,050	341,845
35852 31	Under 27,000 Btuh	22	16,598	16,847	14,077	14,757
35852 32	27,000 to 32,999 Btuh	20	29,777	32,495	25,320	26,229
35852 33	33,000 to 53,999 Btuh	23	90,110	79,146	69,076	61,296
35852 34	54,000 to 64,999 Btuh	20	28,811	38,466	25,168	35,362
35852 35	65,000 to 96,999 Btuh	15	14,884	34,452	12,859	30,914
35852 36	97,000 to 134,999 Btuh	11	14,048	38,795	11,956	33,195
35852 37	135,000 to 184,999 Btuh	11	8,198	34,199	9,224	38,670
35852 38	185,000 to 249,999 Btuh	11	4,973	34,202	4,311	27,048
35852 39	250,000 to 319,999 Btuh	10	2,847	25,807	2,111	20,895
35852 40	320,000 to 379,999 Btuh	10	559	8,900	463	6,856
35852 41	380,000 Btuh and over	9	1,880	57,233	1,485	46,623
	Other than horizontal	(X)	29,667	85,073	30,750	78,190
35852 4A	Under 54,000 Btuh	6	(D)	(D)	(D)	(D)
35852 44	54,000 to 64,999 Btuh	5	4,855	11,057	5,275	10,987
35852 45	65,000 to 96,999 Btuh	4	603	2,248	1,050	3,274
35852 46	97,000 to 134,999 Btuh	4	(D)	(D)	(D)	(D)
35852 47	135,000 to 184,999 Btuh	4	781	5,126	1,104	5,479
35852 4T	185,000 Btuh and over	6	1,007	29,433	1,263	27,644
	Year-round air-conditioners, single package and remote-condenser type (except heat pumps) . .	(X)	493,405	1,020,375	426,946	842,423
35852 50	Under 33,000 Btuh	20	129,123	130,212	96,313	96,407
35852 51	33,000 to 38,999 Btuh	21	96,340	101,373	104,396	104,569
35852 52	39,000 to 43,999 Btuh	13	27,377	30,482	24,649	25,952
35852 53	44,000 to 53,999 Btuh	16	51,118	67,656	48,282	58,383
35852 54	54,000 to 64,999 Btuh	19	69,683	108,948	63,099	93,443
35852 55	65,000 to 134,999 Btuh	13	77,367	220,218	53,690	150,457

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 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
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	22,695	117,849	21,171	108,200
35852 57	185,000 to 249,999 Btuh	14	10,883	84,444	8,796	68,160
35852 58	250,000 to 319,999 Btuh	11	4,921	49,920	3,186	35,515
35852 59	320,000 to 379,999 Btuh	9	1,120	18,621	1,004	16,068
35852 60	380,000 to 539,999 Btuh	9	1,296	26,636	1,122	23,543
35852 61	540,000 to 639,999 Btuh	10	566	18,234	417	14,968
35852 62	640,000 Btuh and over	10	916	45,782	821	46,758
	Air source heat pumps (except room air-conditioners)	(X)	996,185	773,511	875,899	686,641
	Single package:					
35852 63	Under 27,000 Btuh	16	24,331	20,416	20,973	17,631
35852 64	27,000 to 41,999 Btuh	15	71,877	74,033	58,511	59,291
35852 65	42,000 to 64,999 Btuh	15	43,778	56,609	37,464	48,429
35852 66	65,000 Btuh and over	7	8,560	32,426	8,430	29,960
	Split system:					
35852 67	Under 27,000 Btuh	16	254,809	129,333	212,159	110,325
35852 68	27,000 to 41,999 Btuh	16	402,655	278,959	361,108	248,326
35852 69	42,000 to 64,999 Btuh	15	178,318	157,599	164,972	147,138
35852 70	65,000 Btuh and over	7	11,857	24,136	12,282	25,541
35852 71	Water source heat pumps (except room air-conditioners)	13	99,321	105,771	105,159	111,513
	Split system air-conditioning condensing units ..	(X)	3,237,693	1,617,281	2,623,039	1,348,018
35852 72	Under 22,000 Btuh	15	243,654	77,320	189,620	62,871
35852 73	22,000 to 26,999 Btuh	19	673,926	237,369	513,472	187,615
35852 74	27,000 to 32,999 Btuh	19	648,510	269,193	500,991	213,481
35852 75	33,000 to 38,999 Btuh	18	742,293	347,331	614,865	291,495
35852 76	39,000 to 43,999 Btuh	18	267,208	147,462	220,894	121,681
35852 77	44,000 to 53,999 Btuh	18	346,753	209,635	297,587	178,268
35852 78	54,000 to 64,999 Btuh	16	266,466	188,539	237,885	164,711
35852 79	65,000 to 96,999 Btuh	8	17,732	23,651	17,542	23,447
35852 80	97,000 to 134,999 Btuh	8	13,384	25,687	13,332	25,060
35852 81	135,000 to 184,999 Btuh	7	8,478	25,546	8,446	24,533
35852 82	185,000 to 249,999 Btuh	7	3,388	14,240	3,380	13,784
35852 83	250,000 to 319,999 Btuh	5	1,519	8,311	1,351	7,122
35852 84	320,000 to 379,999 Btuh	5	1,529	9,811	1,407	9,017
35852 85	380,000 to 539,999 Btuh	5	1,212	10,539	1,156	9,527
35852 86	540,000 to 639,999 Btuh	4	629	6,590	434	4,492
35852 87	640,000 Btuh and over	4	1,012	16,057	677	10,914
	Split system air-conditioning coils	(X)	2,728,621	520,019	2,373,952	465,036
35852 88	With blower	17	1,164,039	323,441	1,020,347	290,244
35852 89	Without blower	15	1,564,582	196,578	1,353,605	174,792
35853 43	Commercial refrigeration equipment, mechanical drinking water coolers	4	982,905	220,257	824,588	182,893
35854 —	Compressors and compressor units ^{3 4}	37	(X)	3,717,458	(X)	3,101,174
	All refrigerants (except ammonia)	(X)	34,913,140	3,637,192	29,832,903	3,037,529
	Hermetic-type motor compressors	(X)	19,646,740	2,049,384	17,018,501	1,776,724
35854 11	Under 3 hp	12	15,480,795	1,115,298	13,241,728	922,341
35854 23	3 to 10 hp	13	4,077,895	765,625	3,694,476	688,676
35854 30	15 hp	11	20,827	26,060	20,072	24,977
35854 32	20 hp	11	19,608	28,086	19,669	28,763
35854 34	25 hp	12	12,858	21,104	12,684	21,319
35854 36	30 hp	12	10,271	20,185	8,377	18,919
35854 39	40 hp and 50 hp AND	10				
35854 42	60 hp	9	20,595	50,486	17,279	47,307
35854 46	75 hp AND	9				
35854 49	100 hp and over	5	3,891	22,540	4,216	24,422
35854 52	Open-type compressors (with or without motor—all sizes)	14	68,888	36,429	65,016	33,447
35854 53	Automotive air-conditioning compressors (open-type, with or without motor) AND	8				
35854 54	Screw type	4	15,197,512	1,551,379	12,749,386	1,227,358
35854 58	Ammonia refrigerants, all types	7	2,502	80,266	1,930	63,645

See footnotes at end of table.

Table 7. Quantity and Value of Shipments of Refrigeration, Air-Conditioning, and Warm Air Heating Equipment: 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
35855 —	Condensing units, refrigeration (complete).....	28	542,390	276,691	459,490	'239,720
	Air-cooled hermetic-type	(X)	523,939	177,910	440,322	147,275
35855 23	1 hp and under	15	444,671	91,282	365,932	68,992
35855 25	1.5 hp	12	18,833	10,942	21,404	12,166
35855 28	2 hp and 2.5 hp	11	18,591	15,196	16,349	13,102
35855 30	3 hp	13	22,428	21,721	19,038	17,794
35855 32	Over 3 hp, but under 15 hp	14	19,416	38,769	17,599	35,221
35855 44	Water-cooled hermetic-type, under 15 hp	4	6,592	4,420	8,405	6,286
	Water or air-cooled hermetic-type	(X)	4,122	54,563	3,430	49,089
35855 61	15 hp	9	2,014	25,667	1,533	19,936
35855 62	20 hp	7	869	7,478	654	5,423
35855 63	25 hp	6	336	2,876	291	2,793
35855 64	30 hp	6	(D)	(D)	(D)	(D)
35855 70	40 hp	5	566	13,511	'711	'16,625
35855 80	Water or air-cooled open-type (all sizes)	9	(D)	(D)	(D)	(D)
35856 —	Room air-conditioners and dehumidifiers	17	(X)	1,105,844	(X)	'824,477
35856 11	Electrically operated dehumidifiers, mechanically refrigerated, self-contained	10	(X)	127,610	(X)	107,424
	Room air-conditioners	(X)	3,265,427	978,234	2,234,205	'717,053
35856 31	5,999 Btuh and under	6	658,107	123,571	422,845	'103,407
35856 34	6,000 to 6,999 Btuh	7	205,141	49,348	192,923	46,817
35856 38	7,000 to 7,999 Btuh	5	343,566	86,826	157,277	50,524
35856 42	8,000 to 8,999 Btuh	5	257,761	68,318	'212,284	'60,263
35856 46	9,000 to 9,999 Btuh AND	5				
35856 52	10,000 to 10,999 Btuh	6	460,269	130,061	319,791	100,261
35856 56	11,000 to 12,999 Btuh	8	519,028	162,806	334,934	104,629
35856 61	13,000 to 14,999 Btuh	7	66,181	29,125	77,873	27,559
35856 63	15,000 to 16,999 Btuh	7	51,785	21,783	33,646	17,772
35856 65	17,000 to 19,999 Btuh	7	414,527	158,026	282,407	112,226
35856 67	20,000 to 22,999 Btuh	5	35,730	17,216	'38,760	'16,492
35856 68	23,000 to 25,999 Btuh	8	210,150	96,173	131,960	50,188
35856 69	26,000 Btuh and over	9	43,182	34,981	29,505	26,915
3585C pt.	Nonelectric warm air furnaces and dehumidifiers	(X)	(X)	1,425,935	(X)	1,334,215
	Oil, forced air:					
3585C 04	150,000 Btu bonnet output and under	21	250,553	137,470	238,111	129,838
3585C 13	150,000 Btu bonnet output and over	17	8,234	11,142	6,889	10,130
	Gas, forced air:					
3585C 07	150,000 Btu bonnet output and under	24	2,672,615	1,163,775	2,443,929	1,096,230
3585C 08	150,001-400,000 Btu bonnet output	16	51,034	20,837	'9,145	'14,131
3585C 09	Over 400,000 Btu bonnet output	10	1,654	27,517	1,555	'23,849
3585C 79	All other nonelectric warm air furnaces	8	1,465	1,847	'1,069	'1,430
3585C 20	Humidifiers (attachments to warm air furnaces), all types, including central systems and self-contained (except portable humidifiers)	21	579,233	63,347	544,332	58,607

¹Defined 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.

²Figures exclude systems assembled from purchased components and installed at passenger automobile assembly lines. The values are understated for some systems because of the exclusion of compressors.

³Represents only those compressors and compressor units produced and shipped separately, including interplant transfers.

⁴Includes units shipped for household refrigerators.

Btuh (British thermal units-per hour). D Data withheld to avoid disclosing figures for individual companies. pt. Partial. 'Revised by 5 percent or more from previously published figures. X Not applicable.

Table 8. Quantity of Assembled Compressor Bodies: 1994 and 1993

[Quantity in number of units]

Product description	Number of companies	1994	1993
Compressor bodies ^{1 2}	(X)	30,751,302	26,570,721
All refrigerants (except ammonia)	(X)	30,750,613	26,569,460
Other than automotive air-conditioning	(X)	19,806,742	17,157,581
1/4 hp and under	5	5,420,787	5,087,101
1/3 hp and 1/2 hp	6	2,061,561	1,740,156
3/4 hp and 1 hp	6	1,802,983	1,638,296
1-1/2 hp	7	939,592	691,554
2 hp	8	4,354,485	3,151,151
3 hp	12	2,514,514	2,412,823
4 hp	6	715,340	637,464
5 hp	8	1,200,928	1,071,182
7-1/2 hp	11	308,503	344,016
10 hp	12	265,317	199,972
15 hp	10	108,077	76,312
20 hp	9	31,100	29,272
25 hp	11	20,944	20,854
30 hp	11	20,618	19,727
40 hp	11	26,301	24,589
50 hp AND	9		
60 hp	8	9,098	6,729
75 hp	9	1,889	1,879
100 hp and over	7	4,705	4,504
Automotive air-conditioning, including passenger automobiles, trucks, buses, agriculture, and construction equipment	4	(D)	(D)
Ammonia refrigerants	5	(D)	(D)

¹Includes units for household refrigerators.

²Represents the 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).

D Data withheld to avoid disclosing figures for individual companies.
X Not applicable.

[†]Revised by 5 percent or more from previously published figures.

Table 9. **Shipments, Exports, Imports, and Apparent Consumption of Air-Conditioning and Refrigeration Equipment: 1994 and 1993**

[Value in thousands of dollars]

Product code ¹	Product description	Manufacturers' shipments (value f.o.b. plant)	Export of domestic merchandise ¹		Imports for consumption ^{4 5}
			Value at port ²	Estimated producers' value ³	
1994					
35851 —	Heat transfer equipment, excluding room and unitary air-conditioners and dehumidifiers.....	5,508,938	494,915	371,285	41,096
35852 —	Unitary air-conditioners	4,339,428	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.....	3,717,458	711,776	533,974	722,336
35855 —	Condensing units, all refrigerants	276,691	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.....	1,425,935	(NA)	(NA)	(NA)
1993					
35851 —	Heat transfer equipment, excluding room and unitary air-conditioners and dehumidifiers.....	4,951,008	685,229	514,059	103,426
35852 —	Unitary air-conditioners	3,936,501	718,097	538,716	179,020
35853 43	Commercial refrigeration equipment, mechanical drinking water coolers.....	182,893	28,566	21,430	493
35854 —	Compressors and compressor units, all refrigerants.....	3,101,174	654,034	490,656	656,979
35855 —	Condensing units, all refrigerants	239,720	17,608	13,210	10,260
35856 —	Room air-conditioners and dehumidifiers.....	824,477	92,028	69,039	175,834
3585C pt.	Nonelectric warm air furnaces and humidifiers.....	1,334,215	(NA)	(NA)	(NA)

¹Source: Bureau of the Census report EM545, *U.S. Exports*.²This dollar value represents the c.i.f. (cost, insurance, and freight) value at the port of export.³These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors are based on data for 1989 that are published in *Exports from Manufacturing Establishments*, AR89-1, appendix B. The adjustment factor for this report is 0.7502.⁴Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. These figures include both import value and duty value.⁵Represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus U.S. import duties.NA Not available. pt. partial. [†]Revised by 5 percent or more from previously published figures.**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.

9.4 FLUID POWER PRODUCTS, INCLUDING AEROSPACE

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 503 companies. This survey does not include products produced and consumed within the same establishment.

SUMMARY OF FINDINGS

Shipments of fluid power products, including aerospace, in 1994 totaled \$7,737.5 million. The 1994 total includes hydraulic and pneumatic valves, \$1,978.6 million; fittings and assemblies for tubing and hose, excluding plumbers' brass goods, \$1,866.5 million; hydraulic and pneumatic cylinders, actuators, accumulators, cushions, and nonvehicular shock absorbers, \$1,844.0 million; compressed air and gas dryers, and lubricators, \$66.1 million; filters of hydraulic and pneumatic fluid power systems, \$390.8 million; and hydraulic and pneumatic pumps, motors, and hydrostatic transmission components, \$1,591.6 million.

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 non-linear 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 plastic, 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: 1994 and 1993

[Value in thousands of dollars]

Product code	Product description	1994	1993
	Fluid power products, including aerospace	7,737,510	¹ 6,742,246
3492C	Nonaerospace-type hydraulic directional control valves	396,185	² 291,738
3492D	Nonaerospace-type hydraulic valves (except directional control)	584,990	² 473,168
3492E	Nonaerospace-type pneumatic directional control valves	362,295	² 283,493
3492F	Nonaerospace-type pneumatic valves (except directional control)	162,840	¹ 134,893
3492A	Aerospace-type hydraulic fluid power valves	243,129	283,697
3492B	Aerospace-type pneumatic fluid power valves	41,218	¹ 72,265
3492G	Parts for fluid power valves	187,901	¹ 151,017
3492J	Nonaerospace-type flared (metal) fittings and couplings for, and assemblies of tubing used in fluid power transfer systems	238,356	¹ 197,305
3492K	Nonaerospace-type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems	366,049	¹ 320,246
3492M	Nonaerospace-type hydraulic and pneumatic fittings and couplings for hose, and manifolds	651,550	488,870
3492N	Nonaerospace-type hydraulic and pneumatic assemblies of hose	287,661	² 243,245
3492H	Aerospace-type hydraulic and pneumatic hose or tube end fittings and assemblies and manifolds	322,851	303,572
35694	Nonaerospace-type filters for hydraulic fluid power systems	254,405	¹ 231,303
35695	Nonaerospace-type filters for pneumatic fluid power systems	90,253	² 83,806
35696	Aerospace-type hydraulic and pneumatic filters	46,101	66,124
35699 pt.	Compressed air and gas dryers, and lubricators	66,070	(NA)
35934	Nonaerospace-type hydraulic fluid power cylinders and actuators, linear and rotary	946,301	² 786,220
35935	Nonaerospace-type pneumatic fluid power cylinders and actuators, linear and rotary	308,128	² 288,572
35939	Parts for nonaerospace-type hydraulic and pneumatic fluid power cylinders, actuators, and related items, n.e.c.	201,832	² 197,195
35932	Aerospace-type fluid power cylinders and actuators, hydraulic and pneumatic	387,776	464,001
35943	Nonaerospace-type reciprocating pumps	340,770	² 288,262
35944	Nonaerospace-type rotary and other fluid power pumps	418,207	¹ 339,491
35945	Nonaerospace-type fluid power motors	387,193	² 325,118
35946	Aerospace-type fluid power pumps and motors	98,116	¹ 107,894
35949	Parts for fluid power pumps, motors, and hydrostatic transmissions	347,333	¹ 320,751

¹Total does not include the product shipments for "Compressed air and gas dryers, and lubricators" (35699 pt.).

²Due to the change in product detail between 1993 and 1994, the 1993 product code totals were derived from the combination of reported updates and imputation.

NA Not available. pt. Partial. ¹Revised by 5 percent or more from previously published figures.

Table 11. Manufacturer's Shipments of Fluid Power Products, Including Aerospace, by Type: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1994			1993		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
3492C —	Fluid power products, including aerospace	(X)	(X)	7,737,510	(X)	(X)	¹ 6,742,246
	Nonaerospace-type hydraulic directional control valves	(X)	3,895,832	396,185	(X)	(NA)	² 291,738
	Manual:						
3492C 22	3- and 4-way monoblock	27	911,314	67,137	(NA)	(NA)	(NA)
3492C 24	3- and 4-way sectional	23	832,408	147,010	(NA)	(NA)	(NA)
	Solenoid:						
3492C 26	2-way types	17	224,137	23,758	(NA)	(NA)	(NA)
3492C 28	3- and 4-way types	18	793,662	87,767	(NA)	(NA)	(NA)
3492C 25	Other directional control	31	1,134,311	70,513	28	1,251,911	43,673
3492D —	Nonaerospace-type hydraulic valves (except directional control)	(X)	13,113,454	584,990	(X)	(NA)	² 473,168
	Pressure control:						
3492D 31	Relief valves	24	1,504,837	33,356	(NA)	(NA)	(NA)
3492D 33	Other, including load sensing and manual types	19	1,055,332	27,964	(NA)	(NA)	(NA)
	Flow control:						
3492D 34	Manual types	21	744,220	29,740	(NA)	(NA)	(NA)
3492D 35	Other flow control valves	23	2,213,180	44,191	(NA)	(NA)	(NA)
3492D 38	Cartridge valves, all types	19	5,336,363	147,039	(NA)	(NA)	(NA)
	Electrohydraulic valves:						
3492D 49	Pilot-operated, torque motor servovalves	14	130,510	65,960	13	137,583	49,323
3492D 50	Other types, including proportional	11	555,311	49,561	7	(³)	18,255
3492D 48	Other nonaerospace-type hydraulic valves, including stack and logic	22	1,573,701	187,179	26	³ 1,752,432	151,609
3492E —	Nonaerospace-type pneumatic directional control valves	(X)	10,474,181	362,295	(X)	(NA)	² 283,493
3492E 51	Manual	39	2,775,896	79,530	34	2,167,248	42,665
	Solenoid:						
3492E 54	Under 1/8 inch port diameter	7	172,850	7,747	(NA)	(NA)	(NA)
	1/8 inch up to and including 1/4 inch port diameter:						
3492E 56	3-way types	17	1,159,939	32,380	(NA)	(NA)	(NA)
3492E 57	4-way types	19	1,138,385	45,613	(NA)	(NA)	(NA)
	Over 1/4 inch port diameter:						
3492E 58	3-way types	14	598,496	33,810	(NA)	(NA)	(NA)
3492E 59	4-way types	16	2,254,285	109,549	(NA)	(NA)	(NA)
3492E 55	Mechanical, remote pilot, and all other types	28	2,374,330	53,666	28	2,895,230	40,764
3492F —	Nonaerospace-type pneumatic valves (except directional control)	(X)	12,135,459	162,840	(X)	10,641,024	134,893
3492F 61	Filter-regulator combination units, integral types	14	854,793	18,357	15	823,977	16,195
3492F 62	Other FR's and filter-regulator-lubricator combo units	15	268,415	12,568	12	260,403	11,359
3492F 64	Regulators, sold separately	21	4,239,023	68,561	20	4,046,685	62,447
3492F 65	Flow control valves	31	2,643,951	32,216	28	3,001,863	26,903
3492F 69	Check, shuttle, exhaust, needle, and all other types	31	4,129,277	31,138	20	2,508,096	17,989
3492A —	Aerospace-type hydraulic fluid power valves	(X)	841,601	243,129	(X)	1,078,407	283,697
3492A 71	Manually or mechanically operated	17	(D)	57,925	18	(D)	71,506
3492A 72	Solenoid operated	25	51,819	44,003	24	52,549	52,577
3492A 73	Motor operated	6	(D)	4,594	7	(D)	7,910
3492A 74	Electrohydraulic servovalves	7	61,965	72,335	7	74,096	61,806
3492A 75	Flow, pressure, and other types of hydraulic valves	22	252,611	64,272	28	393,706	89,898
3492B —	Aerospace-type pneumatic fluid power valves	(X)	(D)	41,218	(X)	282,331	72,265
3492B 79	Pneumatic valves, all types	19	(D)	41,218	22	282,331	72,265
3492G —	Parts for fluid power valves	(X)	(X)	187,901	(X)	(X)	151,017
3492G 96	Parts for nonaerospace-type hydraulic and pneumatic valves, sold separately	62	(X)	154,003	58	(X)	113,296
3492G 98	Parts for aerospace-type hydraulic and pneumatic valves, sold separately	23	(X)	33,898	25	(X)	37,721
3492J —	Nonaerospace-type flared (metal) fittings and couplings for, and assemblies of tubing used in fluid power transfer systems ⁴	(X)	(X)	238,356	(X)	(X)	197,305
	Flared fittings:						
3492J 11	Brass and bronze (SAE 45 degrees and 37 degrees) ⁴	9	(D)	(⁵)	9	(D)	(⁵)
3492J 13	Carbon steel (JIC 37 degrees) ⁴	12	(D)	97,716	12	(D)	92,212
3492J 15	Other, including alloy steel ⁴	13	(D)	581,084	13	(D)	⁵ 65,555
3492J 41	Assemblies of tubing ⁴	10	(X)	40,583	10	(X)	23,215
3492J 42	Assemblies of tubing and hose ⁴	6	(X)	18,973	6	(X)	16,323
3492K —	Nonaerospace-type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems ⁴	(X)	6,092	366,049	(X)	4,130	320,246
	Metal types:						
3492K 21	Brass and bronze ⁴	15	(D)	130,278	16	(D)	118,856
3492K 23	Carbon steel ⁴	15	(D)	69,432	15	(D)	57,126
3492K 24	Stainless steel ⁴	17	(D)	151,576	16	-	135,015
3492K 28	Other, including alloy steel ⁴	7	-	7,370	8	-	6,972
3492K 38	Nonmetal fittings, including plastic ⁴	10	(D)	7,393	8	-	2,277

See footnotes at end of table.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace, by Type: 1994 and 1993—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1994			1993		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
3492M —	Nonaerospace-type hydraulic and pneumatic fittings and couplings for hose, and manifolds . . .	(X)	(X)	651,550	(X)	(X)	488,870
3492M 44	Permanent hose end fittings (crimped and swaged)	22	(X)	263,935	23	(X)	187,554
3492M 46	Hydraulic and pneumatic reusable end fittings	30	(X)	112,301	26	(X)	90,071
3492M 47	Hydraulic quick connect and disconnect couplings	18	(X)	106,616	19	(X)	92,080
3492M 48	Pneumatic quick connect and disconnect couplings	24	(X)	67,621	23	(X)	64,676
3492M 49	Manifolds and manifold assemblies for fluid power systems	20	(X)	30,830	17	(X)	22,238
3492M 50	All other, including steel adaptor, swivel, rotating, and extension fittings	21	(X)	70,247	18	(X)	32,251
3492N —	Nonaerospace-type hydraulic and pneumatic assemblies of hose	(X)	(X)	287,661	(X)	(X)	243,245
3492N 51	Assemblies with permanent end fittings	25	(X)	247,256	24	(X)	206,364
3492N 53	Assemblies with reusable end fittings	11	(X)	40,405	10	(X)	36,881
3492H —	Aerospace-type hydraulic and pneumatic hose or tube end fittings and assemblies and manifolds	(X)	(X)	322,851	(X)	(X)	303,572
3492H 61	Assemblies of hose and/or tubing	13	(X)	68,592	10	(X)	47,490
3492H 62	Quick connect, rotating, swivel, and extension fittings	10	(X)	105,322	9	(X)	101,962
3492H 63	Manifolds for aerospace hydraulic systems	7	(X)	33,814	8	(X)	43,968
3492H 69	Aerospace hose and tube fittings, n.e.c.	17	(X)	115,123	17	(X)	110,152
35694 —	Nonaerospace-type filters for hydraulic fluid power systems	(X)	(X)	254,405	(X)	(X)	231,303
	Hydraulic fluid filter assemblies, with or without filter element installed:						
35694 11	Low pressure (below 301 psi)	29	944,858	33,027	26	(NA)	30,209
35694 12	Medium pressure (301 to 2,999 psi)	18	623,952	19,237	17	(NA)	16,666
35694 14	High pressure (3,000 psi and above)	14	116,637	14,628	12	(NA)	12,942
	Filter replacement elements:						
35694 15	Reusable (cleanable) type	18	564,830	10,714	17	(NA)	9,024
35694 17	Nonreusable type	28	14,792,819	147,672	23	(NA)	133,894
35694 19	Strainers and separators, filter parts, and accessories	25	(X)	29,127	23	(X)	28,568
35695 —	Nonaerospace-type filters for pneumatic fluid power systems	(X)	(X)	90,253	(X)	(X)	83,806
	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)	37,955	(NA)	(X)	(NA)
35695 34	Other types, including elements sold separately	11	(X)	29,097	(NA)	(X)	(NA)
35695 39	Air exhaust mufflers, diffusers, filter parts, and air preparation accessories	19	(X)	23,201	15	(X)	18,614
35696 —	Aerospace-type hydraulic and pneumatic filters	(X)	(X)	46,101	(X)	(X)	66,124
35696 51	Hydraulic	7	(X)	646,101	8	(X)	66,124
35696 53	Pneumatic	1	(X)	(⁶)	1	(X)	(⁶)
35699 pt.	Compressed air and gas dryers, and lubricators	(X)	516,192	66,070	(X)	(NA)	(NA)
	Compressed air and gas dryers:						
35699 41	Refrigerated dryers	4	(D)	(D)	(NA)	(NA)	(NA)
35699 42	Dessicant dryers	5	5,049	22,575	(NA)	(NA)	(NA)
35699 43	Deliquescent dryers	-	-	-	(NA)	(NA)	(NA)
35699 44	Other compressed air and gas dryers	3	(D)	(D)	(NA)	(NA)	(NA)
35699 13	Lubricators for pneumatic systems, sold separately	8	481,164	10,266	(NA)	(NA)	(NA)
35934 —	Nonaerospace-type hydraulic fluid power cylinders and actuators, linear and rotary	(X)	3,709,238	946,301	(X)	(NA)	786,220
	Hydraulic cylinders, excluding electrohydraulic:						
	Tie-rod types:						
	Standard NFPA and JIC tie-rod types:						
35934 04	Less than 1,500 psi	24	189,753	59,265	(NA)	(NA)	(NA)
35934 06	1,500 to 3,000 psi	22	368,582	79,693	(NA)	(NA)	(NA)
35934 08	Greater than 3,000 psi	7	(⁷)	(⁷)	(NA)	(NA)	(NA)
35934 10	Other tie-rod types	15	308,661	32,894	9	467,693	39,877
35934 12	Threaded/weld-fused combination	50	2,313,917	505,871	(NA)	(NA)	(NA)
35934 13	Telescoping	23	177,921	98,713	24	87,789	71,245
35934 15	Mill type	14	18,425	16,334	12	(D)	36,683
35934 16	Other, including those threaded at both ends	25	277,713	98,630	20	191,501	70,400
35934 18	Electrohydraulic types	5	5,897	12,912	4	4,028	9,174
35934 25	Hydraulic rotary actuators	16	48,369	41,989	17	49,841	39,902

See footnotes at end of table.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace, by Type: 1994 and 1993—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1994			1993		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
35935 —	Nonaerospace-type pneumatic fluid power cylinders and actuators, linear and rotary	(X)	5,610,041	308,128	(X)	(NA)	² 288,572
	Tie-rod types:						
35935 23	Steel	16	230,783	59,754	(NA)	(NA)	(NA)
	Aluminum:						
35935 24	Less than 1-1/2 inch bore size	7	(D)	1,571	(NA)	(NA)	(NA)
35935 25	1-1/2 inch bore size and over	22	273,007	39,826	(NA)	(NA)	(NA)
35935 27	Rodless cylinders	11	(D)	24,759	(NA)	(NA)	(NA)
	Other pneumatic cylinders:						
35935 28	Less than 1-1/2 inch bore size	22	3,174,188	58,891	(NA)	(NA)	(NA)
35935 29	1-1/2 inch bore size and over	32	1,704,594	96,842	(NA)	(NA)	(NA)
35935 26	Pneumatic rotary actuators	16	96,006	26,485	14	103,390	¹ 24,328
35939	Parts for nonaerospace-type hydraulic and pneumatic fluid power cylinders, actuators, and related items, n.e.c.	(X)	4,288,117	201,832	(X)	(NA)	² 197,195
35939 31	Accumulators (bladder, piston, and other types)	27	110,163	40,152	19	¹ 69,742	¹ 28,462
35939 34	Shock absorbers, not for vehicle suspension, and cushions (hydraulic and pneumatic)	16	1,519,335	42,812	(NA)	(NA)	(NA)
35939 36	Reservoirs, intensifiers, and other devices for fluid energy absorption and/or storage	9	(⁸)	1,935	(NA)	(NA)	(NA)
35939 96	Parts for nonaerospace-type hydraulic and pneumatic cylinders, actuators, accumulators, cushions, and nonvehicular shock absorbers, sold separately	63	⁹ 2,658,619	116,933	61	2,055,710	109,275
35932 —	Aerospace-type fluid power cylinders and actuators, hydraulic and pneumatic	(X)	(X)	387,776	(X)	(X)	464,001
	Hydraulic servo-actuator assemblies (linear and rotary):						
35932 51	Mechanical input	5	21,673	91,953	6	24,885	96,503
35932 52	Electrical input	6	10,641	130,587	7	10,168	122,269
35932 55	Combination input	4	(D)	(D)	5	(D)	(D)
	Hydraulic utility actuators:						
35932 61	Linear actuators (cylinders)	11	12,219	32,454	14	¹ 14,476	¹ 37,866
35932 62	Rotary actuators (limited rotation)	3	(D)	(D)	2	(D)	(D)
35932 71	Shock absorbers, snubbers, and cushions, all types, excluding oleo strut assemblies	8	(D)	10,588	7	(D)	12,646
35932 72	Pneumatic actuators (linear and rotary)	6	(D)	(D)	6	(D)	(D)
35932 73	Accumulators (bladder, piston, and other types)	10	9,904	7,675	12	30,545	13,092
35932 74	Reservoirs, intensifiers, and other devices for fluid energy absorption and/or storage	5	(D)	8,378	5	(D)	12,361
35932 79	Other aerospace-type fluid power cylinders, rotary actuators, cushions, and related items, n.e.c.	6	(X)	2,859	7	(X)	3,610
35939 98	Parts for aerospace-type hydraulic and pneumatic cylinders, actuators, accumulators, cushions, and related items, sold separately	12	(X)	25,876	12	(X)	¹ 45,476
35943 —	Nonaerospace-type reciprocating pumps	(X)	1,158,507	340,770	(X)	(NA)	² 288,262
	Axial piston:						
	Variable displacement types:						
35943 15	Closed loop	14	755,780	227,091	13	¹ 502,144	¹ 169,530
35943 27	Open loop	13	155,424	76,776	13	143,027	66,417
35943 37	Fixed displacement types	8	⁹ 247,303	⁹ 36,903	(NA)	(NA)	(NA)
35943 36	Radial piston types	3	(⁹)	(⁹)	(NA)	(NA)	(NA)
35944 —	Nonaerospace-type rotary and other fluid power pumps	(X)	2,660,189	418,207	(X)	¹ 1,943,362	¹ 339,491
	Fixed displacement, open and closed loop:						
35944 30	Internal gear type, including gerotors	16	886,081	96,814	18	¹ 612,945	¹ 85,429
35944 34	External gear type	16	1,365,201	206,358	15	¹ 1,001,850	¹ 172,206
35944 35	Vane type	4	(¹⁰)	(¹⁰)	4	(¹⁰)	(¹⁰)
35944 38	Variable displacement types	9	¹⁰ 408,907	¹⁰ 115,035	4	¹⁰ 328,567	¹⁰ 81,856
35945 —	Nonaerospace-type fluid power motors	(X)	(X)	387,193	(X)	(X)	² 325,118
35945 40	Pneumatic (air) motors	5	(D)	(D)	5	(D)	(D)
	Hydraulic motors:						
	Gear type:						
35945 52	Internal types, excluding gerotors	7	(D)	(D)	8	¹ 427,174	¹ 47,519
35945 56	Gerotors and gerolors	6	680,066	110,720	(NA)	(NA)	(NA)
35945 54	External types	10	105,241	20,087	8	63,507	12,069
35945 42	Vane types, fixed and variable	6	(D)	7,092	6	(D)	¹ 8,835
35945 43	Radial piston types, fixed and variable	4	(D)	(D)	4	(D)	(D)
	Axial piston type:						
35945 44	Fixed displacement	11	422,640	70,081	8	¹ 276,258	45,893
35944 45	Variable displacement	8	(D)	47,917	7	(D)	¹ 34,735
35944 50	Prime movers shipped with pumps or sold separately	7	(X)	37,480	6	(X)	(D)

See footnotes at end of table.

Table 11. **Manufacturer's Shipments of Fluid Power Products, Including Aerospace, by Type: 1994 and 1993—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	1994			1993		
		Number of companies	Quantity	Value	Number of companies	Quantity	Value
35946 —	Aerospace-type fluid power pumps and motors . .	(X)	70,961	98,116	(X)	'27,489	'107,894
	Hydraulic pumps:						
35946 71	Fixed and variable displacement types.	11	16,012	47,880	9	'12,957	43,897
35946 72	Pump/electric motor assemblies, fixed, and variable displacement types.	12	23,563	22,743	8	'5,552	'17,972
35946 73	Other pump packages, n.e.c.	10	25,097	13,653	6	5,661	3,635
	Motors:						
35946 83	Pneumatic (air) motors and motor packages	-	-	-	1	-	'9,556
35946 86	Hydraulic motors, fixed and variable displacement types.	4	(¹¹)	(¹¹)	2	(¹¹)	(¹¹)
35946 87	Hydraulic motor packages, including motor/gearbox, motor/valve, motor/generator, and similar combination units	4	¹¹ 6,289	¹¹ 13,840	6	¹¹ 3,319	¹¹ '32,834
35949 —	Parts for fluid power pumps, motors, and hydrostatic transmissions.	(X)	(X)	347,333	(X)	(X)	'320,751
	Hydraulic:						
35949 91	Nonaerospace	34	(X)	311,493	35	(X)	271,626
35949 93	Aerospace	7	(X)	25,147	5	(X)	(D)
	Pneumatic:						
35949 95	Nonaerospace	4	(X)	(D)	2	(X)	(D)
35949 97	Aerospace	3	(X)	(D)	4	(X)	(D)

¹Total does not include product shipments for "Compressed air and gas dryers, and lubricators" (35699 pt.).
²Due to the change in product detail between 1993 and 1994, the 1993 product class totals were derived from the combination of reported updates and imputation.
³Product codes 3492D 50 and 3492D 48 are combined to avoid disclosing figures for individual companies.
⁴Quantity reported in thousands of pounds.
⁵Product codes 3492J 11 and 3492J 15 are combined to avoid disclosing figures for individual companies.
⁶Product codes 35696 51 and 35696 53 are combined to avoid disclosing figures for individual companies.
⁷Product codes 35934 08 and 35934 16 are combined to avoid disclosing figures for individual companies.
⁸Product codes 35939 36 and 35939 96 are combined to avoid disclosing figures for individual companies.
⁹Product codes 35943 37 and 35943 36 are combined to avoid disclosing figures for individual companies.
¹⁰Product codes 35944 35 and 35944 38 are combined to avoid disclosing figures for individual companies.
¹¹Product codes 35946 86 and 35946 87 are combined to avoid disclosing figures for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available. n.e.c. Not elsewhere classified. pt. Partial.
 'Revised by 5 percent or more from previously published figures. X Not applicable.

Table 12. Shipments, Exports, and Imports of Fluid Power Products: 1994

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

Product code	Product description	Manufacturers' shipments		Export shipments ¹		Import shipments ²	
		Quantity	Value	Quantity	Value	Quantity	Value
3492A,C, D	Hydraulic fluid power valves	17,850,887	1,224,304	2,697,356	144,797	4,637,301	95,001
3492B,E, F	Pneumatic fluid power valves	(D)	566,353	(X)	71,502	(X)	79,169
3492G	Parts for fluid power valves; hydraulic, pneumatic, and whether or not aerospace.	(X)	187,901	(X)	43,285	(X)	30,361
35932 pt., 35934 pt.	Hydraulic cylinders and hydraulic linear actuators (except electrohydraulic types)	3,673,088	936,766	273,155	62,613	1,557,476	125,152
35935 pt.	Pneumatic cylinders (tie-rod types)	(D)	101,151	(X)	894	(X)	181
35935 pt.	Pneumatic cylinders (except tie-rod types)	(D)	180,492	(X)	19,485	(X)	21,386
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)	132,868	(X)	47,568	(X)	59,442
35945 pt.	Pneumatic (air) motors and motor packages, whether or not aerospace	(D)	31,884	(X)	10,475	(X)	1,252
35945 pt., 35946 pt.	Hydraulic motors, whether or not aerospace	(D)	327,247	(X)	27,792	(X)	83,628
35943, 35944 pt., 35946 pt.	Hydraulic pumps, whether or not aerospace	3,834,708	806,857	(X)	226,942	(X)	214,133
35939 pt., 35949	Parts for fluid power pumps and motors	(X)	490,142	(X)	180,702	(X)	145,773

¹Source: Bureau of the Census report, EM545, *U.S. Exports*.²Source: Bureau of the Census report, IM145, *U.S. Imports for Consumption*.

D Data withheld to avoid disclosing figures for individual companies. pt. Partial. X Not applicable.

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.

9.5 PUMPS AND COMPRESSORS

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 400 companies are included. No estimate is derived for the small firms excluded from the survey.

SUMMARY OF FINDINGS

In 1994, manufacturers' shipments of pumps and compressors totaled \$6,563.2 million, an increase of 6 percent from the 1993 figure of \$6,216.1 million. The 1994 total includes industrial pumps, \$2,637.8 million, an increase of 3 percent from the 1993 total of \$2,570.6 million; compressors and vacuum pumps, \$2,679.5 million, an increase of 12 percent from the 1993 total of \$2,399.6 million; domestic water systems, \$339.0 million, an increase of 3 percent from the 1993 total of \$329.6 million; and other pumps, \$906.9 million, a decrease of 1 percent from the 1993 total of \$916.3 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.

Non-Jet 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: 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
	Pumps and compressors	(S)	23,719,568	6,563,227	23,602,471	6,216,117
35611 —	Industrial pumps	(X)	6,703,900	2,637,840	6,031,853	2,570,566
35611 98	Value of drivers (reported separately) ¹	94	(X)	403,244	(X)	¹ 434,838
	Reciprocating pumps	(X)	266,630	129,183	254,397	¹ 114,329
35611 01	Direct-acting steam-driven	3	(²)	1,860	¹ 35	¹ 1,875
35611 02	Electric motor driven	23	251,631	114,305	240,345	¹ 99,589
35611 04	Engine driven	8	² 14,999	13,018	14,017	12,865
	Turbine pumps, vertical, including deep-well	(X)	37,646	175,672	¹ 34,978	180,707
35611 05	Submersible, over 5 hp	20	19,757	46,757	¹ 17,657	¹ 43,076
	Other than submersible:					
35611 07	Up to 8" diameter bowl size	11	4,612	23,463	¹ 4,106	¹ 24,720
35611 08	Over 8" to 16" diameter bowl size	11	12,344	84,880	12,149	¹ 88,989
35611 10	Over 16" diameter bowl size	9	933	20,572	1,066	¹ 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 nonclog 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	¹ 6,900	¹ 14,070
35611 92	7" discharge outlet and over	8	314	1,989	¹ 251	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	¹ 22,463
35611 19	Over 4" discharge outlet	30	10,189	24,878	11,748	¹ 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	¹ 57,727
35611 26	4" to 6" discharge outlet	40	25,474	89,858	29,506	¹ 91,821
35611 29	Over 6" discharge outlet	32	8,410	71,029	¹ 9,219	¹ 92,738
	Single stage, double suction:					
35611 42	Under 4" discharge outlet	15	7,341	14,142	¹ 6,765	¹ 12,026
35611 44	4" and 5" discharge outlet	18	7,017	25,241	¹ 5,525	¹ 23,264
35611 46	6" and 7" discharge outlet	16	5,401	30,778	¹ 3,952	¹ 24,022
35611 48	8" to 12" discharge outlet	17	4,897	37,468	¹ 3,534	¹ 37,480
35611 49	Over 12" discharge outlet	12	504	16,262	¹ 470	¹ 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	¹ 29,327
35611 56	4" and 5" discharge outlet	17	971	27,230	¹ 895	¹ 24,351
35611 58	6" and 7" discharge outlet	9	(³)	(³)	¹ 161	22,009
35611 59	8" discharge outlet and over	7	³ 313	³ 36,994	¹ 55	¹ 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	(⁴ ¹)	(⁴ ¹)
35611 69	Over 6" discharge outlet	9	662	74,962	⁴ ¹ 148,141	⁴ ¹ 151,304

See footnotes at end of table.

Table 13. Quantity and Value of Shipments of Pumps and Compressors: 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 —	Pumps and compressors—Con.					
	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	⁽⁵⁾	37,288	⁽⁵⁾	30,933
35611 72	100 to 299 GPM, designed capacity	13	⁵ 158,005	20,727	⁵ 145,592	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	⁽⁶⁾	25,697	⁽⁶⁾	⁽⁶⁾
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	⁶ 192,508	5,792	⁶ 203,143	⁶ 28,969
35611 78	11 GPM, and over, designed capacity	9	⁽⁷⁾	⁽⁷⁾	5,082	14,972
35611 79	Over 500 PSI, designed pressure	5	⁷ 6,134	⁷ 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	⁴ 44,607	35,481
35611 00	Industrial pumps, n.s.k. ⁸	(S)	(S)	271,964	(S)	⁷ 253,603
35613 —	Domestic water systems, including drivers ⁹	(X)	2,036,923	338,950	1,976,082	329,648
35613 17	Nonsubmersible pump systems (jet and non-jet) ⁹	18	918,453	118,552	857,303	112,332
	Submersible pump systems, 5 hp and under:					
35613 26	Up to 1 hp ⁹	19	868,880	159,387	804,316	147,618
35613 27	Over 1 hp to 3 hp ⁹	14	116,249	30,148	101,985	25,165
35613 28	Over 3 hp to 5 hp ⁹	13	28,405	13,517	28,131	¹ 13,630
35613 70	Domestic hand and windmill pumps, pump jacks, and cylinders (sold separately) ⁹	3	8,982	1,379	8,324	1,244
35613 00	Domestic water systems, n.s.k. ⁸	(S)	(S)	15,967	(S)	29,659
35615 —	Other pumps	(X)	11,742,142	906,909	12,819,092	916,330
35615 98	Value of drivers (reported separately) ¹	(X)	(X)	115,265	(X)	121,911
	Domestic sump pumps, 1 hp and under, including drivers ⁹	(X)	2,237,378	116,209	2,258,293	123,499
35615 73	Pedestal ⁹	17	294,462	14,173	327,906	16,033
	Submersible:					
35615 77	1/3 hp and under ⁹	20	1,827,653	92,439	1,801,147	96,579
35615 78	Over 1/3 hp ⁹	11	115,263	9,597	129,240	10,887
	Oil-well and oil-field pumps (except boiler-feed)	(X)	(D)	168,007	(D)	¹ 171,297
35615 11	Subsurface pumps for oil-well pumping	8	(D)	145,254	(D)	144,098
35615 13	Mud pumps (slush pumps)	5	340	7,475	398	10,263
35615 15	Other oil-well and oil-field pumps	6	8,191	15,278	8,585	¹ 16,936
35615 94	Other pumps, n.e.c. ¹⁰	18	6,353,923	277,379	6,933,747	254,800
35615 00	Sump, oil-well and oil-field, and other pumps, n.s.k. ⁸	(S)	(D)	230,049	(D)	244,823
35631 —	Compressors and vacuum pumps	(X)	3,236,603	2,679,528	2,775,444	2,399,573
35631 98	Value of drivers (reported separately) ¹	42	(X)	327,794	(X)	² 288,857
	Air compressors	(X)	2,555,137	1,180,519	2,278,907	1,068,350
	Stationary	(X)	835,019	708,838	788,347	661,617
	Reciprocating, single acting	(X)	(D)	237,110	(D)	225,605
35631 01	1-1/2 hp and under	18	(D)	44,108	(D)	40,889
35631 02	Over 1-1/2 hp to 5 hp	22	211,422	105,993	190,432	98,820
35631 03	6 hp to 25 hp	20	37,843	72,713	37,178	71,158
35631 04	26 hp and over	9	1,155	14,296	779	14,738
	Reciprocating, double acting:					
35631 05	150 hp and under	8	(D)	⁽¹⁾	(D)	⁽¹⁾
35631 06	151 hp and over	3	(D)	¹ 38,792	(D)	¹ 37,697

See footnotes at end of table.

Table 13. Quantity and Value of Shipments of Pumps and Compressors: 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
35631 —	Pumps and compressors—Con. Compressors and vacuum pumps—Con. Air compressors—Con. Stationary—Con.					
	Rotary positive	(X)	(D)	273,331	(D)	246,493
35631 07	Discharge pressure 50 PSIG and under, all hp sizes	8	(D)	22,473	(D)	20,364
	Discharge pressure of 51 PSIG and over:					
35631 10	10 hp and under	7	(D)	3,113	(¹²)	(¹²)
35631 11	11 to 40 hp	13		6,755	¹² 7,075	¹² 46,127
35631 12	41 to 150 hp	15		10,940	10,241	112,776
35631 13	151 to 300 hp	10		1,337	49,987	1,173
35631 15	301 hp and over	6		380	29,958	386
35631 16	Centrifugal and axial	7	(D)	159,605	(D)	151,822
	Portable	(X)		1,720,118	1,490,560	406,733
35631 29	Under 11 CFM	11	(¹³)	215,423	(¹³)	193,286
35631 33	11 to 74 CFM	6	¹³ 1,704,146	82,339	¹³ 1,476,441	71,356
35631 34	75 to 124 CFM	7		1,353	¹ 1,131	6,597
35631 36	125 to 249 CFM	9		10,765	76,009	9,596
35631 37	250 to 599 CFM	6		1,908	22,658	1,693
35631 38	600 to 899 CFM	6	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)
35631 39	900 CFM and over	5	¹⁴ 1,946	¹⁴ 66,275	¹⁴ 1,699	¹⁴ 50,294
	Gas compressors	(X)		4,648	582,196	4,311
	Stationary, centrifugal, and axial:					
35631 42	Natural gas	6		67	106,278	75
35631 43	All other gases	6		330	127,308	309
	Stationary reciprocating:					
35631 45	Integral engine ⁹	3	(D)	(D)	(D)	(D)
	Other than integral engine:					
35631 51	1,000 hp and under	15		3,138	166,653	3,043
35631 53	1,001 hp and over	5		660	126,209	478
35631 56	Stationary rotary positive	5	(D)	(D)	(D)	(D)
35631 89	Other compressors, including compressor packages	5	(D)	25,216	(¹⁵ ¹)	30,359
	Vacuum pumps, including laboratory	(X)		283,783	211,912	229,748
	Low vacuum, 29.5" mercury vacuum and lower:					
35631 61	Under 5 hp	9		189,179	32,893	150,319
35631 64	5 hp to 50 hp	9		4,329	24,391	(¹⁶)
35631 67	51 hp to 200 hp	5	(¹⁷)	(¹⁷)	(¹⁶)	(¹⁶)
35631 70	201 hp and over	2	¹⁷ 425	¹⁷ 18,180	¹⁶ 4,191	¹⁶ 45,678
	High vacuum, 29.6" mercury vacuum and over:					
35631 73	Under 5 hp	12		79,721	97,923	¹⁶ 65,454
35631 76	5 hp to 50 hp	8		10,129	38,518	¹⁹ 7,784
35631 79	51 hp to 200 hp	-	-	-	-	-
35631 82	201 hp and over	-	-	-	-	-
35631 96	Packaged compressor units assembled from purchased compressors	9	(D)	95,664	¹⁵ ¹ 78,210	87,346
35631 00	Compressors, vacuum pumps, n.s.k. ⁸	(S)	(D)	256,227	(S)	261,248

¹The value of drivers was reported only at the product code (five-digit) level. For each product line, the value figure excludes (except as noted for products 35613 17 through 35613 70, 35615 73 through 35615 78, 35631 45, and all four product codes ending in "00"; see footnote 8) the value of the driver (electric motor or prime mover) shipped with that product. The extent to which some respondents may have included the value of drivers with the value of specific pumps or compressors is unknown.

²For 1994, quantities for product codes 35611 01 and 35611 04 are combined to avoid disclosing data for individual companies.

³For 1994, product codes 35611 58 and 35611 59 are combined to avoid disclosing data for individual companies.

⁴For 1993, product codes 35611 66 and 35611 69 are combined to avoid disclosing data for individual companies.

⁵Quantities for products 35611 71 and 35611 72 are combined to avoid disclosing data for individual companies.

⁶For 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.

⁷For 1994, product codes 35611 78 and 35611 79 are combined to avoid disclosing data for individual companies.

⁸Not 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 the five-digit product code level. Drivers may in some cases be included.

⁹Value includes drivers. Drivers are not included in the separate reported driver line for the product code (see footnote 1).

¹⁰Includes hot water heating circulator pumps, oil burner and appliance pumps, fire engine pumps, and packaged pump units assembled from purchased pumps. Does not include hydraulic fluid power pumps (Standard Industrial Classification Industry 3594), measuring and dispensing pumps for gasoline service station use (SIC 3586), pumps for motor vehicles (SIC 3714), or vacuum pumps (SIC 3563). Vacuum pumps are included later in this report.

¹¹Product codes 35631 05 and 35631 06 are combined to avoid disclosing data for individual companies.

¹²For 1993, product codes 35631 10 and 35631 11 are combined to avoid disclosing data for individual companies.

¹³Quantities for product codes 35631 29 and 35631 33 are combined to avoid disclosing data for individual companies.

¹⁴Product codes 35631 38 and 35631 39 are combined to avoid disclosing data for individual companies.

¹⁵For 1993, quantities for product codes 35631 89 and 35631 96 are combined to avoid disclosing data for individual companies.

¹⁶For 1993, product codes 35631 64, 35631 67, and 35631 70 are combined to avoid disclosing data for individual companies.

¹⁷For 1994, product codes 35631 67 and 35631 70 are combined to avoid disclosing data for individual companies.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. ¹Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

Table 14. Shipments, Exports, and Imports of Pumps and Compressors: 1994 and 1993

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

Product description	Manufacturers' shipments ¹		Export shipments ²		Import shipments ⁴	
	Quantity	Value f.o.b. plant	Quantity	Value ³	Quantity	Value ⁵
1994						
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 ⁶	(D)	1,268,081	1,477,117	165,009	29,463,225	143,219
Compressors.....	2,952,820	2,139,822	259,660	810,255	7,083,147	302,081
Stationary air compressors:						
Reciprocating, single and double acting	(D)	275,902	177,660	70,440	187,595	34,027
Rotary positive, centrifugal, and axial	(D)	432,936	64,264	133,491	466,890	138,918
Portable air compressors	1,720,118	471,681	10,555	103,710	2,451,498	58,689
Other compressors, including gas compressors and compressor packages) ⁷	397,683	959,303	7,181	502,614	3,977,164	70,447
Vacuum pumps.....	283,783	211,912	253,596	71,695	3,307,677	227,300
1993						
Pumps	20,827,027	3,259,795	1,554,114	712,234	17,300,350	349,617
Reciprocating pumps.....	254,397	[†] 114,329	34,571	48,156	351,467	36,865
Turbine pumps, vertical.....	[†] 34,978	180,707	10,236	41,325	2,329	2,406
Centrifugal pumps:						
Submersible	369,487	85,125	163,777	67,089	124,685	19,846
Single stage single suction, close coupled	832,024	220,294	147,780	32,854	1,435,932	37,070
Single stage, single suction, frame mounted	(D)	[†] 403,270	12,420	35,012	6,277	4,280
Single stage, double suction	[†] 20,246	[†] 110,404	2,812	9,438	1,545	2,105
Multistage, single or double suction	37,152	99,621	6,114	43,232	1,073	7,860
Other, including propeller and mixed flow	(D)	277,195	29,032	91,349	1,428,423	80,222
Rotary pumps	914,433	229,484	54,524	109,112	387,228	35,462
Diaphragm pumps	457,249	126,215	55,982	26,110	31,423	9,350
Oil-well and oil-field pumps (except boiler feed)	(D)	[†] 171,297	4,773	75,051	1,317	2,539
Other pumps, including domestic water systems and sump pumps, and hot water circulator pumps ⁶	(D)	[†] 1,241,854	1,032,093	133,506	13,528,651	111,612
Compressors.....	2,545,696	1,953,582	272,548	628,879	5,971,705	301,296
Stationary air compressors:						
Reciprocating, single and double acting	(D)	[†] 263,302	191,683	82,808	103,559	27,036
Rotary positive, centrifugal, and axial	(D)	398,315	61,603	79,681	560,226	129,675
Portable air compressors	1,490,560	406,733	12,418	81,960	2,850,509	67,980
Other compressors, including gas compressors and compressor packages) ⁷	266,789	[†] 885,232	6,844	384,430	2,457,411	76,605
Vacuum pumps.....	229,748	157,134	221,592	55,771	2,247,407	161,395

¹Manufacturers' shipments generally exclude values of drivers. See footnotes 1, 8, and 9 in table 13.²Source: Bureau of Census report EM545, *U.S. Exports*.³Excludes the value of drivers.⁴Source: Bureau of Census report IM145, *U.S. Imports for Consumption*.⁵Value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus import duties.⁶Manufacturers' shipments include n.s.k. for product codes 35611, 35613, and 35615.⁷Manufacturers' shipments include n.s.k. for product code 35631.

D Data withheld to avoid disclosing figures for individual companies.

[†]Revised by 5 percent or more from previously published figures.

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.

9.6 ANTIFRICTION BEARINGS

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 \$4,663.0 million in 1994, an increase of 8 percent from shipments of \$4,331.1 million in 1993. The 1994 total includes: complete ball bearings, \$1,677.1 million, an increase of 4 percent from the 1993 value of shipments; complete tapered roller bearings and roller bearing parts (except rollers), \$1,139.2 million, an increase of 14 percent; other complete roller bearings, \$905.3 million, an increase of 12 percent; mounted bearings (except plain), \$407.8 million, a decrease of 7 percent; and parts and components for ball and roller bearings, sold separately, \$533.6 million, an increase of 14 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 O.D., cylindrical O.D., wide, etc.).

Miniature Ball Bearing. Ball bearing with outside diameter below, but not including, 3/8 in. or 9 mm O.D.

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 multi-row, 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 15. **Value of Shipments for Complete Antifriction Bearings and Components, Including Balls and Rollers, by Product Class: 1985 to 1994**

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988 ¹	1987	1986	1985
3562-	Ball and roller bearings	4,663.0	4,331.1	4,011.3	3,778.9	4,064.2	3,965.3	3,899.2	3,550.9	3,349.3	3,508.9
35621	Ball bearings, complete	1,677.1	1,616.8	1,484.2	1,406.7	1,469.0	1,420.9	1,497.6	1,312.2	1,298.6	1,363.2
35622	Tapered roller bearings, cups and cones	1,139.2	1,001.0	935.6	876.8	977.3	963.9	745.7	754.6	667.0	734.2
35623	Roller bearings, complete	905.3	810.4	773.1	794.3	872.4	849.6	834.3	737.9	703.6	706.3
35624	Mounted bearings (except plain)	407.8	439.4	378.0	322.9	362.9	344.9	358.2	305.6	298.2	303.0
35629	Parts and components for ball and roller bearings, including balls and rollers sold separately	533.6	467.0	440.4	378.3	382.6	386.1	463.4	440.6	381.9	402.2

¹Data for 1988 and earlier years may not be directly comparable due to reclassifications.

[†]Revised by 5 percent or more from previously published figures.

Table 16. Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3562- —	Antifriction bearings and components	(X)	(X)	4,662,948	(X)	4,331,080
35621 —	Ball bearings, complete	51	561,601	1,677,146	518,987	1,616,751
	Annular, including self-aligning:					
	Ground or precision:					
	Single-row conrad:					
	Miniature (below 9 mm O.D.):					
35621 01	Regular (ABEC 1 and 3)	4	647	1,502	764	1,855
35621 02	Precision (ABEC 5 and up)	6	(D)	(D)	(D)	(D)
	Other regular (ABEC 1 and 3):					
35621 03	9 mm O.D. through 30 mm O.D.	8	80,112	72,764	67,153	60,582
35621 04	Over 30 mm O.D. through 52 mm O.D.	14	123,741	169,491	113,297	152,599
35621 05	Over 52 mm O.D. through 100 mm O.D.	14	40,127	207,545	29,254	171,935
35621 07	Over 100 mm O.D.	14	5,476	142,199	4,105	129,171
	Other precision (ABEC 5 and up):					
35621 09	9 mm O.D. through 30 mm O.D.	4	4,535	48,743	4,055	44,428
35621 11	Over 30 mm O.D. through 52 mm O.D.	8	584	33,868	542	31,511
35621 12	Over 52 mm O.D. through 100 mm O.D.	9	179	27,559	164	25,683
35621 13	Over 100 mm O.D.	8	35	29,839	63	36,832
35621 14	Single-row maximum capacity type	6	1,095	17,836	975	16,693
35621 18	Integral shaft and integral spindle ball bearings	5	26,742	302,598	23,688	331,557
35621 16	Double row	11	15,021	111,509	21,385	135,499
	Angular contact:					
35621 19	Regular AND	8				
35621 22	Precision	3	7,035	153,069	7,035	141,966
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	5	5,081	26,086	3,934	25,396
35621 25	Unground, including self-aligning (less than ABEC 1)	17	221,802	121,316	179,431	104,903
	Thrust ball bearings:					
35621 33	Ground	15	4,163	28,117	8,436	34,052
35621 35	Unground	4	4,936	7,952	4,158	7,011
35621 55	Other ball bearings	13	38,804	146,452	43,500	143,041
35622 —	Tapered roller bearings	10	258,727	1,139,236	228,775	1,001,037
35622 32	Cup and cone assemblies shipped as a set	10	16,049	351,992	14,608	291,458
35622 33	Cups shipped separately AND	7				
35622 34	Cone assemblies shipped separately	8	242,677	787,244	214,167	709,579
35623 —	Cylindrical, spherical, needle, and other roller bearings	31	734,051	905,260	582,153	806,900
	Cylindrical roller bearings:					
35623 11	Regular (ABEC 1 and 3)	21	34,391	130,518	26,926	121,563
35623 12	Precision (ABEC 5 and up)	7	138	60,318	130	59,053
	Spherical roller bearings, including hourglass and barrel:					
35623 24	Single-row	4	258	19,465	276	19,263
35623 25	Double-row	6	955	155,689	962	152,077
35623 41	Needle roller bearings	7	638,187	463,733	507,513	389,793
35623 93	Other roller bearings not specified above	19	60,172	75,537	46,346	65,151

See footnotes at end of table.

Table 16. **Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 1994 and 1993—Con.**

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

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3562- —	Antifriction bearings and components—Con.					
35624 —	Mounted bearings (except plain)	14	10,458	407,750	'11,177	'439,386
35624 17	Ball bearings, unit and/or split-mounted	12	9,195	219,006	'9,833	'238,580
	Roller:					
35624 53	Unit mounted	6	1,112	156,110	1,187	167,906
35624 55	Split-mounted	5	152	32,634	158	32,900
35629 —	Parts and components for ball and roller bearings, including balls and rollers sold separately	47	(X)	533,556	(X)	467,006
35629 11	Balls:					
	Shipments (quantity in millions of units)	17	60,949	185,722	27,180	154,191
	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)	98,851	(X)	96,375
35629 31	Rollers:					
	Shipments (quantity in millions of units)	14	13,327	100,139	12,228	83,203
	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)	42,454	(X)	34,088
35629 36	For cylindrical roller bearings	5	(X)	(D)	(X)	(D)
35629 37	For spherical roller bearings	7	(X)	26,696	(X)	24,800
35629 49	For other roller bearings	5	(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)	11,308	(X)	'14,254

D Data withheld to avoid disclosing figures for individual companies. 'Revised by 5 percent or more from previously published figures.
 S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

Table 17. Shipments, Exports, Imports, and Apparent Consumption of Antifriction Bearings and Components, Including Balls and Rollers: 1994 and 1993

[Quantity in thousands of units. Value and duty in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Imports for consumption ²	
	Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	Value
1994						
Radial ball bearings and integral shaft and spindle ball bearings	522,797	1,530,694	27,341	180,039	422,454	556,555
Other ball bearings	38,804	146,452	10,084	56,055	43,637	65,716
Tapered roller bearings	258,727	1,139,236	13,586	172,802	75,927	147,302
Cylindrical roller bearings	34,529	190,836	1,663	38,300	9,002	80,597
Spherical roller bearings	1,213	175,154	3,053	21,971	670	51,982
Needle roller bearings	638,187	463,763	9,193	28,647	30,221	33,753
Other roller bearings	60,172	75,537	4,043	57,027	2,918	5,956
Mounted bearings:						
Ball	9,195	219,006	357	15,883	4,012	23,989
Roller	1,264	188,744	244	12,667	2,514	9,721
Parts for ball and roller bearings:						
Balls (quantity in millions of units)	60,949	185,722	(NA)	30,655	(NA)	9,166
Rollers (quantity in millions of units)	13,327	100,139	(NA)	30,742	(NA)	21,811
Other parts for tapered roller bearings	(X)	148,844	(NA)	74,394	(NA)	90,870
Other ball bearing parts	(X)	98,821	(NA)	12,396	(NA)	-
1993						
Radial ball bearings and integral shaft and spindle ball bearings	475,487	1,473,710	4,755	74,108	398,654	472,714
Other ball bearings	43,500	143,041	31,619	136,150	36,530	128,674
Tapered roller bearings	228,775	1,001,037	13,627	164,137	81,992	141,072
Cylindrical roller bearings	27,056	180,616	1,297	32,941	11,535	65,178
Spherical roller bearings	1,238	171,340	2,982	25,196	954	47,653
Needle roller bearings AND						
Other roller bearings	553,859	454,944	10,627	69,545	29,656	35,830
Mounted bearings:						
Ball	9,833	238,580	334	16,920	3,631	25,225
Roller	1,345	200,806	99	5,089	1,782	6,486
Parts for ball and roller bearings:						
Balls (quantity in millions of units)	27,180	154,191	(NA)	36,802	(NA)	7,243
Rollers (quantity in millions of units)	12,228	83,203	(NA)	25,229	(NA)	18,067
Other parts for tapered roller bearings AND						
Other ball bearing parts	(X)	229,612	(NA)	35,252	(NA)	123,773

¹Source: Bureau of Census report EM545, *U.S. Exports*.²Source: Bureau of Census report IM145, *U.S. Imports for Consumption*.

- Represents zero. NA Not available. †Revised by 5 percent or more from previously published figures. X Not applicable.

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.

9.7 VENDING MACHINES (COIN-OPERATED)

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 (47 companies).

SUMMARY OF FINDINGS

In 1994, manufacturers' shipments of coin-operated vending machines totaled \$679.6 million, an increase of 15 percent from the 1993 figure of \$590.2 million. Shipments of beverage vending machines increased 19 percent, from \$323.1 million in 1993 to \$383.2 million in 1994. Vending machines for confections and foods increased 20 percent, from \$199.2 million in 1993 to \$239.0 million in 1994.

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, plastic, 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 18. Value of Shipments Coin-Operated Vending Machines: 1984 to 1994

[Millions of dollars]

Year	MA35U	Annual Survey of Manufactures
1994.....	679.6	(NA)
1993.....	590.2	609.5
1992.....	592.8	¹ 559.5
1991.....	522.1	478.5
1990.....	524.6	507.0
1989.....	591.8	581.7
1988.....	583.2	558.6
1987.....	521.1	¹ 502.1
1986.....	469.7	454.9
1985.....	451.2	439.6
1984.....	394.4	391.1

¹Source: 1992 Census of Manufactures.

NA Not available.

Table 19. Quantity and Value of Shipments of Coin-Operated Vending Machines: 1994 and 1993

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

Product code	Product description	Company count	1994		1993	
			Quantity	Value	Quantity	Value
	Coin-operated vending machines.....	47	725,831	679,554	778,038	590,247
	Beverage vending machines.....	(X)	279,390	383,192	240,379	323,089
	Hot beverage:					
35811 10	Instant, freeze-dried, or liquid concentrate coffee.....	4	1,338	2,821	(D)	(D)
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).....	10	251,920	313,976	217,208	259,928
35811 09	Cup (postmix).....	4	1,903	8,730	(D)	(D)
35811 19	Other vending machines for beverages.....	3	(D)	(D)	(D)	(D)
	Confections and food vending machines.....	(X)	255,608	238,996	332,861	199,292
35811 21	Bulk confections and charms.....	6	139,421	8,333	216,990	15,236
35811 22	Bagged snacks and confections.....	10	94,865	143,737	99,348	115,858
35811 24	Frozen foods and ice cream.....	2	(D)	(D)	(D)	(D)
35811 25	Multipurpose food and confections.....	7	18,663	80,968	(D)	(D)
35811 29	Other vending machines for confections and foods.....	3	(D)	(D)	(D)	(D)
	Other vending machines.....	(X)	190,833	57,366	204,798	67,866
35811 31	Cigarettes (single packs only) AND	3				
35811 32	Water AND	2				
35811 35	Postage stamp AND	3				
35811 49	All other vending machines.....	24	190,833	57,366	204,798	67,866

D Data withheld to avoid disclosing figures for individual companies.

X Not applicable.

Table 20. **Shipments, Exports, Imports, and Apparent Consumption of Coin-Operated Vending Machines: 1994 and 1993**

[Value in millions of dollars]

Product description	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise ¹	Imports for consumption ^{2 3}	Apparent consumption ⁴
1994				
Coin-operated vending machines	679.6	132.7	27.8	574.7
1993				
Coin-operated vending machines	590.2	140.5	25.7	475.4

¹Source: Bureau of the Census report EM545, *U.S. Exports*. Schedule B export numbers for automatic merchandising machines, coin-operated, and new are: 8476.11.0000 and 8476.19.0000.

²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*. HTSUSA numbers for automatic merchandising machines, coin-operated, new are: 8476.11.0000 and 8476.19.0000.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus import duties.

⁴Apparent consumption is derived by subtracting exports from the 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 Nguyen, 301-457-4752.

9.8 MOTORS AND GENERATORS

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 257 companies.

SUMMARY OF FINDINGS

During 1994, the total value of shipments of motors and generators, including interplant transfers, was \$9.7 billion, up 7 percent from the revised 1993 value of \$9.0 billion. The 1994 data for individual categories of motors and generators exhibited the following changes. The value of

shipments of fractional horsepower motors increased 3 percent, from \$4.2 billion in 1993 to \$4.4 billion in 1994. The integral horsepower motors and generators increased 11 percent, from \$1.7 billion in 1993 to \$1.9 billion in 1994. The value of land transportation motors and generators was combined with parts for motors and generators to avoid disclosing figures for individual companies. The value of shipments of prime mover generator sets increased 14 percent, from the revised data in 1993 of \$1.2 billion to \$1.4 billion in 1994. Electric motor generator sets and other rotating equipment, including hermetics and parts, increased 8 percent to \$2.0 billion in 1994, from the revised data of \$1.8 billion reported in 1993.

EXPLANATION OF TERMS

See the Introduction for an explanation of terms.

Table 21. Value of Shipments of Motors and Generators, by Product Class: 1985 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
3621-36211	Motors and generators.	9,655.1	9,011.2	8,092.3	7,652.5	7,552.7	7,947.3	7,664.1	6,762.0	6,198.7	5,793.5
36212	Fractional horsepower motors, excluding hermetics.	4,365.3	4,242.8	4,019.7	3,626.0	3,698.3	4,049.7	3,983.5	3,493.8	3,258.6	3,322.3
36213	Integral horsepower motors and generators, other than for land transportation equipment.	1,885.5	1,695.0	1,568.9	1,670.7	1,568.3	1,573.5	1,477.0	1,249.7	1,191.5	1,201.2
36214	Land transportation motors, generators, and control equipment.	(¹)	(¹)	138.4	202.7	195.4	237.4	190.4	228.6	257.4	² 473.9
36217	Prime mover generator sets (except steam or hydraulic turbine).	1,424.4	¹ 1,245.9	1,087.1	1,048.1	991.9	998.0	956.2	779.4	789.5	699.8
36218	Motor generator sets and other rotating equipment:										
36219	Fractional.	413.7	¹ 358.6	344.1	325.1	311.4	281.1	250.5	248.7	231.1	268.4
	Integral.	387.6	¹ 381.5	394.6	393.3	359.0	342.7	318.7	282.2	275.4	301.8
	Parts for motors and generators.	¹ 1,178.7	¹ 1,087.4	539.4	386.6	428.4	464.9	487.8	479.6	195.2	(²)

¹Data for industry 36213 are combined with industry 36219 to avoid disclosing figures for individual companies.

²Prior to 1986, data for product code 36219, "Parts for motors and generators," were collected only on a partial basis and included with product code 36213.

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

Note: Beginning in 1986, data in this survey are shown in a new format. See "Summary of Findings" for more information.

Table 22. Quantity and Value of Shipments of Motors and Generators: 1994 and 1993

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

Product code	Product description	Number of companies	1994		1993	
			Quantity ¹	Value	Quantity ¹	Value
3621- —	Motors and generators	(NA)	(X)	9,655,110	(X)	9,011,159
36211 —	Fractional horsepower, excluding hermetics and other rotating equipment	(NA)	376,933	4,365,263	360,918	4,242,811
36211 0M	Used in automobile accessories (such as heaters, convertible tops, and automatic windows; excluding starter motors and generators), including ac and dc	14	65,014	919,903	80,632	¹ 1,079,988
	Used in aircraft and spacecraft, excluding generators:					
36211 0N	ac	19	44	22,835	¹ 50	¹ 26,052
36211 0P	dc	20	231	45,432	¹ 175	¹ 42,872
36211 0T	Used in toys (all sizes) and clock type synch and subsynch timing, ac and dc)	7	15,070	68,850	14,236	65,211
	All other uses:					
	ac (non-commutated)	(NA)	155,436	2,485,403	142,849	2,313,638
	Single phase or polyphase:					
36211 X2, 3	Less than 746 watts, under 1 hp (three-digit FS)	(NA)	² (D)	² (D)	² (D)	² (D)
	Single phase:					
	Skeleton type shaded pole	(NA)	40,278	145,415	36,412	132,994
36211 1A	Less than 2.75-inch diameter at widest point	9	8,622	41,298	¹ 8,032	¹ 41,552
36211 1B	2.75-inch diameter and over	5	31,656	104,117	28,380	91,442
	Conventional type shaded pole	(NA)	59,808	532,078	55,719	522,866
36211 1C	Less than 2.5-inch diameter	8	19,166	87,240	17,111	81,132
	2.5- to less than 3.75-inch diameter:					
36211 1D	2 pole	8	13,524	185,129	13,723	200,548
36211 1Q	4 pole	4	10,285	94,535	10,461	99,417
36211 1T	6 pole and over	2	(D)	(D)	(D)	(D)
36211 1F	3.75- to less than 4.375-inch diameter	4	3,117	44,916	2,633	34,955
	4.375- to less than 5.375-inch diameter:					
36211 1G	2 pole and 4 pole	6	3,053	43,656	2,451	35,516
36211 1H	6 pole and over	5	8,537	56,741	6,449	45,246
36211 1I	5.375-inch diameter and over	3	(D)	(D)	(D)	(D)
	Permanent split capacitor	(NA)	17,336	441,820	¹ 14,454	¹ 375,953
36211 1J	Less than 2.5-inch diameter	6	³ (D)	³ (D)	902	11,162
	2.5- to less than 3.75-inch diameter:					
36211 1K	2 pole	10	³ 2,297	³ 43,424	1,222	¹ 26,974
36211 1L	4 pole and over	11	2,598	38,601	1,516	¹ 27,667
	3.75- to less than 4.375-inch diameter:					
36211 1M	2 pole	3	⁴	⁴	⁴	⁴
36211 1V	4 pole	7	⁴	⁴	⁴	⁴
36211 1W	6 pole and over	3	⁴ 1,150	⁴ 25,180	⁴ 1,071	⁴ 22,709
	4.375- to less than 5.375-inch diameter:					
36211 1O	2 pole	3	⁵	⁵	⁵	⁵
36211 1P	4 pole	10	⁵ 1,318	⁵ 29,529	⁵ 1,310	⁵ 27,364
36211 1R	6 pole and over	7	685	23,510	612	19,000
	5.375- to less than 6-inch diameter:					
36211 1S	Less than 746 watts, under 1 hp (two-digit FS)	10	8,527	237,265	7,123	204,052
36212 1A	746 watts and over, 1 hp and over (two-digit FS)	4	⁶	⁶	⁶	⁶
	6-inch diameter and over:					
36211 1U	Less than 746 watts, under 1 hp (two-digit FS)	7	171	13,735	145	14,892
36212 1B	746 watts and over, 1 hp and over (two-digit FS)	5	⁶	⁶	⁶	⁶
	Capacitor start	(NA)	9,299	302,958	¹ 8,428	¹ 274,292
36211 11	Less than 3.75-inch diameter	7	(D)	(D)	(D)	(D)
36211 14	3.75- to less than 4.375-inch diameter	2	(D)	(D)	⁷	⁷
36211 15	4.375- to less than 5.375-inch diameter	5	216	9,628	⁷ 233	⁷ 10,691
	5.375- to less than 6-inch diameter:					
36211 16	Less than 746 watts, under 1 hp (two-digit FS)	8	1,393	55,971	571	38,021
36212 1C	746 watts and over, 1 hp and over (two-digit FS)	5	⁶	⁶	⁶	⁶
	6-inch diameter and over:					
36211 18	Less than 746 watts, under 1 hp (two-digit FS)	8	673	62,896	516	51,450
36212 1D	746 watts and over, 1 hp and over (two-digit FS)	9	⁶	⁶	⁶	⁶

See footnotes at end of table.

Table 22. Quantity and Value of Shipments of Motors and Generators: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity ¹	Value	Quantity ¹	Value
	Split phase	(NA)	8,738	271,799	10,060	301,639
36211 30	Less than 3.75-inch diameter	2	(D)	(D)	(D)	(D)
36211 31	3.75- to less than 5.375-inch diameter	8	(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)	3	(⁶)	(⁶)	(⁶)	(⁶)
	6-inch diameter and over:					
36211 38	Less than 746 watts, under 1 hp (two-digit FS)	7	(D)	(D)	(D)	(D)
36212 3F	746 watts and over, 1 hp and over (two-digit FS)	2	(⁶)	(⁶)	(⁶)	(⁶)
	All other single phase	(NA)	16,819	508,967	15,112	¹ 465,047
36211 41	Less than 6-inch diameter	7	(D)	(D)	(D)	(D)
	6-inch diameter and over:					
36211 48	Less than 746 watts, under 1 hp (two-digit FS)	5	(D)	(D)	(D)	(D)
36212 4H	746 watts and over, 1 hp and over (two-digit FS)	5	(⁶)	(⁶)	(⁶)	(⁶)
	Polyphase (servo and non-servo)	(NA)	3,158	282,366	¹ 2,664	¹ 240,847
36211 55	Synchronous stepper motors	9	517	19,774	497	20,527
	All other polyphase:					
36211 56	Servo (induction rotor)	5	(D)	(D)	(D)	(D)
	Non-servo:					
36211 57	Less than 5.375-inch diameter	12	186	14,447	¹ 149	¹ 14,286
	5.375- to less than 6-inch diameter:					
36211 5T	Less than 736 watts, under 1 hp (two-digit FS)	10	534	47,976	498	45,879
36212 5I	746 watts and over, 1 hp and over (two-digit FS)	6	(⁸)	(⁸)	(⁸)	(⁸)
	6-inch diameter and over:					
36211 5V	Less than 746 watts, under 1 hp (two-digit FS)	10	421	44,210	441	41,846
36212 5J	746 watts and over, 1 hp and over (two-digit FS)	8	(⁸)	(⁸)	(⁸)	(⁸)
	ac (commutated)	(NA)	43,880	565,568	27,033	¹ 474,481
	Mechanically commutated (brushes, for example):					
	Cased or sleeved:					
36211 6E	Less than 2.875-inch diameter	17	5,692	61,029	¹ 5,085	¹ 54,210
36211 6F	2.875- to less than 3.188-inch diameter	14	6,400	93,757	¹ 4,811	¹ 69,245
36211 6G	3.188- to less than 3.563-inch diameter	13	169	10,168	¹ 148	¹ 8,724
	3.563-inch diameter and over:					
36211 6H	Less than 746 watts, under 1 hp (two-digit FS)	12	276	36,623	¹ 241	¹ 33,276
36212 6K	746 watts and over, 1 hp and over (two-digit FS)	6	(⁹)	(⁹)	(⁹)	(⁹)
	Uncased:					
36211 6J	Less than 2.875-inch diameter	9	4,751	69,315	4,322	¹ 55,384
36211 6K	2.875- to less than 3.188-inch diameter	6	26,260	223,446	(D)	(D)
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	(⁹)	(⁹)	(⁹)	(⁹)
	dc or universal motors by case size	(NA)	22,762	510,174	¹ 23,070	¹ 462,590
	By case diameter:					
36211 6C	Less than 4-inch diameter	42	22,225	370,765	¹ 22,644	¹ 339,850
36211 6D	4-inch diameter and over	18	537	139,409	¹ 426	¹ 122,740
	Permanent magnet (brushless)	(NA)	16,664	402,153	14,919	328,221
	Servo:					
36211 8E	Less than 4-inch diameter	20	6,860	161,138	¹ 5,472	¹ 124,424
36211 8H	4-inch diameter and over	8	77	33,281	¹ 52	¹ 24,992
	Non-servo:					
36211 8D	Less than 4-inch diameter	26	9,395	154,906	9,128	¹ 137,185
36211 8K	4-inch diameter and over	13	332	52,828	267	41,620
36211 8P	Wound field	14	434	15,858	¹ 411	¹ 17,705
36211 88	Electronically commutated	8	593	99,382	540	¹ 89,555
	All other:					
36211 89	Servo	9	129	32,738	¹ 158	¹ 22,780
36211 96	Non-servo	6	58	9,681	¹ 61	¹ 10,896

See footnotes at end of table.

Table 22. Quantity and Value of Shipments of Motors and Generators: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity ¹	Value	Quantity ¹	Value
36212 —	Integral horsepower, excluding hermetics and other rotating equipment.....	(NA)	9,466,399	1,885,490	8,041,239	1,694,958
36212 04	Used in aircraft and spacecraft, excluding generators.....	4	7,818	24,928	6,976	25,018
	All other uses:					
	ac (non-commutated).....	(NA)	1,874,150	1,337,707	¹ 1,671,235	¹ 1,210,377
	Motors (single, polyphase induction, and synchronous):					
	Single phase.....	(NA)	1,845,731	160,561	² 2,092,739	¹ 167,171
36211 1W	Less than 746 watts, under 1 hp (three-digit FS).....	3	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾
36212 12	746 watts and over, 1 hp and over (three-digit FS).....	11	296,077	56,459	¹ 289,264	⁵ 55,564
36212 X4	746 watts and over, 1 hp and over (two-digit FS).....	(NA)	⁶ 1,520,254	⁶ 98,211	⁶ 1,774,948	⁶ 105,701
	Polyphase induction, excluding synchronous.....	(NA)	1,463,415	998,745	¹ 1,273,992	905,035
	All motors, including Energy Efficient (EE):					
36211 1X	Less than 0.746 watts, less than 1 hp (three-digit FS).....	4	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾
36212 X5	746 watts and over, 1 hp and over (two-digit FS).....	(NA)	⁸ 1,230,134	⁸ 133,559	⁸ 820,165	⁸ 96,909
36212 15	0.746 to 3.371 kW, 1 through 5 hp.....	17	715,621	135,447	¹ 587,776	¹ 115,682
36212 16	3.731 to less than 14.921 kW, greater than 5 through 20 hp.....	21	507,336	179,180	464,772	149,582
36212 17	14.921 to less than 37.301 kW, greater than 20 through 50 hp.....	17	141,644	141,135	130,820	129,106
36212 18	37.301 to less than 74.601 kW, greater than 50 through 100 hp.....	16	50,277	113,770	46,735	105,543
36212 19	74.601 to less than 149.201 kW, greater than 100 through 200 hp.....	17	27,839	120,557	24,771	105,788
36212 20	149.601kw to less than 373.001 kW, greater than 200 through 500 hp.....	18	15,954	168,782	14,559	159,448
36212 27	373.001 to less than 746.001, greater than 500 through 1,000 hp.....	10	2,047	52,064	² 2,081	⁵ 50,982
36212 28	746.001 to less than 1865.001 kW, greater than 1,000 through 2,500 hp.....	9	2,339	66,283	¹ 2,160	¹ 64,830
36212 29	1,865.001 kW and over, greater than 2,500 hp.....	7	217	21,386	177	23,933
	Energy efficient motors, included in product codes 36212 15 to 36212 19.....	(NA)	286,247	171,417	¹ 240,883	142,524
36212 2K	0.746 to 3.371 kW, 1 through 5 hp.....	7	126,065	23,870	110,538	19,827
36212 2L	3.731 to less than 14.921 kW, greater than 5 through 20 hp.....	8	97,682	34,207	78,478	¹ 26,320
36212 2M	14.921 to less than 37.301 kW, greater than 20 through 50 hp.....	8	37,741	42,078	29,786	32,418
36212 2N	37.301 to less than 74.601 kW, greater than 50 through 100 hp.....	8	16,556	34,173	14,301	30,092
36212 2P	74.601 to less than 149.201 kW, greater than 100 through 200 hp.....	8	8,203	37,089	7,780	33,867
36212 30	Synchronous (servo and non-servo).....	5	6,417	39,028	6,638	¹ 27,476
	ac generators (for internal combustion engines).....	(NA)	78,841	237,584	72,814	216,396
36212 33	Less than 5 kVA.....	5	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾	⁽¹⁰⁾
36212 38	5 to less than 15 kVA.....	11	¹⁰ 44,283	¹⁰ 29,740	¹⁰ 39,909	¹⁰ 27,594
36212 40	15 to less than 75 kVA.....	10	13,277	44,607	12,409	42,489
36212 50	75 to less than 375 kVA.....	8	11,789	38,685	¹⁰ 10,554	¹ 32,073
36212 51	375 to less than 750 kVA.....	7	5,938	37,619	5,812	33,686
36212 55	750 kVA and over.....	5	3,554	86,933	4,130	¹ 80,554
	dc motors and generators, excluding all arc welding and battery charging generators for internal combustion engines.....	(NA)	4,822,311	269,953	3,765,371	237,542
36212 70	0.746 to less than 3.375 kW, 1 through 5 hp.....	10	4,777,832	114,668	3,714,722	91,221
36212 X6	746 watts and over, 1 hp and over (two-digit FS).....	(NA)	⁹ 89,067	⁹ 32,503	⁹ 78,090	⁹ 30,616
36212 72	3.375 to less than 74.601 kW, 5 through 100 hp.....	6	39,199	57,823	⁽¹¹⁾	⁽¹¹⁾
36212 74	74.601 kW and over, greater than 100 hp.....	6	5,280	97,462	¹¹ 50,649	¹¹ 146,321
36213 —	Motors and generators for land transportation, including those used in associated control equipment.....	8	⁽¹²⁾	⁽¹²⁾	⁽¹²⁾	⁽¹²⁾
36214 —	Prime mover generator sets (except steam or hydraulic turbine and electric motor-driven generator sets).....	(NA)	452,241	1,424,435	¹ 423,479	¹ 1,245,883
	Gas/gasoline engine-driven generator sets, ac and dc output.....	(NA)	374,292	343,368	348,827	¹ 275,104
36214 03	Under 1.5 kVA.....	4	⁽¹³⁾	⁽¹³⁾	⁽¹³⁾	⁽¹³⁾
36214 04	1.5 to less than 5 kVA.....	19	¹³ 238,677	¹³ 113,005	¹³ 239,605	¹³ 103,145
36214 05	5 to less than 15 kVA.....	19	116,000	100,665	87,891	78,786
36214 07	15 to less than 50 kVA.....	13	6,109	36,374	6,637	38,161
36214 08	50 to less than 100 kVA.....	9	11,807	32,615	¹ 13,949	24,887

See footnotes at end of table.

Table 22. Quantity and Value of Shipments of Motors and Generators: 1994 and 1993—Con.

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

Product code	Product description	Number of companies	1994		1993	
			Quantity ¹	Value	Quantity ¹	Value
36214 10	100 to less than 500 kVA.....	8	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)
36214 12	500 to less than 1,000 kVA.....	3	(¹⁴)	(¹⁴)	(¹⁴)	(¹⁴)
36214 13	1,000 kVA and over.....	3	¹⁴ 1,699	¹⁴ 60,709	¹⁴ 745	¹⁴ 30,125
	Diesel engine-driven generator sets, ac and dc output.....	(NA)	77,233	1,063,368	⁷ 3,993	⁹ 54,443
36214 41	Under 15 kVA.....	21	15,194	71,514	11,637	46,348
36214 42	15 to less than 50 kVA.....	24	6,954	56,317	5,673	47,053
36214 43	50 to less than 100 kVA.....	25	29,065	90,146	³ 2,389	⁸ 7,691
36214 44	100 to less than 200 kVA.....	20	7,754	94,322	6,008	86,679
36214 45	200 to less than 400 kVA.....	18	11,548	264,622	¹ 1,971	² 50,092
36214 46	400 to less than 600 kVA.....	17	1,690	66,209	1,798	63,548
36214 47	600 to less than 800 kVA.....	16	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
36214 48	800 to less than 1,000 kVA.....	10	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
36214 49	1,000 to less than 2,000 kVA.....	14	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
36214 50	2,000 to less than 3,000 kVA.....	3	(¹⁵)	(¹⁵)	(¹⁵)	(¹⁵)
36214 51	3,000 kVA and over.....	2	¹⁵ 5,028	¹⁵ 420,238	¹⁵ 4,517	¹⁵ 373,032
	Dual fuel (oil and gas) engine-driven generator sets, ac and dc output:					
	Under 2,000 kVA.....	1	(D)	(D)	(D)	(D)
36214 52	2,000 kVA and over.....	2	(D)	(D)	(D)	(D)
36214 75	Other generator set units, excluding electric motor-driven generator sets.....	4	(D)	(D)	(D)	(D)
36217, 8	Electric motor-driven generator sets.....	(NA)	(X)	801,246	(X)	⁷ 40,142
	Electric motor-driven generator sets, including dynamotors, converters, inverters, and frequency changers:					
	Synchro converters and double current generators, 746 watts or more.....	3	(D)	(D)	(D)	(D)
	Other motor generator sets:					
36217 21	ac and dc output rated at less than 746 watts.....	5	7,955	2,751	7,745	2,625
	ac and dc output rated at 746 watts or more:					
36218 30	ac output, based on the rating of the largest ac generator....	12	10,445	25,328	11,035	29,379
36218 40	dc output, based on the rating of the largest dc generator....	4	2,902	13,073	¹ 2,332	¹ 12,632
	Other rotating equipment:					
36217 53	Rate generators, resolvers, and combinations (less than 746 watts).....	11	(¹⁶)	(¹⁶)	(¹⁶)	(¹⁶)
36217 57	Synchro-type components, less than 746 watts.....	6	¹⁶ 884,239	¹⁶ 112,805	¹⁶ 730,134	¹⁶ 91,203
	All hermetic motors:					
36217 97	5.5-inch stator core diameters, and smaller.....	6	11,448	272,293	¹ 10,146	² 40,165
36218 97	Over 5.5-inch stator core diameters.....	9	9,756	316,624	9,466	311,729
	All other rotating equipment:					
36217 98	Rated at less than 746 watts.....	8	101	25,840	113	24,619
36218 98	Rated at 746 watts or more.....	10	(D)	(D)	(D)	(D)
36219 —	Parts for motors and generators regardless of output rating ¹²	(NA)	(X)	¹⁷ 1,178,676	(X)	¹⁷ 1,087,365
36219 90	Commutators.....	12	(X)	(¹⁷)	(X)	(¹⁷)
36219 59	Land transportation.....	6	(X)	(¹⁷)	(X)	(¹⁷)
36219 95	All other parts.....	65	(X)	(¹⁷)	(X)	(¹⁷)

¹The 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.

²Data were included in product code 36211 X2, 3.

³Data for 36211 1J and 36211 1K are combined to avoid disclosing figures for individual companies.

⁴Data for 36211 1M, 36211 1V, and 36211 1W are combined to avoid disclosing figures for individual companies.

⁵Data for 36211 1O and 36211 1P are combined to avoid disclosing figures for individual companies.

⁶Data are included in product code 36211 X4.

⁷For 1993, data for product code 36211 14 are included with product code 36211 15 to avoid disclosing figures for individual companies.

⁸Data are included in product code 36211 X5.

⁹Data are included in product code 36211 X6.

¹⁰Data for 36212 33 and 36212 38 are combined to avoid disclosing figures for individual companies.

¹¹Data for 36212 72 and 36212 74 are combined to avoid disclosing figures for individual companies.

¹²Data for industry 36213 are combined with industry 36219 to avoid disclosing figures for individual companies.

¹³Data for 36214 03 and 36214 04 are combined to avoid disclosing figures for individual companies.

¹⁴Data for 36214 10, 36214 12, and 36214 13 are combined to avoid disclosing figures for individual companies.

¹⁵Data for 36214 47, 36214 48, 36214 49, 36214 50, and 36214 51 are combined to avoid disclosing figures for individual companies.

¹⁶Data for 36217 53 and 36217 57 are combined to avoid disclosing figures for individual companies.

¹⁷Data for 36219 90, 36219 59, and 36219 95 are combined with industry 36219 to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. FS = Frame size. NA Not available. ¹Revised by 5 percent or more from previously published figures. X Not applicable.

Table 23. 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: 1994 and 1993

[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	
1994						
3621- —	Motors and generators:					
36211 —	Fractional horsepower motors, excluding hermetics	376,933	4,365,263	61,289	754,185	33,254
36212 —	Integral horsepower motors and generators, excluding hermetics	9,466	1,885,490	5,855	122,323	1,182
	Alternating current:					
36212 00	Polyphase, induction greater than 1 hp	1,463	998,745	9	16,291	10
36212 XX	Other	1,230	133,559	(D)	(D)	(D)
36213 —	Motors and generators for land transportation equipment	(¹)	(¹)	(¹)	(¹)	(¹)
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	(D)	(D)	(D)
36218 —	Electric motor generator sets and other rotating equipment, including hermetics with a power rating of 746 watts or more	(X)	387,557	² (X)	² (X)	(D)
36219 —	Parts for motors and generators	¹ (X)	¹ 11,178,676	^{1 2} (X)	^{1 2} 87,706	¹ (X)
1993						
3621- —	Motors and generators:					
36211 —	Fractional horsepower motors, excluding hermetics	360,918	4,242,811	72,210	905,610	36,990
36212 —	Integral horsepower motors and generators, excluding hermetics	8,041	1,694,958	4,908	90,763	1,246
	Alternating current:					
36212 00	Polyphase, induction greater than 1 hp	1,274	905,035	8	13,642	9
36212 XX	Other	820	96,909	(D)	(D)	(D)
36213 —	Motors and generators for land transportation equipment	(¹)	(¹)	(¹)	(¹)	(¹)
36214 —	Prime mover generator sets (except steam and hydraulic turbine)	423	1,245,883	(D)	(D)	(D)
36217 —	Electric motor generator sets and other rotating equipment, including hermetics with power rating less than 746 watts	(X)	358,612	(D)	(D)	(D)
36218 —	Electric motor generator sets and other rotating equipment, including hermetics with a power rating of 746 watts or more	(X)	381,530	² (X)	² (X)	(D)
36219 —	Parts for motors and generators	¹ (X)	¹ 11,087,365	^{1 2} (X)	^{1 2} 80,923	¹ (X)

¹Data for 36213 and 36219 are combined to avoid disclosing figures for individual companies.

²For 1994 and 1993, interplant transfers for industries 36218 and 36219 are combined to avoid disclosing figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. X Not applicable.

Table 24. Shipments, Exports, Imports, and Apparent Consumption of Motors and Generators: 1994 and 1993

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

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise ¹ (value at port)	Imports for consumption ² (value)
		Quantity	Value f.o.b. plant		
1994					
36211 —	Fractional horsepower motors and generators (except hermetics)	376,933	4,365,263	443,276	1,595,692
36212 —	Integral horsepower motors and generators	9,466	1,885,490	465,742	676,515
36213 —	Motors and generators for land transportation	(³)	(³)	(³)	(³)
36214 —	Prime mover generator sets (except steam or hydraulic and electric motor driven):				
	Gas/gasoline driven:				
	Less than 5 kVA (36214 03, 04)	239	113,005	(⁴)	(⁴)
	5 kVA and over (36214 05 to 08)	134	169,654	⁴ 40,137	⁴ 84,497
	Diesel engine-driven:				
	Less than 400 kVA (36214 41 to 45)	71	576,921	(⁵)	(⁵)
	400 kVA to less than 1,000 kVA (36214 46 to 48)	(⁶)	(⁶)	(⁵)	(⁵)
	1,000 kVA and over (36214 49 to 51)	(⁶)	(⁶)	⁵ 528,465	⁵ 44,119
	Other (36214 to 75)	⁶ 7	⁶ 486,447	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)	11	15,824	(⁷)	(⁷)
	Hermetic motors (36217 97, 36218 97)	21	588,917	(⁷)	(⁷)
	Other rotating equipment (36217 53, 57, 98, 36218 98)	884	138,645	⁷ 9,788	⁷ 5,465
36219 —	Parts for all electric motors and generators (36219 59 to 95)	³ (X)	³ 1,178,676	³ 658,800	³ 532,092
1993					
36211 —	Fractional horsepower motors and generators (except hermetics)	360,918	4,242,811	401,597	1,394,885
36212 —	Integral horsepower motors and generators	8,041	1,694,958	462,873	577,709
36213 —	Motors and generators for land transportation	(³)	(³)	(³)	(³)
36214 —	Prime mover generator sets (except steam or hydraulic and electric motor driven):				
	Gas/gasoline driven:				
	Less than 5 kVA (36214 03, 04)	240	103,145	(⁴)	(⁴)
	5 kVA and over (36214 05 to 08)	108	141,834	⁴ 55,151	⁴ 70,816
	Diesel engine-driven:				
	Less than 400 kVA (36214 41 to 45)	⁶ 8	⁶ 517,863	(⁵)	(⁵)
	400 kVA to less than 1,000 kVA (36214 46 to 48)	(⁶)	(⁶)	(⁵)	(⁵)
	1,000 kVA and over (36214 49 to 51)	(⁶)	(⁶)	⁵ 449,318	⁵ 33,948
	Other (36214 to 75)	⁶ 6	⁶ 436,580	470,880	117,700
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)	¹ 10	¹ 15,257	(⁷)	(⁷)
	Hermetic motors (36217 97, 36218 97)	¹ 20	¹ 551,894	(⁷)	(⁷)
	Other rotating equipment (36217 53, 57, 98, 36218 98)	¹ 730	¹ 115,822	⁷ 11,901	⁷ 11,314
36219 —	Parts for all electric motors and generators (36219 59 to 95)	³ (X)	³ 1,087,365	³ 697,164	³ 431,708

¹Source: Bureau of the Census Report, EM545, *U.S. Exports*.²Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.³Data for "Motors and generators for land transportation" and "Parts for all electric motors and generators" are combined to avoid disclosing figures for individual companies.⁴Export and import figures for "Gas/gasoline driven, less than 5 kVA" and "Gas/gasoline driven, 5 kVA and over" are combined to avoid disclosing figures for individual companies.⁵Export and import figures 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 figures for individual companies.⁶Manufacturers' shipments figures for "Diesel engine-driven, 400 kVA to less than 1,000 kVA," "1,000 kVA and over," and "Other" are combined to avoid disclosing figures for individual companies.⁷Export and import figures for "Synchronous converters, double current generators, and electric motor-driven generator sets," "Hermetic motors," and "Other rotating equipment" are combined to avoid disclosing figures for individual companies.¹Revised by 5 percent or more from previously published figures. X Not applicable.

Note: Beginning in 1989, data for exports and imports are being 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

10.1 FARM MACHINERY AND LAWN AND GARDEN EQUIPMENT

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 754 companies are included. No estimate is derived for the small firms excluded from the survey.

SUMMARY OF FINDINGS

During 1994, factory shipments of farm machinery and equipment, including parts and attachments, produced by original equipment manufacturers (OEM), totaled \$9,587.1 million, an increase of 18 percent from 1993 shipments of \$8,127.6 million. Shipments of planting, seeding, and fertilizing machinery and parts totaled \$946.3 million, an increase of 18 percent from the 1993 total of \$804.6 million. Harrow, roller, pulverizer, and stalk cutter shipments were valued at \$391.0 million, an increase of 10 percent from the 1993 value of \$356.2 million. Shipments of plows and listers increased 18 percent, from \$123.4 million in 1993 to \$145.1 million in 1994. The value of shipments for harvesting machinery increased 8 percent, from \$2,036.9 million in 1993 to \$2,204.1 million in 1994. Haying machinery increased 26 percent, from \$622.5 million in 1993 to \$786.9 million in 1994. Shipments of farm dairy machines, sprayers and dusters, and farm elevators and farm blowers increased 14 percent, from \$591.1 million in 1993 to \$671.9 million in 1994.

The value of shipments for commercial turf and ground equipment, including parts, was \$1,001.2 million in 1994, a 14-percent increase, from \$880.8 million in 1993. The 1994 total included commercial turf and grounds mowing equipment, \$790.4 million, an increase of 15 percent, from \$688.2 million in 1993. Other commercial turf and grounds care equipment increased 9 percent, from \$192.6 million in 1993 to \$210.8 million in 1994.

The value of shipments of consumer lawn, garden, and snow equipment, including parts, was \$5,606.0 million in 1994, a 17-percent increase, from \$4,803.2 million in 1993. The 1994 value of consumer nonriding lawn, garden, and snow equipment and parts increased 17 percent to \$2,720.9 million, from \$2,321.6 million in 1993. The value of consumer riding lawn, garden, and snow equipment and parts increased 14 percent, from \$2,174.4 million in 1993 to \$2,479.6 million in 1994.

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: 1985 to 1994

[Value in millions of dollars]

Product description ¹	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
Wheel tractors, farm-type	(²)	(²)	(²)	(²)	(²)	(²)	(²)	958.6	893.4	1,443.2
Farm dairy machines, sprayers, dusters, elevators, and farm blowers	671.9	591.1	469.9	449.2	516.0	478.2	434.8	364.7	371.7	403.6
Planting, seeding, and fertilizing machinery	946.3	804.6	634.1	601.0	676.2	638.2	508.6	409.1	371.2	453.3
Harvesting machinery	2,204.1	2,036.9	1,863.7	2,158.0	2,302.5	1,858.8	1,422.8	1,282.3	1,230.1	1,190.8
Haying machinery	786.9	622.5	558.2	659.1	875.1	731.1	574.6	433.7	383.4	498.1
Plows and listers	145.1	123.4	107.4	119.6	136.0	130.8	117.7	74.6	75.3	111.0
Harrows, rollers, pulverizers, and similar equipment	337.8	281.0	273.4	321.6	212.4	207.8	136.9	99.9	99.2	166.0
All other farm machinery and equipment ^{2 3}	4,495.0	3,668.1	3,327.8	3,397.2	4,091.1	3,586.6	3,002.8	1,186.5	933.1	1,051.9
Commercial turf and grounds care equipment	1,001.2	880.8	781.8	724.8	707.9	633.9	595.0	514.6	412.8	376.7
Lawn and garden equipment	5,606.0	4,803.2	4,251.7	3,972.9	4,101.8	3,708.5	3,937.0	3,979.9	3,385.8	3,155.1

¹Each type of farm machinery includes parts and attachments.

²Data for "Wheel tractors, farm-type" are included with "All other farm machinery and equipment" for years 1988 through 1994 to avoid disclosing data for individual companies.

³Includes irrigation systems.

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment, by Type: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
35231 —	Wheel tractors (except contractors' off-highway wheel tractors, garden tractors, turf tractors, and motor tillers) and attachments	18	(X)	(¹)	(X)	(¹)
	Wheel tractors, farm-type (power take-off (PTO) hp) . . .	(NA)	(D)	(D)	(D)	(D)
35231 01	2-wheel drive, including front wheel assist types.	7	(D)	(D)	(D)	(D)
35231 30	4-wheel drive, including tractors with equal size tires, front and rear.	7	4,370	407,408	3,498	326,189
35231 87	Attachments for wheel tractors, farm-type	10	(X)	31,264	(X)	20,299
35239 26	Parts for wheel tractors, farm-type	13	(X)	290,549	(X)	248,017
35232 —	Farm dairy machines, sprayers, dusters, elevators, and farm blowers	(NA)	(X)	563,999	(X)	486,757
35232 pt.	Farm dairy machines and equipment.	14	(X)	81,110	(X)	83,298
	Mechanical installations:					
35232 04	Milking machines, complete, suspended and floor-type bucket, single and double units	4	(D)	(D)	(D)	(D)
35232 08	Pipeline milking units, complete, including claws, shells, inflations, and air tubes, with or without pulsator.	6	(D)	(D)	33,910	¹ 16,129
35232 13	Other farm dairy machines and equipment.	13	30,096	23,368	² 29,297	² 24,889
35232 16	Attachments for farm dairy machines and equipment.	5	(X)	(D)	(X)	(D)
35239 30	Parts for farm dairy machines and equipment, replacement units only	10	(X)	24,899	(X)	23,876
35232 pt.	Sprayers and dusters.	78	(X)	414,192	(X)	335,733
	Power sprayers, field and row crop types only:					
35232 19	Self-propelled	12	3,349	230,369	2,813	174,415
35232 30	Tractor mounted	31	6,035	9,799	9,128	11,087
	Other than tractor mounted:					
35232 40	PTO driven, piston pump type	12	939	3,617	⁵ 546	² 2,782
35232 45	Nonpiston pump type	14	2,404	6,859	2,586	8,017
35232 48	Other power sprayers, over 4 g.p.m.	11	1,362	6,242	^b 1,419	^c 8,591
	Power sprayers, other than row crop and field types, over 4 g.p.m.:					
35232 47	PTO driven	12	1,930	^b 7,414	^a 2,191	6,777
35232 49	Engine-driven	17	2,156	^b 7,800	^a 2,544	^a 8,133
35235 50	Air carried type power sprayers (field, row crop, and orchard types)	10	(S)	4,865	(S)	^b 5,217
35235 51	Foggers and mist sprayers, portable	7	(S)	8,393	(S)	^b 7,707
35232 58	Hand-pulled and garden-type 4 g.p.m. and under . . .	15	^a 50,995	9,051	41,490	7,595
	Sprayers, agricultural hand:					
35232 59	Under 1 gallon	4	428,565	2,597	461,452	2,602
	1 gallon and over:					
35232 61	Compressed air or gas	6	6,134,795	94,820	5,680,010	71,373
35232 62	Other, including knapsack, hose end, and flame sprayers, and sprayer pumps	9	4,391,232	7,967	4,279,731	7,380
35232 67	Dusters, power, and hand, all types	5	100,466	978	90,541	951
35232 68	All other sprayers	11	(X)	^a 3,318	(X)	2,915
35232 69	Attachments for sprayers and dusters	21	(X)	10,103	(X)	10,191
35239 35	Parts for sprayers and dusters, replacement units only	44	(X)	70,747	(X)	70,996
35232 pt.	Farm elevators and blowers.	44	(X)	68,697	(X)	67,726
	Farm elevators, portable:					
35232 70	Single and double chain	12	^a 2,047	4,985	^a 1,883	^a 4,423
35232 72	Auger type	14	^a 15,380	^b 25,751	18,978	31,488
35232 73	Other farm portable and stationary augers and elevators.	17	9,343	21,121	8,103	19,288

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment, by Type: 1994 and 1993—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
35232 —	Farm dairy machines, sprayers, dusters, elevators, and farm blowers—Con.					
35232 pt.	Farm elevators and blowers—Con.					
35232 74	Other farm blowers, including forage blowers, and combination grain and forage blowers	10	2,306	7,035	'2,272	'7,291
35232 75	Attachments for farm elevators and blowers	15	(X)	9,805	(X)	5,236
35239 40	Parts for farm elevators and for grain and forage blowers, replacement units only	23	(X)	^a 12,237	(X)	9,489
35233 —	Planting, seeding, and fertilizing machinery	131	(X)	824,539	(X)	675,177
35233 21	Corn planters, corn and cotton planters, and lister planters, pull type and mounted (total rows mounted) .	11	49,109	189,132	48,114	157,612
35233 24	Grain drills (fixed frame), all types	12	(D)	(D)	(D)	(D)
35233 40	Transplanters (pull-type or mounted) and broadcast seeders (end-gate, mounted and drawn)	8	13,513	5,833	15,151	8,673
	Fertilizer distributors (pull-type or mounted):					
35233 50	Dry, including lime spreaders	35	^a 5,890	31,232	6,326	29,756
35233 57	Liquid and anhydrous ammonia	20	6,837	25,041	'5,844	'27,045
35233 61	Manure spreaders, rear discharge	18	8,189	47,469	'7,174	'41,457
35233 65	Manure spreaders, side discharge	10	^a 2,844	^a 22,693	2,740	21,173
35233 69	Manure pumps, liquid	10	^a 1,228	^a 4,316	'946	'3,541
35233 73	Front and rear tractor-mounted loaders (farm-type), manure and general utility (except beet and sugar cane loaders)	15	27,858	83,872	21,905	65,596
35233 77	Row crop unit planters (quantity in rows)	8	30,405	22,456	29,849	21,658
35233 79	Other planting, seeding, and fertilizing machinery	32	(D)	(D)	(D)	(D)
35233 84	Attachments for planting, seeding, and fertilizing machinery	32	(X)	42,452	(X)	42,689
35239 71	Parts for planting, seeding, and fertilizing machinery, replacement units only	82	(X)	121,798	(X)	129,410
35235 —	Harvesting machinery	84	(X)	1,858,907	(X)	1,696,000
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	9	5,924	118,570	4,389	82,130
35235 41	Other grain-type combines	6	(D)	(D)	340	11,957
	Field forage harvesters:					
35235 63	Shear bar, self-propelled type and pull-type (basic machines)	6	2,310	42,292	1,976	40,740
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	5	339	2,274	266	1,776
35235 79	Other harvesting machinery, including potato diggers, cane harvesting equipment, and picker-shellers	57	(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	31	(X)	87,849	(X)	71,822
35239 50	Parts for harvesting machinery, replacement units only	59	(X)	345,237	(X)	340,925
35236 —	Haying machinery	43	(X)	670,453	(X)	505,184
35236 13	Mowers, cutter bar type, including drum and disk	7	6,111	^a 27,410	4,140	16,812
35236 23	Mower-conditioners and windrowers with conditioner auger and draper-type (pull-type and self-propelled)	9	16,827	210,265	13,100	141,337
35236 31	Rakes, side delivery, cylinder type, and finger wheel type	12	9,933	34,951	7,931	25,178
35236 55	Hay balers, hay stackers (field type), hay bale loaders, and bale throwing attachments	18	26,547	350,052	21,708	281,218
36236 82	Other haying machinery ²	21	(X)	47,775	(X)	40,639

See footnotes at end of table.

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment, by Type: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
35236 —	Haying machinery—Con.					
35236 83	Other attachments for haying machinery (stripper, bale chute, and knife attachments)	8	(X)	⁽²⁾	(X)	⁽²⁾
35239 55	Parts for haying machinery, replacement units only	28	(X)	116,416	(X)	117,351
3523C —	Plows, harrows, rollers, pulverizers, cultivators, and weeders.	(NA)	(X)	385,782	(X)	309,553
3523C pt.	Plows (primary tillage equipment)	72	(X)	109,532	(X)	90,995
3523C 15	Subsoilers, deep tillage	27	^a 4,173	25,821	^a 3,350	19,512
3523C 17	Terracing and ditching plows	11	^a 575	^a 1,458	¹ 447	¹ 1,115
	Chisel plows, deep tillage (chisel or sweep type):					
3523C 19	Pull-type	13	1,948	23,324	1,806	22,203
3523C 21	Mounted	12	^b 461	^b 897	(D)	(D)
3523C 25	Other plows (except snow plows)	20	4,288	31,051	(D)	(D)
3523C 27	Middlebusters and disc bedders	11	2,181	2,224	¹ 2,365	2,215
3523C 29	Attachments for plows (coulters, jointers, root cutters, subsoilers, fertilizer distributors, etc.), excluding lister planting attachments	24	(X)	15,893	(X)	¹ 13,207
3523C 31	Plowshares (quantity in thousands of pounds)	9	12,973,443	8,864	14,396,475	8,534
35239 60	Parts for plows (except plowshares), replacement units only	26	(X)	35,617	(X)	32,411
3523C pt.	Harrows, rollers, pulverizers and similar equipment (secondary tillage)	96	(X)	160,997	(X)	123,291
3523C 41	Spike-tooth harrow sections and spring-tooth and tine-tooth harrow sections	24	27,137	^a 11,234	24,880	9,708
3523C 44	Disc harrows, single, tandem, and offset	25	11,881	59,185	11,702	39,591
3523C 53	Combination tillage equipment, roller/harrows, disc or coulters/field cultivators, and disc or coulters/spring tooth	29	11,443	37,811	5,207	29,413
3523C 54	Blade terracers or scrapers (farm-size)	39	^a 61,653	^a 22,668	45,014	¹ 17,030
3523C 59	Land levelers	9	1,223	1,936	1,257	1,610
3523C 61	Other harrows, rollers, pulverizers, and similar equipment	29	7,073	24,418	6,339	^a 22,863
3523C 63	Attachments for harrows, rollers, pulverizers, and similar equipment	13	(X)	3,745	(X)	3,076
35239 45	Parts for harrows, rollers, pulverizers, and similar equipment, replacement units only	40	(X)	20,765	(X)	^a 23,237
3523C pt.	Cultivators and weeders	58	(X)	115,253	(X)	95,267
3523C 70	Corn and cotton type cultivators, shank and sweep type (front and rear mounted)	25	8,378	37,147	8,741	36,486
3523C 80	Rotary cultivators, ground and power driven	9	1,082	2,875	2,269	5,439
3523C 90	Field cultivators	21	5,125	48,124	2,885	28,820
3523C 94	Other cultivators and weeders, including tool bars (basic units)	22	3,361	8,278	¹ 3,045	6,495
3523C 98	Attachments for cultivators and weeders (front mounting frame, disc weeders, rear section, and drawbars)	25	(X)	18,829	(X)	18,027
35239 65	Parts for cultivators and weeders, replacement units only	36	(X)	40,792	(X)	¹ 39,175
3523E —	All other farm machinery and equipment (except parts) ¹	(NA)	(X)	3,730,733	(X)	3,173,086
3523E pt.	Stalk shredders and cutters or rotary mowers (PTO)	43	121,130	166,775	123,495	172,447
3523E 01	Flail type (without spout)	16	^a 2,346	14,178	^a 3,147	15,871
	Horizontal blade type:					
3523E 05	66 inches cutting width and under	30	^a 76,659	^a 42,083	77,013	39,989
3523E 07	Over 66 inches up to 100 inches cutting width	23	29,694	^a 38,015	29,695	37,982
3523E 09	Over 100 inches cutting width	17	^a 12,431	72,499	13,640	78,605
35239 85	Parts for stalk shredders, and cutters or rotary mowers (PTO), replacement units only	30	(X)	^a 42,487	(X)	¹ 37,198
3523E pt.	Machines for preparing crops for market or for use	86	(X)	249,281	(X)	242,277
3523E 11	Feed grinders and crushers, power	16	2,259	29,170	2,293	26,130

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment, by Type: 1994 and 1993—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3523E —	All other farm machinery and equipment (except parts)—Con.					
3523E pt.	Machines for preparing crops for market or for use—Con.					
3523E 13	Feed mixers, farm-size, stationary and portable	21	3,885	48,083	'4,262	'50,548
3523E 14	Combination grinder-mixers	10	2,329	20,959	1,962	16,653
	Dryers (grain, hay, and seed):					
3523E 25	Heated air crop dryers	16	8,631	54,915	9,512	60,529
3525E 26	Crop drying fans (over 15,000 c.f.m. at approximately 1-inch pressure)	10	11,569	7,730	15,049	'9,980
3523E 23	Other machines for preparing crops for market or for use	44	24,399	77,358	24,945	67,818
3523E 24	Attachments for machines for preparing crops for market or for use	17	(X)	11,066	(X)	10,619
35239 70	Parts for machines for preparing crops for market or for use, replacement units only	47	(X)	36,590	(X)	32,042
3523E pt.	Farm poultry equipment	41	(X)	236,499	(X)	196,258
3523E 31	Incubators; quantity represents egg capacity in thousands	7	(D)	(D)	(D)	(D)
3523E 34	Brooders, floor and hanging (gas, electric, oil, coal, wood, and battery) ⁴	9	136,638	16,607	'94,619	'12,522
3523E 36	Nests and cages	7	2,155,078	29,474	'2,020,846	'31,224
3523E 38	Poultry feeders (trough, hanging, and mechanical) and waterers (except turkey feeders and waterers)	18	19,359,065	93,236	13,437,196	66,719
3523E 48	Other farm poultry equipment, including turkey waterers, mechanized egg graders, and egg washers	19	(D)	(D)	(D)	(D)
3523E 49	Attachments for farm poultry equipment	14	(X)	11,512	(X)	9,960
35239 75	Parts for farm poultry equipment, replacement units only	14	(X)	^a 18,527	(X)	^a 16,642
3523E pt.	Hog equipment	54	(X)	141,361	(X)	'107,659
3523E 50	Feeding equipment	32	294,500	40,259	273,132	36,559
3523E 55	Handling equipment	19	943,635	49,109	767,154	'33,907
3523E 59	Watering equipment	26	1,000,950	10,255	823,146	9,395
3523E 61	Other hog equipment	26	1,071,817	39,252	966,945	25,761
3523E 62	Attachments for hog equipment	14	(X)	2,486	(X)	2,037
35239 88	Parts for hog equipment, replacement units only	21	(X)	4,907	(X)	4,536
3523E pt.	Other barn and barnyard equipment	105	(X)	219,375	(X)	192,383
3523E 63	Silo and grain bin unloaders, forage and grain, including sealed storage unloaders (farm-type)	17	17,296	25,447	34,822	26,277
	Cattle and dairy barn equipment:					
3523E 64	Feeding equipment	46	220,295	41,995	174,566	37,490
3523E 71	Handling equipment	37	1,254,242	54,888	'997,501	'43,909
3523E 79	Water equipment	29	410,843	20,836	412,790	19,857
3523E 85	Other barn and barnyard equipment	52	964,702	70,266	'879,599	'59,636
3523E 86	Attachments for barn and barnyard equipment	19	(X)	5,943	(X)	'5,214
35239 80	Parts for barn and barnyard equipment, replacement units only	35	(X)	26,023	(X)	'29,618
3523E pt.	Farm wagons, and other farm transportation equipment ¹	89	(X)	2,371,178	(X)	1,960,651
3523E 88	Wagons (chassis only) and trailer gears, excluding motor trucks, 4-wheel	36	(D)	(D)	(D)	(D)
	Boxes and racks for mounting on wagons and trailer gears:					
3523E 90	Manual unloading or dump	9	(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	12	(D)	(D)	(D)	(D)
3523E 95	Other farm transportation equipment	26	(X)	(D)	(X)	(D)
3523E 96	Attachments for farm transportation equipment	16	(X)	(D)	(X)	9,569
35239 89	Parts for farm transportation equipment, including operator cabs for farm tractors	45	(X)	73,046	(X)	70,906
3523E pt.	Irrigation systems	22	(X)	346,264	(X)	301,411
3523E 98	Self-propelled irrigation systems, center-pivot; quantity is in ten-tower equivalents	12	9,450	318,061	8,427	272,359

See footnotes at end of table.

Table 2. Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment, by Type: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3523E —	All other farm machinery and equipment (except parts)—Con.					
3523E pt.	Irrigation systems—Con.					
3523E 99	All other systems using 100-foot flexible hose feeder line and over	13	4,527	28,203	4,684	29,052
35239 82	Parts for irrigation systems, replacement units only	12	(X)	57,635	(X)	56,067
3523F —	Commercial turf and grounds care equipment, including parts and attachments	(NA)	(X)	1,001,224	(X)	880,798
3523F pt.	Commercial turf and grounds mowing equipment	44	(X)	790,391	(X)	688,246
3523F 01	Powered nonriding mowers	19	56,148	90,968	46,994	69,645
3523F 03	Riding reel-type turf mowers, including greens mowers)	7	14,158	153,445	12,325	122,404
3523F 07	Riding rotary turf mowers	22	47,116	291,059	42,855	258,758
3523F 09	Gang rotary cutting units, reel and rotary, individual sections	7	44,861	54,430	36,410	43,792
3523F 11	Flail mower cutting units, including gang	6	2,686	12,290	5,143	14,426
3523F 13	Other mowing equipment	9	16,522	30,145	11,280	22,750
3523F 17	Parts for commercial turf and grounds mowing equipment	28	(X)	115,642	(X)	108,307
3523F 19	Attachments for commercial turf and grounds mowing equipment	22	(X)	42,412	(X)	48,164
3523F pt.	Other commercial turf and grounds care equipment	44	(X)	210,833	(X)	192,552
3523F 23	Sod cutters and sod harvesters	3	2,886	7,753	¹ 2,349	5,702
3523F 25	Seeders, spreaders, and top dresser attachments	11	22,369	12,175	31,645	11,968
3523F 27	Aerators, spikers, and pluggers	12	10,588	27,663	11,064	23,263
3523F 29	Dethatchers	10	6,124	4,649	5,500	4,138
3523F 31	Power brooms, blowers, vacuums, and sweepers	12	12,198	28,567	9,890	23,698
3523F 33	Irrigation systems (except agricultural and residential)	5	(S)	22,715	(S)	¹ 22,325
3523F 36	Other commercial turf and grounds care equipment, including trap rakes, transport trailers, and turf tractors and trucks	23	15,785	70,000	¹ 14,152	¹ 63,054
3523F 41	Parts for other commercial turf and ground care equipment	20	(X)	19,094	(X)	25,201
3523F 43	Attachments for other commercial turf and ground care equipment	11	(X)	18,217	(X)	¹ 13,203
3524 —	Lawn and garden equipment	(NA)	(X)	5,605,981	(X)	4,803,244
35241 —	Consumer nonriding lawn, garden, and snow equipment	60	24,720,418	2,544,009	22,667,997	2,162,648
	Lawnmowers:					
35241 02	Push-type: reel (powered and nonpowered) and rotary-gas powered	23	3,882,747	529,940	4,799,788	668,790
35241 12	Rotary, self-propelled, gas-powered	23	⁽³⁾	⁽³⁾	⁽³⁾	⁽³⁾
35241 15	Electric, all types, including battery-powered ³	2	2,100,008	571,085	1,251,293	341,047
35241 20	Rotary garden motor tillers	17	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾
35241 30	2-wheel tractors walking type (except rotary tillers) ⁴	4	509,207	184,658	413,201	161,448
	Snow throwers (snow blowers) (except attachment-type):					
35241 41	Single stage	4	200,611	57,278	^b 149,621	^b 43,341
35241 42	Dual stage	9	567,611	259,511	^b 143,229	^a 72,094
	Powered lawn edgers/trimmers:					
35241 50	Fixed blade	15	948,238	65,397	897,657	60,257
35241 52	Other than fixed blades	16	8,170,785	430,135	8,685,103	456,062
35241 61	Shredders and shredder-grinders	11	95,527	40,403	124,675	52,523
35241 63	Yard vacuums and blowers	17	3,016,802	256,457	2,365,311	154,048

See footnotes at end of table.

Table 2. **Manufacturers' Shipments of Farm Machinery and Lawn and Garden Equipment, by Type: 1994 and 1993—Con.**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3524 —	Lawn and garden equipment—Con.					
35241 —	Consumer nonriding lawn, garden and snow equipment—Con.					
35241 91	Other consumer nonriding lawn, garden, and snow equipment.	20	5,228,882	149,145	3,838,119	153,038
35244 —	Consumer riding lawn, garden, and snow equipment	24	1,637,362	2,215,806	1,546,327	1,898,833
	Lawn tractors and riding mowers, front engine:					
35244 03	Under 10.0 hp (under 7.5 kW)	3	(⁵)	(⁵)	4,068	4,238
35244 07	10.0 hp and over (7.5 kW and over) ⁵	13	1,265,983	1,448,945	1,199,986	1,230,554
	Lawn tractors and riding mowers, rear engine:					
35244 09	Under 10.0 hp (under 7.5 kW)	9	88,378	92,688	70,670	76,139
35244 11	10.0 hp and over (7.5 kW and over)	15	121,556	175,208	154,097	190,815
	Garden tractors:					
35244 13	Under 16.0 hp (under 12.0 kW)	6	21,749	78,548	(D)	(D)
35244 17	16.0 hp to 19.9 hp (12.0 kW to 14.9 kW)	9	81,509	185,891	64,307	149,065
35244 19	20.0 hp and over (15.0 kW and over)	10	58,187	234,526	(D)	(D)
35244 31	Other consumer riding lawn, garden, and snow equipment.	1	(⁵)	(⁵)	(D)	(D)
35246 —	Parts and attachments for consumer lawn, garden, and snow equipment	55	(X)	846,166	(X)	741,763
	Nonriding:					
35246 03	Parts	46	(X)	176,883	(X)	158,982
35246 05	Attachments	26	(X)	148,624	(X)	87,121
	Riding:					
	Parts:					
35246 11	For tractors and riding mowers	29	(X)	254,568	(X)	268,828
35246 13	For other equipment	9	(X)	9,191	(X)	6,704
	Attachments:					
35246 15	Rotary mower decks	14	(X)	78,590	(X)	59,765
35246 17	Rotary tiller attachments	8	(X)	6,367	(X)	7,541
35246 19	Blades, dozer	10	(X)	20,724	(X)	15,910
35246 21	Snow throwers	8	(X)	20,635	(X)	11,474
35246 23	Carts and wagons	11	(X)	20,486	(X)	14,680
35246 25	All other attachments.	27	(X)	110,098	(X)	110,758

¹Data for product code 35231, "Wheel tractors," are combined with product code 3523E, "All other farm machinery and equipment (except parts)" to avoid disclosing figures for individual companies.

²Data for the value of shipments of "Other attachments for haying machinery" are combined with "Other haying machinery" to avoid disclosing figures for individual companies.

³Data for "Lawnmowers, rotary, self-propelled, gas-powered" are combined with "Lawnmowers, electric, all types" to avoid disclosing figures for individual companies.

⁴Data for "Rotary garden motor tillers" are combined with "2-wheel tractors walking-type (except rotary tillers)" to avoid disclosing figures for individual companies.

⁵For 1994, data for "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 figures for individual companies.

D Data withheld to avoid disclosing figures for individual companies. NA Not available. pt. Partial. [†]Revised by 5 percent or more from previously published figures. S Suppressed. Data did not meet publication standards of the Bureau of the Census. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a10 to 25 percent of the item is estimated. ^b25 to 50 percent of the item is estimated. ^cOver 50 percent of the item is estimated.

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Imports for consumption ²		Apparent consumption	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994								
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)	414,192	(NA)	128,947	3,221,743	21,184	(NA)	306,429
Planting machinery and fertilizer distributors, pull-type or mounted	(X)	824,539	18,121	78,699	126,576	69,789	(NA)	(NA)
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	108,529	98,067	14,020	11,048	17,087	6,217	111,596	93,236
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
Hay mowers, mower-conditioners, and windrowers	144,068	404,450	39,221	64,540	42,687	73,333	147,534	413,243
Other haymaking machines	(X)	82,726	2,988	38,104	12,190	18,444	(NA)	63,066
Balers, including pickup balers	26,547	350,052	6,574	77,925	914	6,693	20,887	278,820
Plows	(X)	109,532	4,065	10,725	14,397	11,418	(NA)	110,225
Cultivators and weeders	17,946	96,424	37,523	23,211	34,239	52,307	14,662	125,520
Machinery for preparing animal feed	8,473	98,212	6,149	37,084	13,231	8,881	15,555	70,009
Other machines for preparing crops for market or for use	44,599	140,003	4,429	14,589	5,806	7,129	45,976	132,543
Farm poultry incubators and brooders	(D)	(D)	38,003	25,513	19,492	4,883	(D)	(D)
Nests and cages (poultry equipment)	2,155,078	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	9,450	318,061	911	19,633	3	85	8,542	298,343
All other self-propelled irrigation systems using 100-foot flexible hose feeder line and over	4,527	28,203	(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 and flail and gang mowers	108,821	511,224	14,275	54,873	5,428	6,469	99,974	462,820
Mowers for lawns, parks, or sports grounds and other commercial and turf grounds mowers	5,453,083	2,446,442	1,019,798	432,480	94,596	18,752	4,527,881	2,032,714
Snowblowers (snowthrowers)	768,222	316,789	22,770	15,767	85,365	50,158	830,817	351,180
Powered lawn and hedge trimmers	9,119,023	495,532	1,403,636	84,464	337,618	52,597	8,053,005	463,665

See footnotes at end of table.

Table 3. Shipments, Exports, and Imports of Farm Machinery and Equipment: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise ¹		Imports for consumption ²		Apparent consumption	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1993								
Farm-type wheel tractors.....	(D)	(D)	22,928	572,278	78,804	991,913	(D)	(D)
Farm dairy mechanical installations, including milking machine vacuum pumping outfits	(D)	(D)	1,846	18,805	17,562	3,916	(D)	(D)
Sprayers and dusters (except aerial types)	(X)	335,733	(NA)	103,200	2,424,193	19,698	(NA)	252,231
Planting machinery and fertilizer distributors, pull-type or mounted	(X)	675,177	16,846	69,885	176,761	73,178	(NA)	678,470
Disc harrows	11,702	39,591	1,838	7,397	112,496	25,123	122,360	57,317
Other harrows, rollers, pulverizers, and similar equipment	82,697	80,624	9,156	12,839	11,177	4,120	84,718	71,905
Combines	(D)	(D)	5,114	323,010	1,018	26,014	(D)	(D)
Other harvesting machines	(D)	(D)	2,556	33,559	4,221	43,216	(D)	(D)
Field forage harvesters	2,242	42,516	1,231	15,072	1,073	6,205	2,084	33,649
Hay mowers, mower-conditioners, and windrowers	140,735	330,596	14,571	42,122	32,904	66,075	159,068	354,549
Other haymaking machines	(X)	65,817	25,401	53,235	13,716	13,538	(NA)	26,120
Balers, including pickup balers.....	21,708	281,218	7,203	76,507	763	6,009	15,268	210,720
Plows.....	(X)	90,995	4,349	10,569	5,438	9,125	(NA)	89,551
Cultivators and weeders	16,940	77,240	36,968	23,189	34,086	44,453	14,058	98,504
Machinery for preparing animal feed. . .	8,517	93,331	4,377	35,414	4,328	5,103	8,468	63,020
Other machines for preparing crops for market or for use	49,506	138,327	2,784	19,449	1,669	977	48,391	119,855
Farm poultry incubators and brooders ..	(D)	(D)	27,522	17,447	32,228	8,491	(D)	(D)
Nests and cages (poultry equipment) . . .	2,020,846	31,224	40,272	43,192	170,787	6,661	(NA)	(NA)
Other barn and barnyard equipment. . . .	(D)	(D)	57,011	69,943	150,964	3,394	(D)	(D)
Self-propelled irrigation systems, center-pivot	8,427	272,359	1,839	44,910	-	-	6,588	227,449
All other self-propelled irrigation systems using 100-foot flexible hose feeder line and over	4,684	29,052	(NA)	155,371	19,388,409	17,443	(NA)	(NA)
Farm wagons and other farm transportation equipment.....	(D)	(D)	-	-	11,975	2,720	(D)	(D)
Riding turf mowers	91,590	424,954	11,391	45,366	1,364	5,171	81,563	384,759
Flail and gang mowers.....	5,143	14,426	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Mowers for lawns, parks, or sports grounds and other commercial and turf grounds mowers	6,310,996	2,354,764	877,474	409,157	167,453	34,576	5,600,975	1,980,183
Snowblowers (snowthrowers).....	292,850	115,435	17,480	11,553	39,428	26,316	314,798	130,198
Powered lawn and hedge trimmers.....	9,582,760	516,319	1,094,258	60,220	409,769	56,638	8,898,271	512,737

¹Source: Bureau of the Census report, EM545, *U.S. Exports*.²Source: Bureau of the Census report, IM145, *U.S. Imports for Consumption*.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available. X Not applicable.

Note: 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 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.

10.2 CONSTRUCTION MACHINERY

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, road graders, and scraper bowls, totaled \$9.2 billion in 1994, a 20-percent increase from the 1993 total of \$7.7 billion, also excluding the same products. Shipments of contractors' off-highway wheel tractors totaled \$492.4 million, representing a 38-percent increase from the 1993 shipments of \$355.6 million. The figure for shipments of crawler, or tracklaying, tractors for 1994 was again suppressed because the data did not meet publication standards of the Bureau of the Census. The 1994 shipments of tractor shovel loaders totaled \$2,624.0 million, an increase of 11 percent from the 1993 total of \$2,354.4 million. Shipments of power cranes, draglines, and shovels in 1994 totaled \$2,231.4 million, an increase of 30 percent from the 1993 shipments of \$1,719.4 million. The 1994 shipments of mixers, pavers, and related equipment totaled \$1,004.2 million, an increase of 14 percent from the 1993 total of \$877.1 million.

The 1994 shipments of compactors, rollers, rough-terrain forklifts, and off-highway trucks, trailers, and wagons totaled \$1,605.8 million, an increase of 16 percent from the 1993 total of \$1,381.3 million. The shipments of motor graders, light maintainers, and scraper bowls, suppressed for 1993, totaled \$806.4 million in 1994. The 1994 shipments of equipment for mounting on tractors (or trucks or other prime movers) totaled \$286.6 million, an increase of 15 percent from the 1993 total of \$249.8 million. The 1994 shipments of self-propelled continuous ditchers and trenchers totaled \$174.0 million, a 21-percent increase from the 1993 total of \$143.6 million. Shipments of aerial work platforms totaled \$824.2 million in 1994, an increase of 29 percent from the 1993 total of \$637.4 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.

Tractor Shovel 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 material or equipment on mining, construction, logging, petroleum development, and similar project sites.

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 will have 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. Tractors with torque converter transmission should be included in the same horsepower group as the comparable model tractor equipped with direct drive transmission. Where there is no comparable direct drive model tractor, such tractors are included at 80 percent of net horsepower at the flywheel.

Hydraulic Crane. A machine with 360-degree rotation. On this machine, the boom is designed primarily for lifting the load by wire rope. The boom can also be extended, retracted, raised, and lowered hydraulically.

Integrated Hydraulic Truck Mounted Crane. A telescopic truck mounted (rubber) crane mounted on a purpose designed crane carrier chassis.

Pinned on Telescopic Crane. An 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

- hp horsepower = .7457 kilowatts (kW)
- yd³ cubic yard = .7646 cubic meters (m³)
- 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

Table 4. Value of Shipments of Construction Machinery: 1985 to 1994

[Millions of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
3531A 00	Contractors' off-highway wheel tractors.....	492.4	¹ 355.6	324.0	244.2	360.5	366.2	408.1	374.8	421.9	486.6
3531B 00	Crawler (or tracklaying) tractors.....	(D)	(D)	775.6	998.7	1,092.6	1,163.7	1,145.1	975.9	821.2	628.7
3531C 00	Tractor shovel loaders.....	2,624.0	¹ 2,354.4	1,833.1	1,855.5	2,235.9	2,212.0	2,027.6	1,782.5	1,679.0	1,754.1
3531E 00	Power cranes, draglines, and shovels.....	2,231.4	¹ 1,719.4	1,582.3	1,239.1	1,511.8	1,318.3	1,050.7	955.4	¹ 1,308.6	¹ 1,445.5
3531F 00	Mixers, pavers, and related equipment.....	1,004.2	877.1	635.8	509.6	609.6	701.8	565.3	569.9	566.2	632.1
3531G 00	Scrapers; graders; compactors; rollers; off-highway trucks, trailers, and wagons; and rough terrain forklifts....	2,175.8	¹ (D)	1,560.7	1,631.6	2,023.7	1,881.3	1,524.2	1,249.9	² 2,023.8	² 2,322.0
3531N 00	Equipment for mounting on tractors.....	286.6	¹ 249.8	³ 256.1	³ 214.6	³ 258.6	³ 343.0	³ 363.8	³ 481.1	^(2, 3)	^(2, 3)
3531P 20	Self-propelled continuous ditchers and trenchers.....	174.0	143.6	³ 124.1	³ 112.2	³ 129.7	³ 153.6	³ 141.2	³ 127.6	³ 125.6	³ 118.0
3531P 90	Aerial work platforms.....	824.2	637.4	³ 590.3	³ 568.9	³ 814.9	³ 799.8	³ 591.6	³ 529.3	(NA)	(NA)

¹Prior 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.

²Data for product codes 3531G and 3531H (see footnote 3) are combined for years prior to 1987.

³Prior 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 the old 3531H but moved to 3531K in 1992 and to 3531P in 1993. Beginning in 1992, "Snow-clearing attachments" are no longer included in the MA35D (which includes all of 3531N, but only part of 3531P).

D Data withheld to avoid disclosing figures for individual companies. NA Not available. ¹Revised by 5 percent or more from previously published figures.

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: 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
	Wheel tractors, contractors' off-highway type	(X)	4,473	492,363	'3,710	'355,597
	2- and 4-wheel for use on natural terrain: ¹					
3531A 13	Single axle towing tractors.	5	(D)	(D)	(D)	(D)
3531A 15	Two axle towing tractors, including 2- and 4-wheel drive	3	(D)	(D)	(D)	(D)
3531A 34	Rubber-tired dozers, all sizes	2	(D)	(D)	(D)	(D)
3531A 37	Wheeled log skidders, self-propelled.	6	2,562	227,228	2,086	187,841
3531B 00	Crawler tractors (except crawler loaders)	6	(D)	(D)	(D)	(D)
	Loaders	(X)	74,863	2,623,996	'62,965	2,354,410
3531C 60	Skid steer loaders, 4-wheel drive skid steer, all sizes	8	45,332	623,008	36,777	524,840
	Wheel loaders, rear engine mount, integral design, 4-wheel drive, nonskid steer:					
3531C 71	Under 79 nehp.	5	528	12,667	'573	'13,740
3531C 72	80 through 149 nehp	9	5,586	396,924	4,822	331,407
3531C 73	150 through 249 nehp	9	2,998	331,124	3,839	447,639
3531C 74	250 nehp and over	7	(D)	(D)	(D)	(D)
3531C 82	Crawler loaders	2	(D)	(D)	493	29,791
3531C 95	Integral design tractor shovel loader/backhoes ²	6	17,744	571,635	(D)	(D)
	Power cranes, draglines, and excavators, including surface mining equipment	(X)	³ 54,552	³ 2,231,378	³ '43,919	³ '1,719,373
	Hydraulic operated excavators:					
	Crawler mounted, rated size in metric tons:					
3531E 05	Not more than 24 metric tons	10	6,397	716,150	4,669	484,086
3531E 06	More than 24 but not more than 40 metric tons	6	1,216	161,567	1,117	140,758
3531E 07	More than 40 metric tons.	6	(⁴)	(⁴)	(⁴)	(⁴)
3531E 19	Wheel (rubber) mounted, all sizes	3	⁴ 1,340	⁴ 356,821	⁴ '1,028	⁴ '219,871
	Cranes, lattice boom, wheel (rubber) mounted:					
3531E 37	Maximum working load not more than 120 tons	2	(⁵)	(⁵)	(⁵)	'3,511
3531E 38	Maximum working load more than 120 tons	4	⁵ 37	⁵ 21,855	⁵ '38	'20,815
	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	2,102	138,244	1,002	81,072
3531E 52	More than 20 but not more than 30 tons	6	187	20,740	126	14,130
3531E 53	More than 30 but not more than 55 tons	7	112	27,775	(⁶)	(⁶)
3531E 54	More than 55 tons	3	107	46,587	⁶ 177	⁶ 63,984
3531E 57	Pinned on type, telescopic and articulated.	6	2,107	78,402	1,758	58,466
	Wheel cranes, one control station (self-propelled, rubber mounted), maximum working load of:					
3531E 68	Not more than 18 tons	9	748	49,995	674	43,476
3531E 65	More than 18 tons but not more than 25 tons	5	186	20,617	247	28,716
3531E 66	More than 25 tons	5	535	127,727	655	147,740
	Other cranes and excavators:					
3531E 84	Pedestal or shipmounted marine cranes	9	66	18,726	62	17,305
3531E 87	All other cranes, n.e.c. ⁷	16	4,072	306,557	'3,671	280,347
	Attachments for power cranes, draglines, and excavators: ⁸					
3531E 94	Hoe.	5	10,112	25,560	7,563	18,908
3531E 95	Dragline buckets, all sizes	5	113	13,920	114	6,447
3531E 97	Clamshell/grapple	8	1,098	35,407	785	28,779
3531E 98	All other attachments, n.e.c.	24	24,017	64,728	20,233	'60,962
	Mixers, pavers, and related equipment	(X)	151,416	1,004,155	136,010	877,070
	Concrete mixers, portable, all sizes: ⁹					
3531F 21	Truck-mixer or agitator	11	4,795	222,226	5,770	'204,948
3531F 25	Other than truck-mixer	8	(D)	(D)	(D)	4,579
3531F 31	Plaster and mortar mixers, all sizes.	8	12,890	23,970	9,682	18,096
3531F 33	Slipform concrete paving machines ¹⁰	11	379	61,453	374	58,795
3531F 34	Nonautomated (extruder) concrete curbers and concrete placer spreaders	3	(D)	(D)	(D)	(D)
3531F 39	Concrete trowels	9	10,002	15,854	7,134	11,405
3531F 40	Concrete vibrators ¹¹	12	112,454	35,679	103,526	'28,087
3531F 42	Concrete screeds (hand-propelled or winch type)	8	3,112	5,675	2,960	4,958
3531F 43	Concrete batching plants, bin and batch ¹²	14	454	48,434	471	43,928
3531F 63	Concrete pumps, mobile	5	(D)	(D)	(D)	(D)
3531F 66	Bituminous distributors	7	613	24,856	498	21,701

See footnotes at end of table.

Table 5. Quantity and Value of Shipments of Selected Types of Construction Machinery: 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
	Mixers, pavers, and related equipment—Con.					
	Bituminous pavers, self-propelled:					
3531F 71	21,999 lb gross weight and under (basic unit)	7	685	37,206	†482	†23,634
3531F 75	22,000 lb gross weight and over (basic unit)	6	631	104,715	635	102,171
3531F 80	Bituminous pavers, not self-propelled	4	(D)	(D)	(D)	(D)
	Asphalt plants, including cold mix central plants:					
3531F 82	Less than 7,500 lb (239 tph)	4	41	23,480	41	22,526
3531F 84	7,500 lb and over (240 tph and over)	6	110	148,000	128	†145,964
3531F 85	Bituminous stabilization mixing equipment ¹³	5	232	45,927	†192	†39,959
3531F 89	Bituminous cold planers/milling machines (self-propelled)	6	123	37,843	112	†32,484
3531F 98	Other concrete and bituminous equipment ¹⁴	22	2,654	46,466	†2,321	†39,499
3531G 02	Scraper bowls	5	1,709	124,898	(D)	(D)
	Motor graders and light maintainers	(X)	3,648	445,129	(D)	(D)
3531G 11	Under 144 nehp	5	2,081	146,903	(D)	(D)
3531G 17	145 nehp and over	3	1,567	298,226	(D)	(D)
	Rollers and compactors	(X)	7,458	361,296	†6,200	†303,213
	Static smooth steel wheel rollers, tandem:					
3531G 21	Under 3 metric tons	7	926	7,440	748	5,971
3531G 23	At least 3 but less than 5.5 metric tons	4	197	4,285	117	2,568
3531G 26	5.5 metric tons and over	5	205	8,150	†261	†9,560
3531G 32	Pneumatic tire rollers	5	452	17,295	†361	†12,543
	Vibratory single drum with one or two drive wheels:					
3531G 37	Under 5 metric tons	6	616	19,204	†645	†21,903
3531G 39	At least 5 but less than 8 metric tons	4	555	31,405	477	22,242
3531G 42	8 metric tons and over	5	1,605	110,580	†1,427	†92,224
	Vibratory double drum, two drums vibrating:					
3531G 45	Under 3 metric tons	3	(¹⁵)	(¹⁵)	(¹⁶)	(¹⁶)
3531G 47	At least 3 but less than 5 metric tons	3	(¹⁵)	(¹⁵)	(¹⁶)	(¹⁶)
3531G 49	At least 5 but less than 8 metric tons	3	124	7,023	(¹⁶)	(¹⁶)
3531G 51	At least 8 but less than 11.3 metric tons	3	(¹⁵)	(¹⁵)	(¹⁶)	(¹⁶)
3531G 53	11.3 metric tons and over	1	(¹⁵)	(¹⁵)	(¹⁶)	(¹⁶)
3531G 56	All other compaction equipment ¹⁷	4	¹⁵ 2,778	¹⁵ 155,914	¹⁶ †2,164	¹⁶ †136,202
	Off-highway trucks, truck-type tractor chassis, trailers, or wagons	(X)	3,956	975,585	†3,160	†876,142
3531G 71	Off-highway rear dump haulers	9	1,800	857,939	†1,563	†786,345
3531G 76	Other	11	2,156	117,646	†1,597	†89,797
	Rough terrain forklifts (integral units only)	(X)	4,690	268,902	†3,495	†201,935
3531G 81	Vertical mast, 2-wheel drive	10	2,227	127,543	†1,903	†108,573
3531G 83	Vertical mast, 4-wheel drive	7	189	6,835	†78	†2,936
3531G 85	Telescopic handlers, 2- and 4-wheel drive	5	2,274	134,524	†1,514	†90,426
	Construction machinery for mounting	(X)	95,447	286,576	†81,335	†249,796
3531N 06	Winches (towing, logging, and oil-field types)	9	(D)	71,846	(D)	60,461
3531N 12	Backhoes ¹⁸	10	11,130	84,913	10,605	76,274
3531N 22	All other construction machinery for mounting ¹⁹	29	(D)	129,817	(D)	†113,061
	Ditchers and trenchers, self-propelled (integral units only)	(X)	8,223	174,011	†6,483	†143,555
	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	5	(D)	50,418	(D)	†42,593
3531P 16	5,000 lb gross weight and over	5	2,073	96,100	1,456	70,726
3531P 18	Wheel-type digging element	3	(D)	(D)	(D)	(D)
	Aerial work platforms	(X)	42,256	824,165	36,603	637,372
3531P 81	Boom type, self-propelled	6	6,590	328,028	4,258	224,254
3531P 83	Scissors type, self-propelled	11	(D)	209,883	(D)	117,208
3531P 85	Not self-propelled, boom and scissors type	8	(D)	22,770	(D)	35,891
3531P 87	Truck mounted	14	8,765	263,484	†8,778	†260,019

See page 10-15 for footnotes.

Table 5—Con. (footnotes)

¹Including towing units and loaders and bare industrial wheel tractors (2- and 4-wheel).

²Wheel tractor-chassis shipped as part of front engine mount contractor tractor.

³Figures include attachments. Not including attachments, figures would be: 1994 quantity, 19,212; 1994 value, 2,091,763; 1993 quantity, 15,224; 1993 value, 1,604,277.

⁴For 1994, product codes 3531E 07 and 3531E 19 are combined to avoid disclosing figures for individual companies.

⁵For 1994, product codes 3531E 37 and 3531E 38 are combined, and quantities for these two product codes were combined in 1993 to avoid disclosing figures for individual companies.

⁶For 1993, product codes 3531E 53 and 3531E 54 are combined to avoid disclosing figures for individual companies.

⁷Including locomotive wrecking, cable operated excavators, draglines, and crawler mounted cranes.

⁸Sold separately.

⁹Except plaster and mortar.

¹⁰Including multipurpose, automated curb and gutter and concrete slipform pavers, up to and including 34-foot wide.

¹¹Electric motor, gasoline engine, structural high-cycle, pneumatic, etc.

¹²For concrete aggregate only and bulk cement.

¹³Including central mixing plants and mix-in-place.

¹⁴Including mixers, heating kettles, heaters, circulators, and spreader boxes.

¹⁵For 1994, product codes 3531G 45, 3531G 47, 3531G 51, 3531G 53, and 3531G 56 are combined to avoid disclosing figures for individual companies.

¹⁶For 1993, product codes 3531G 45, 3531G 47, 3531G 49, 3531G 51, 3531G 53, and 3531G 56 are combined to avoid disclosing figures for individual companies.

¹⁷Except hand-held; including embankment and landfill compactors, towed roller and double drum compactors with one drum vibrating.

¹⁸Either shipped for mounting separately or already mounted on an integral unit.

¹⁹Including sidebooms, pipehandlers, dozers, front-end loaders, shovel loaders, logging arches, rippers, rooters, continuous ditching and trenching attachments, forklift attachments, cranes, cable power control units, and hydraulic power control units.

D Data withheld to avoid disclosing figures for individual companies. nehp - Net engine horsepower. n.e.c. Not elsewhere classified. n.s.k. Not specified by kind. Revised by 5 percent or more from previously published figures. tph - tons per hour. X Not applicable.

Table 6. Shipments, Exports, and Imports of Construction Machinery: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product description ¹	Manufacturers' shipments ¹		Export shipments ³		Imports for consumption ⁴	
	Quantity	Value ²	Quantity	Value as reported	Quantity	Value ⁵
1994						
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	45,332	623,008	1,921	94,111	5,198	209,829
Crawler loaders	(D)	(D)	140	4,781	1,645	182,565
Excavators, hydraulic operated, crawler mounted	(⁶)	(⁶)	1,982	233,973	6,317	557,726
Excavators, hydraulic operated, wheel (rubber) mounted	⁶ 8,953	⁶ 1,234,538	28	4,770	865	89,379
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	301,748	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	4,072	306,557	172	72,705	295	24,480
Clamshell/grapple attachments	1,098	35,407	4,593	8,902	2,839	4,387
Dragline buckets (attachments)	113	13,920	-	-	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	383	217,407	319	23,495	12	183
Scraper bowls	1,709	124,898	14	207	261	22,259
Motor graders and light maintainers	3,648	445,129	2,017	167,776	834	69,683
Self-propelled vibratory compaction equipment ..	5,678	324,126	1,531	50,223	4,588	74,160
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	1,800	857,939	39,038	259,586	441	32,209
Off-highway trucks, truck-type tractor chassis, trailers, and wagons	2,156	117,646	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

See footnotes at end of table.

Table 6. Shipments, Exports, and Imports of Construction Machinery: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product description ¹	Manufacturers' shipments ¹		Export shipments ³		Imports for consumption ⁴	
	Quantity	Value ²	Quantity	Value as reported	Quantity	Value ⁵
1993						
Wheel tractors, contractors' off-highway type, 2- and 4-wheel for use on natural terrain	(D)	(D)	1,160	27,619	6,215	27,047
Rubber-tired dozers	(D)	(D)	497	12,536	93	5,652
Wheeled log skidders, self-propelled	2,086	187,841	937	43,986	2,084	65,048
Crawler tractors (except crawler loaders)	(D)	(D)	1,509	247,187	3,315	184,206
Wheel loaders, rear engine mount, integral design 4-wheel drive, non-skid steer	(D)	(D)	10,604	396,851	3,568	202,498
Skid steer loaders	36,777	†524,840	3,035	91,382	2,842	107,477
Crawler loaders	493	29,791	119	7,252	1,021	113,247
Excavators, hydraulic operated, crawler mounted	(⁶)	(⁶)	1,421	171,388	5,091	410,305
Excavators, hydraulic operated, wheel (rubber) mounted	⁶ 6,814	⁶ †844,715	48	3,758	802	72,525
Cranes, lattice boom, wheel (rubber) mounted	†38	†24,326	74	24,545	12	3,401
Cranes, wheel (integral), hydraulic operated, telescopic boom, multiple control stations (rubber mounted), including pinned on type, telescopic and articulated	3,063	217,652	535	67,001	47	23,533
Cranes, wheel, hydraulic operated, telescopic boom, one control station (self-propelled, rubber mounted)	1,576	219,932	369	37,346	47	4,042
Cranes, pedestal or ship mounted	62	17,305	167	10,777	251	1,002
Cranes, other	†3,671	280,347	188	101,624	373	30,706
Clamshell/grapple attachments	785	28,779	3,564	6,805	565	1,575
Dragline buckets (attachments)	114	6,447	951	2,140	296	1,293
Concrete mixers	(D)	†271,551	1,547	15,246	28,256	8,823
Concrete pavers, finishers, and spreaders	(D)	(D)	2,767	21,413	403	1,644
Concrete pumps	(D)	(D)	1,452	12,708	2,367	9,554
Bituminous pavers, finishers, and spreaders	(D)	(D)	1,200	18,674	405	345
Asphalt plants and bituminous stabilization mixing equipment	†361	208,449	470	19,071	50	155
Scraper bowls	(D)	(D)	2	14	2,380	8,053
Motor graders and light maintainers	(D)	(D)	1,776	130,054	488	31,006
Self-propelled vibratory compaction equipment	†4,713	†272,571	16,962	64,286	6,416	59,630
Self-propelled static compaction equipment	1,487	†30,642	1,140	38,523	298	10,441
Off-highway rear dump haulers, trucks, and truck trailers, including ridged and articulated	1,563	786,345	2,340	346,436	358	14,777
Off-highway trucks, truck-type tractor chassis, trailers, and wagons	†1,597	89,797	1,495	89,725	730	91,355
Winches for mounting (towing, logging, and oil-field types)	(D)	60,461	171,844	49,853	604,896	27,352
Backhoes for mounting	10,605	76,274	1,056	3,952	1,809	1,550
Other construction machinery for mounting	(D)	†113,061	16,281	32,608	17,908	38,768
Self-propelled continuous ditchers and trenchers (integral units), ladder-type digging element	(D)	(D)	1,186	14,344	-	-
Self-propelled continuous ditchers and trenchers (integral units), wheel-type digging element	(D)	(D)	248	7,075	5	844

¹For 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.

²Value f.o.b. plant.

³Source: Bureau of the Census report, EM545, *U.S. Exports*.

⁴Source: Bureau of the Census report, IM145, *U.S. Imports for Consumption*.

⁵Represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus import duties.

⁶Data for the two varieties of hydraulic excavators are combined for 1994 and 1993 to avoid disclosing figures for individual companies.

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

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.

10.3 MINING MACHINERY AND MINERAL PROCESSING EQUIPMENT

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 123 companies.

SUMMARY OF FINDINGS

In 1994, the manufacturers' value of shipments of selected types of mining machinery and related equipment totaled \$1.3 billion, an increase of 12 percent from the 1993 figure of \$1.2 billion. The 1994 total included shipments of \$82.7 million of portable crushing, pulverizing, and screening machinery, which was a 10-percent increase from the 1993 total of \$75.3 million. Underground mining machinery equipment totaled \$356.3 million in 1994, a 5-percent increase from the 1993 total of \$338.5 million. In 1994, stationary, crushing, pulverizing and screening machinery totaled \$278.1 million, a 21-percent increase from the \$229.0 million reported in 1993. Drills and other mining machinery totaled \$273.0 million in 1994, a 28-percent increase from the \$214.0 million reported in 1993. Portable drilling rigs totaled \$320.7 million in 1994, a 3-percent increase from the \$310.8 million reported in 1993.

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: 1994 and 1993

[Quantity in units except as specified. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Quantity	Value	Quantity	Value
3531K —	Mining machinery and mineral processing equipment.	(X)	(X)	1,310,819	(X)	1,167,594
	Portable crushing, screening, washing, and combination plants	16	605	82,706	574	75,295
	Crushing plants (classification based upon the type of crusher first in the processing flow):					
3531K 41	Gyratory	6	76	21,536	^f 66	^f 16,189
3531K 42	Impact	8	48	13,126	^f 44	10,388
3531K 43	Jaw	10	⁽¹⁾	⁽¹⁾	59	19,538
3531K 44	Roll ¹	2	55	15,965	7	1,259
3531K 47	Screening, washing, and other plants.	15	426	32,079	^f 398	^f 27,921
35325 —	Underground mining machinery (except parts sold separately)	33	4,189	356,321	3,312	338,485
35325 41	Continuous mining machines, borer, ripper, auger, and drum, including roadheading machines	10	238	125,086	169	116,709
35325 56	Face-haulage vehicles, rubber-tired, self-propelled	10	127	27,521	97	20,840
35325 70	Support vehicles, rubber-tired or track-mounted.	17	256	19,160	257	17,889
35325 97	All other underground mining machinery, n.e.c.	23	3,568	184,554	^f 2,789	^f 183,047
35327 —	Crushing, pulverizing, and screening (except portable machinery (except parts sold separately).	47	4,010	278,138	3,297	229,026
	Crushers, stationary type, including skid-mounted:					
35327 11	Gyratory	7	329	88,120	^f 313	^f 83,067
35327 13	Impact	17	527	64,984	^f 505	^f 38,487
35327 17	Jaw AND	8				
35327 19	Roll	7	131	16,091	^f 139	^f 14,446
35327 31	Grinding mills and pulverizers	4	71	30,828	^f 84	^f 33,197
	Screens, vibrating, stationary:					
35327 56	Horizontal	16	935	25,218	784	17,747
35327 57	Inclined	16	1,335	32,741	1,069	^f 29,987
53527 58	Other, including trommell.	11	^c 384	^c 10,404	^f 211	^f 4,890
35327 59	Other crushing, pulverizing, and screening machinery, n.e.c.	8	298	9,752	192	7,205
35328 —	Drills and other mining machinery, n.e.c. (except parts).	27	10,779,498	272,984	10,729,859	213,975
	Drills and breakers (rotary and percussion):					
35328 11	Rock drills, air and hydraulic powered	6	23,974	83,528	23,011	56,825
35328 15	Coal drills and core drills AND	4				
35328 50	Roof bolters	6	9,446,136	61,225	8,739,926	52,502
35328 75	All other mining machinery and equipment (except parts sold separately).	19	1,309,388	128,231	1,966,922	104,648
3533A —	Portable drilling rigs and parts	30	2,570,242	320,670	2,350,637	310,813
	Rotary, trailer- and truck-mounted with pull-back capacity:					
3533A 21	Up to 14,999 lb	5	80	3,821	54	3,393
3533A 23	15,000 to 29,999 lb	8	127	20,382	^f 156	^f 22,549
3533A 25	30,000 to 59,999 lb AND	6				
3533A 28	60,000 lb and over	3	161	47,197	102	30,996
	Rotary blasthole drills, truck-, trailer-, or track-mounted:					
3533A 35	Up to 59,999 lb	6	139	46,233	164	54,529
3533A 38	60,000 lb and over	6	44	^a 39,922	44	37,817
3533A 40	Construction drills	10	8,820	17,893	^f 7,948	^f 21,140
3533A 49	Other portable drilling rigs, including workover (service) rigs	8	883	^b 48,903	976	46,286
3533A 78	Parts for portable drilling rigs	22	2,559,988	96,319	2,341,193	94,103

¹For 1994, data for product code 3531K 43 "Portable crushing plants jaw type" have been combined with product code 3531K 44 "Portable crushing plants roll type" to avoid disclosing figures for individual companies.

n.e.c. Not elsewhere classified. ^fRevised by 5 percent or more from previously published figures. X Not applicable.

Note: The percent estimation of each item is indicated as follows: ^a15 to 25 percent of this item is estimated. ^b26 to 50 percent of this item is estimated. ^cOver 50 percent of this item is estimated.

Table 8. Shipments, Exports, and Imports of Selected Mining Machinery and Mineral Processing Equipment: 1994 and 1993

[Value in thousands of dollars]

Product description ¹	Manufacturers' shipments (value f.o.b. plant)	Exports of domestic merchandise ^{1 2} (value at port)	Value of imports for consumption ^{1 3 4}
1994			
Portable crushing plants and stationary grinding mills and pulverizers	81,455	78,373	25,057
Sorting, screening, separating, or washing machines	110,194	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	169,195	29,782	15,343
Pneumatic hand-held rotary rock drills	(NA)	(NA)	(NA)
1993			
Portable crushing plants and stationary grinding mills and pulverizers	80,571	63,217	22,677
Sorting, screening, separating, or washing machines	87,750	42,217	22,315
Rock breaking machines, coal or rock cutters, and tunneling machinery . . .	226,036	102,763	78,514
Mine wagon pushers, locomotive or wagon tracers, wagon tippers, and similar railway wagon handling equipment	38,729	1,330	-
Stationary crushing machines	136,000	52,539	9,237
Pneumatic hand-held rotary rock drills	(NA)	1,932	2,340

¹For 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.

²Source: Bureau of the Census report FT446, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

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

- Represents zero. NA Not available.

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.

10.4 INTERNAL COMBUSTION ENGINES

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 36 companies.

SUMMARY OF FINDINGS

In 1994, a total of 24,177,814 internal combustion engines (except outboard, nondiesel automotive, aircraft and military tank) were shipped or produced and incorporated at the same plant, representing a 13-percent increase from the 21,342,404 produced in 1993. Gasoline or gas-gasoline engines totaled 23,287,399 in 1994, 13 percent above the figure of 20,561,362 for 1993. The number of nonautomotive diesel, semidiesel, and dual-fuel engines produced in 1994 amounted to 220,276, a 12-percent increase from the 196,895 reported in 1993. There were 661,155 automotive diesel, semidiesel, and dual-fuel engines produced in 1994, 9 percent more than the 607,966 produced in 1993. Production of gas engines (LPG and natural) was 8,984 in 1994, 51 percent more than the 5,942 produced in 1993.

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: 1994 and 1993

[Engines and quantity in units. Value in thousands of dollars]

Product description	Engines produced ¹	Total shipments and interplant transfers		Shipments to other companies		Interplant transfers		Engines produced and incorporated ²
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	
1994								
Total	24,177,814	(D)	9,254,670	(D)	(D)	[†] 1,003,985	(D)	6,125,824
Gasoline (except automotive)	23,287,399	14,970,525	2,161,619	14,187,921	1,934,484	782,604	227,135	8,316,874
Nonautomotive diesel	220,276	(D)	1,662,091	146,394	1,163,904	(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	8,984	(D)	263,655	(D)	(D)	(D)	(D)	(D)
1993								
Total	21,342,404	(D)	7,772,936	(D)	(D)	727,124	(D)	6,125,824
Gasoline (except automotive)	20,561,362	12,644,242	1,739,455	12,133,984	1,553,287	510,258	186,168	[†] 7,917,120
Nonautomotive diesel	196,895	(D)	1,549,009	131,335	1,102,607	(D)	446,402	(D)
Automotive diesel	607,966	607,966	4,294,627	438,315	3,423,606	169,651	871,021	-
Natural gas and liquefied petroleum gas	5,942	(D)	[†] 232,017	(D)	(D)	(D)	(D)	(D)

¹Represents total number of engines shipped or produced and incorporated into products at the same establishment.

²Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

Table 10. Gasoline Engines, by Horsepower Rating: 1994 and 1993

[Engines and quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	Engines produced ¹	Total shipments and interplant transfers		Shipments to other companies		Interplant transfers		Engines produced and incorporated ²
				Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	
1994										
35191 —	Gasoline engines	19	23,287,399	14,970,525	2,161,619	14,187,921	1,934,484	782,604	227,135	8,316,874
35191 01	Under 11 hp	13	20,931,415	(D)	(D)	(D)	(D)	632,250	56,080	8,315,626
35191 02	11 to under 21 hp ...	5	(D)	(D)	(D)	(D)	(D)	36,080	16,024	(D)
35191 03	21 to under 61 hp ...	5	61,586	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35191 07	61 hp and over	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-
1993										
35191 —	Gasoline engines	20	20,561,362	12,644,242	1,739,455	12,133,984	1,553,287	510,258	186,168	7,917,120
35191 01	Under 11 hp	14	18,556,908	(D)	(D)	(D)	(D)	372,410	35,478	[†] 7,915,731
35191 02	11 to under 21 hp ...	4	(D)	(D)	(D)	(D)	(D)	37,759	14,671	(D)
35191 03	21 to under 61 hp ...	5	41,545	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35191 07	61 hp and over	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-

¹Represents total number of engines shipped or produced and incorporated into products at the same establishment.

²Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

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: 1994 and 1993

[Engines and quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	Engines produced ¹	Total shipments and interplant transfers		Shipments to other companies		Interplant transfers		Engines produced and incorporated ²
				Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	
1994										
35193 —	Nonautomotive diesel engines...	12	220,276	(D)	1,662,091	146,394	1,163,904	(D)	498,187	(D)
35193 31	Under 101 hp	7	(D)	(D)	(D)	(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	35,195	(D)	(D)	19,975	82,796	(D)	(D)	(D)
35193 37	176 to under 251 hp	6	59,917	(D)	(D)	38,471	198,536	(D)	(D)	(D)
35193 39	251 to under 301 hp	5	10,453	(D)	(D)	4,897	56,418	(D)	(D)	(D)
35193 41	301 to under 401 hp	5	(D)	11,336	146,164	6,622	77,213	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
1993										
35193 —	Nonautomotive diesel engines...	13	196,895	(D)	1,549,009	131,335	1,102,607	(D)	446,402	(D)
35193 31	Under 101 hp	7	(D)	(D)	(D)	12,893	45,454	(D)	(D)	(D)
35193 33	101 to under 151 hp	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 35	151 to under 176 hp	6	29,107	(D)	(D)	16,389	71,917	(D)	(D)	(D)
35193 37	176 to under 251 hp	6	44,977	(D)	(D)	32,164	175,434	(D)	(D)	(D)
35193 39	251 to under 301 hp	5	10,623	(D)	(D)	4,082	49,220	(D)	(D)	(D)
35193 41	301 to under 401 hp	5	(D)	10,759	137,268	6,603	78,834	4,156	58,434	(D)
35193 43	401 to under 451 hp	3	4,225	(D)	(D)	3,950	58,237	(D)	(D)	(D)
35193 45	451 to under 601 hp	3	7,185	(D)	(D)	4,381	106,329	(D)	(D)	(D)
35193 47	601 to under 701 hp	3	3,444	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 49	701 to under 801 hp	4	(D)	(D)	(D)	1,180	41,750	(D)	(D)	-
35193 51	801 to under 1,501 hp.....	5	3,657	(D)	(D)	(D)	(D)	(D)	(D)	(D)
35193 28	1,501 hp and over	8	2,718	(D)	(D)	728	188,670	(D)	(D)	(D)

¹Represents total number of engines shipped or produced and incorporated into products at the same establishment.

²Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

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: 1994 and 1993

[Engines in units. Value in thousands of dollars]

Product code	Product description	Number of companies	1994		1993	
			Engines ¹	Value ²	Engines ¹	Value ²
35194 —	Automotive diesel engines.....	9	661,155	5,167,305	607,966	4,294,627
35194 11	Under 226 hp.....	9	381,824	1,750,455	373,005	1,527,663
35194 14	226 to under 251 hp.....	7	18,478	116,247	14,365	84,250
35194 15	251 hp and over.....	6	260,853	3,300,603	220,596	2,682,714

¹Represents total number of engines shipped, including interplant transfers.

²Represents the value of all engines shipped, including interplant transfers.

Table 13. Gas Engines (Except Automotive), by Horsepower Rating: 1994 and 1993

[Engines and quantity in units. Value in thousands of dollars]

Product code	Product description	Number of companies	Engines produced ¹	Total shipments including interplant transfers		Engines produced and incorporated ²
				Quantity	Value f.o.b. plant	
1994						
35196 —	Natural gas and liquefied petroleum gas engines..	10	8,984	(D)	263,655	(D)
35196 11	Under 501 hp.....	9	(D)	7,523	49,908	(D)
35196 12	501 hp and over.....	4	(D)	(D)	213,747	-
1993						
35196 —	Natural gas and liquefied petroleum gas engines..	9	5,942	(D)	232,017	(D)
35196 11	Under 501 hp.....	8	(D)	4,684	33,686	(D)
35196 12	501 hp and over.....	4	(D)	(D)	198,331	-

¹Represents total number of engines shipped or produced and incorporated into products at the same establishment.

²Represents engines produced and incorporated (in the same plant) into products such as construction machinery, farm machinery, tractors, engine-generator sets, and other products.

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. [†]Revised by 5 percent or more from previously published figures.

Table 14. Engines Produced, by Piston Displacement and Fuel System: 1994 and 1993

Piston displacement	1994	1993
Total.....	24,168,830	21,366,223
Gasoline, total.....	23,287,399	20,561,362
Under 251 cc.....	20,416,798	18,229,203
251 cc and over.....	2,870,601	2,332,159
Nonautomotive diesel, total.....	220,276	196,895
Under 251 cc.....	2,507	3,184
251 to 3,700 cc.....	25,200	26,576
3,701 cc and over.....	192,569	167,135
Automotive diesel, total.....	661,155	607,966
Under 251 to 3,700 cc.....	174,980	144,207
3,701 cc and over.....	486,175	463,759

cc Cubic centimeters. [†]Revised by 5 percent or more from previously published figures.

Table 15. **Engines Produced (Except Outboard, Automotive, and Aircraft), by Type of Engine and End Application: 1994 and 1993**

End application	Gasoline engines		Nonautomotive diesel engines	
	1994	1993	1994	1993
Total	23,287,399	20,561,362	220,276	196,895
Oil field and petroleum-related generating and stationary equipment	-	-	(D)	(D)
Other generator sets	(D)	(D)	31,902	29,119
Irrigation	(D)	(D)	(D)	(D)
Agricultural vehicular	(D)	(D)	(D)	(D)
Off-highway mobile construction equipment	(D)	(D)	99,656	86,489
Marine (except outboard)	(D)	(D)	15,038	13,737
Railroad, motive power type	-	-	(D)	688
Chain saws	2,185,422	1,950,786	-	-
Garden tractors	(D)	(D)	-	-
Lawn, home, and recreational equipment	16,945,370	14,569,466	-	-
Other general industrial	(D)	(D)	23,200	24,018

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. ¹Revised by 5 percent or more from previously published figures.

Table 16. **Production, Exports, and Imports of Internal Combustion Engines: 1994 and 1993**

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Manufacturers' production		Exports of domestic merchandise ²		Imports for consumption ³	
		Quantity	Value of shipments f.o.b. plant ¹	Quantity	Value at port	Quantity	Value
	1994						
	Total	15,840,591	9,254,670	2,217,287	2,022,263	2,520,579	1,815,316
35194	Automotive diesel engines	661,155	5,167,305	91,993	834,969	12,711	67,524
35193	Nonautomotive diesel engines	(D)	1,662,091	56,066	816,971	274,624	759,588
35191	Gasoline engines	14,970,525	2,161,619	2,066,717	313,190	2,214,025	963,532
35196	Gas and liquefied petroleum gas engines ...	(D)	263,655	2,511	57,133	19,219	24,672
	1993						
	Total	13,436,499	7,815,108	2,081,286	1,826,305	2,178,520	1,081,370
35194	Automotive diesel engines	607,966	4,294,627	104,921	798,062	8,264	34,101
35193	Nonautomotive diesel engines	(D)	1,549,009	46,759	666,423	236,355	623,122
35191	Gasoline engines	12,644,242	1,739,455	1,928,605	322,977	1,913,583	409,714
35196	Gas and liquefied petroleum gas engines ...	(D)	232,017	1,001	38,843	20,318	14,433

¹Value of shipments f.o.b. plant of production; quantities shipped as engines, including interplant transfers.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. General Imports*. These figures include both import value and duty value.

D Data withheld to avoid disclosing figures for individual companies.

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 Annette Ralston, 301-457-4750.

10.5 METALWORKING MACHINERY

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 421 companies are included.

SUMMARY OF FINDINGS

Shipments of metalworking machinery during 1994 totaled \$3,780.0 million, a 17-percent increase from the \$3,222.5 million shipments for 1993. Exports during the year were valued at \$590.9 million, a 17-percent increase from exports valued at \$503.8 million during 1993. The value of unfilled orders on December 31, 1994 totaled \$2,400.5 million. The December 31, 1993 unfilled orders were valued at \$1,720.4 million.

Shipments of metal cutting type machine tools in 1994 totaled \$2,422.5 million, an 18-percent increase from the \$2,048.1 million shipped during 1993. For 1994, shipments of lathes accounted for \$390.4 million; grinding and polishing machines, \$443.3 million; milling machines, \$138.9 million; and boring and drilling machines, \$181.8 million. The corresponding figures for 1993 were: lathes, \$305.8 million; grinding and polishing machines, \$360.9 million; milling machines, \$180.2 million; and boring and drilling machines, \$121.8 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: 1985 to 1994

[Thousands of dollars]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
	Metalworking machinery	3,780,074	3,222,456	3,073,862	3,171,748	3,426,081	3,514,224	2,858,174	2,668,685	2,709,800	2,682,201
3541D ¹	Metal cutting type	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	1,877,289
	Boring machines ¹	129,835	84,667	97,975	77,655	(²)	(²)	(²)	(²)	83,916	85,066
	Drilling machines ²	51,987	37,076	37,472	37,374	184,118	183,151	133,860	154,665	40,040	43,805
35413	Gear cutting machines	100,612	87,662	79,600	¹ 115,226	102,678	97,304	48,897	59,608	57,313	51,791
35414	Grinding and polishing machines (except gear-tooth grinding, lapping, polishing, and buffing machines)	443,262	360,894	335,121	¹ 378,946	433,574	419,754	359,821	384,711	419,659	414,962
35415	Lathes ³	390,843	305,488	258,885	317,087	355,632	343,223	282,480	283,505	261,973	318,693
35416	Milling machines ⁴	138,852	180,174	210,403	¹ 201,137	214,254	206,248	184,482	206,910	169,221	180,639
3541A2	Machining centers (multi-function numerically controlled machines)	552,358	485,375	377,941	361,799	436,999	442,226	334,469	217,839	213,405	214,708
3541B2	Station type machines	455,138	374,772	434,705	450,366	502,066	562,887	225,376	299,570	517,736	406,119
3541C2	Other metal cutting machine tools (except those designed primarily for home workshops, laboratories, etc.)	200,114	166,248	166,535	¹ 195,654	141,945	173,727	165,396	173,929	148,365	161,506
	Metal forming type	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	804,912
35421 pt.	Punching and shearing machines	294,441	213,402	172,872	180,756	200,050	200,104	167,347	141,965	122,253	144,047
35421 pt.	Bending and forming machines	253,219	255,299	270,044	204,357	229,271	217,891	204,939	173,380	169,853	178,407
35422	Presses (except forging)	376,398	345,653	288,248	297,889	319,436	316,549	356,528	265,630	293,090	254,029
35423 pt.	Forging machines	(⁵)	(⁵)	(⁵)	(⁵)	73,947	58,478	(⁵)	42,735	36,715	35,367
35423 pt.	Other metal forming type machines ⁵	393,015	325,227	342,830	350,033	274,985	292,682	394,579	264,238	176,261	193,062

¹Prior to the 1987 Census of Manufactures, the boring machine product code was identified as 35411, and the drilling machine product code was identified as 35412.²For 1987 through 1990, data for "Boring machines" have been combined with "Drilling machines" to avoid disclosing figures for individual companies.³For 1991 through 1994, product code 35415, "Lathes," excludes the value for product code 35415 09, "All Lathes valued under \$3,025 each."⁴For 1991 through 1994, product code 35416, "Milling machine," excludes the value for product code 35416 09, "All milling machines valued under \$3,025 each."⁵For 1990 through 1994, and 1988, data for "Forging machines" have been combined with "Other metal forming machines" to avoid disclosing figures for individual companies.pt. Partial. ¹Revised by 5 percent or more from previously published figures.

Table 18. Total Shipments and Unfilled Orders: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1994			1993		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Number of units	Value		Number of units	Value	
	Metalworking machinery	(X)	171,554	3,780,074	2,400,452	125,227	3,222,456	1,720,396
	Metal cutting type machine tools valued over \$3,025.	(X)	27,939	2,422,468	1,593,271	23,361	2,048,144	1,193,001
	Metal cutting type machine tools valued at \$3,025 and under ^{1 2}	(X)	73,200	40,533	3,622	64,205	34,731	1,496
3541D 00	Boring and drilling machines	57	9,944	181,822	110,915	7,182	121,753	95,193
3541D 10	All boring machines valued under \$3,025 each.	1	(³)	(³)	(³)	(³)	(³)	(³)
3541D 15	Boring machines valued at \$3,025 each or more:							
3541D 40	Horizontal boring, drilling, and milling machines, including floor, table, and rail mounted AND	5						
3541D 45	Precision boring machines, including horizontal and vertical boring machines.	9	1,066	129,163	85,725	818	83,621	82,132
3541D 05	Jig boring and all other boring machines (except boring lathes) ³	2	27	^b 672	235	34	1,056	-
3541D 05	All drilling machines valued under \$3,025 each	16	7,278	9,282	552	5,318	7,112	524
3541D 15	Drilling machines valued at \$3,025 each or more:							
3541D 25	Vertical upright drilling machines, including plain upright and heavy duty	9	616	4,760	^c 996	532	3,648	1,320
3541D 35	Radial drilling machines, including plain and universal AND	-						
3541D 45	Deep hole drilling machines.	4	^a 68	^a 8,542	^a 6,084	41	6,242	3,105
3541D 55	Multiple spindle drilling machines:							
3541D 55	Adjustable joint and fixed center types	7	248	4,307	2,025	130	3,052	1,280
3541D 65	All other automatic multiple spindle drilling machines	6	91	11,999	13,066	92	8,434	5,386
3541D 65	All other drilling machines, n.e.c.	7	^c 550	^c 13,097	^c 2,232	217	8,588	1,446
35413 00	Gear cutting machines, including gear hobbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines	10	298	100,612	79,257	238	87,662	42,993
35414 00	Grinding, polishing, buffing, honing, and lapping machines	96	61,100	443,262	301,883	56,068	360,894	217,916
35414 10	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each	20	55,533	^b 19,803	^b 2,566	51,574	16,370	493
35414 11	All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more:							
35414 13	External cylindrical grinding machines:							
35414 14	Plain, including angular wheel types AND	4						
35414 14	Universal	4	102	25,712	18,822	96	24,043	13,306
35414 33	Roll, chucking, centerless, and other cylindrical grinding machines	11	^a 606	135,794	142,375	401	93,679	103,636
35414 34	Surface grinding machines, rotary table type, horizontal and vertical.	9	^b 600	^a 15,943	10,007	335	17,244	8,340
35414 37	Surface grinding machines, reciprocating table type, including face grinders, horizontal and vertical AND	9						
35414 42	Surface grinding machines, reciprocating table type, including face grinders, hand surface type.	4	944	15,747	5,481	878	16,366	5,513
35414 52	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders	8	433	21,572	18,694	383	29,029	13,747
35414 55	Tool and cutter grinding machines	16	583	57,503	10,767	452	33,518	12,604
35414 75	All other grinding machines, n.e.c., including internal cylindrical type, planer type, and thread grinding machines	22	538	59,121	35,233	353	38,175	23,231
35414 79	Honing and lapping machines, internal, including combination bore, hone, and external	6	758	42,128	24,827	751	30,745	8,161
35414 84	Flat surface lapping machines (except gear lapping)	5	229	6,167	2,401	310	13,067	1,767
35414 84	All other honing and lapping machines or polishing and buffing machines, including speed lathes and multistation type	18	774	43,772	30,710	535	48,658	27,118

See footnotes at end of table.

Table 18. Total Shipments and Unfilled Orders: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1994			1993		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Number of units	Value		Number of units	Value	
35415 00	Lathes	(X)	3,662	390,407	132,986	3,039	305,822	94,795
	Numerically controlled:							
	Horizontal	15	2,616	295,987	83,902	2,318	205,232	52,301
35415 15	Multiple spindle NC turning machine	3	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
	Single spindle NC turning machines:							
35415 16	Small	11	2,173	219,700	42,156	1,803	164,566	25,166
35415 17	Medium	6	412	64,531	25,239	496	31,125	18,742
35415 18	Large ⁴	5	31	11,756	16,507	19	9,207	8,393
35415 22	Vertical NC turning machines	7	88	47,445	26,857	85	53,894	30,369
	Nonnumerically controlled turning machines	14	958	46,975	22,227	636	46,696	12,125
35415 09	All lathes (turning machines) valued under \$3,025 each ¹	1	(¹)	(¹)	-	(¹)	(¹)	-
	All lathes (turning machines) valued at \$3,025 each or more:							
35415 23	Engine or toolroom lathes, all types AND	3						
	Automatic lathes:							
35415 83	Single spindle	2	41	5,260	3,725	28	3,928	2,834
	Multiple spindle:							
35415 88	Bar (screw) machines AND	2						
35415 67	Chucking machines	3	158	22,273	16,543	135	24,835	8,734
35415 57	All other horizontal turning machines, including turret lathes and automatic between center lathes AND	5						
35415 86	All vertical turning machines	3	^b 759	^b 19,442	^a 1,959	473	17,933	557
35416 00	Milling machines ²	23	4,087	138,852	121,247	3,386	180,174	94,546
35416 09	All milling machines valued under \$3,025 each	6	(²)	(²)	(²)	(²)	(²)	(²)
	All milling machines valued at \$3,025 or more:							
35416 23	General-purpose, knee milling machines all types AND	6						
	Automatic and manufacturing:							
35416 32	Single spindle, multiple spindle, and special-purpose machines AND	5						
35416 53	Profile machines and duplicators AND	4						
35416 62	All other milling machines, n.e.c., including planer type and thread milling machines	10	4,087	138,852	121,247	3,386	180,174	94,546
3541A 00	Machining centers	28	5,362	552,358	233,426	3,917	485,375	178,005
	Drill, mill, and bore, vertical (automatic tool change):							
3541A 05	Y-axis travel less than 20 inches	10	2,073	133,982	29,822	1,475	101,804	22,585
3541A 07	Y-axis travel 20 inches through 26 inches	10	1,688	139,359	33,255	1,079	99,560	16,130
3541A 09	Y-axis travel over 26 inches	6	326	51,230	14,491	207	31,402	12,765
	Drill, mill, and bore, horizontal (automatic tool change):							
3541A 11	Y-axis travel 27 inches	7	^b 354	70,028	24,163	481	97,322	16,064
3541A 13	Y-axis travel 27 inches through 40 inches AND	6						
3541A 15	Y-axis travel over 40 inches	4	215	134,786	97,436	202	133,753	101,721
3541A 19	All other machining centers including special machining centers, special adapting of standard machining centers, and machining centers with indexing turret	11	706	22,973	34,259	473	21,534	8,740
3541B 00	Station type machines	20	430	455,138	571,542	363	374,722	426,594
3541B 31	Dial or rotary, trunnion, and center column	13	242	246,451	307,384	193	179,969	142,062
3541B 35	Transfer AND	11						
3541B 37	Other station type, n.e.c.	3	188	208,687	264,158	170	194,753	284,532

See footnotes at end of table.

Table 18. Total Shipments and Unfilled Orders: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1994			1993		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Number of units	Value		Number of units	Value	
3541C 00	Other metal cutting machine tools	71	14,803	200,114	45,637	13,347	166,248	44,451
3541C 41	Other metal cutting machine tools, n.e.c., valued under \$3,025	17	7,488	9,512	495	6,966	10,462	475
	Other metal cutting machine tools, n.e.c., valued at \$3,025 each or more:							
3541C 51	Broaching machines	9	^c 139	^c 19,058	7,254	50	9,003	7,665
	Sawing and cutoff machines:							
3541C 53	Power hack saws	2	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾
3541C 55	Circular cutoff saws (cold)	5	175	10,810	^c 103	140	7,528	532
3541C 59	Band saws	13	^a 3,657	^a 44,039	^b 6,269	3,093	37,132	4,631
3541C 61	All other sawing and cutoff machines ⁵	10	542	16,639	10,718	629	20,181	5,161
3541C 64	Spark erosion, ultrasonic, and electrolytic machines all types	9	913	51,400	14,304	610	29,543	5,220
3541C 91	Miscellaneous metal cutting machine tools	25	^b 1,889	^b 48,656	6,494	1,859	52,399	19,767
	Metal forming type machine tools valued over \$3,025 ..	(X)	20,398	1,277,187	799,255	18,436	1,119,089	523,633
	Metal forming type machine tools valued at \$3,025 and under	(X)	50,017	39,886	4,304	19,225	20,492	2,266
35421 00	Punching, shearing, bending, and forming machines ..	97	19,762	547,660	205,395	18,982	468,701	133,806
35421 08	All punching and shearing machines valued under \$3,025 each	13	^b 1,828	^b 2,564	^c 175	2,511	3,398	360
	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	2,625	37,057	8,888	3,098	42,851	6,025
35421 16	Punching machines fixed position and two axes positioning table	6	597	147,221	^a 21,430	424	82,826	10,617
	Plate shearing machines:							
35421 12	Mechanical	6	196	37,556	⁽⁶⁾	226	36,469	⁽⁶⁾
35421 14	Hydraulic ⁶	13	^a 1,100	^a 28,731	48,240	924	17,831	18,224
35421 19	Other power-operated punching and shearing machines	13	1,256	41,312	14,628	286	30,027	11,398
35421 33	All bending and forming machines, power operated, valued under \$3,025 each	7	6,169	9,565	594	5,368	5,833	1,036
	All bending and forming machines, power operated, valued at \$3,025 each or more:							
35421 34	Press brakes all types	11	^a 1,143	^a 54,645	14,712	999	46,305	10,284
35421 37	Bending rolls, sheet, and plate	8	400	16,543	11,719	477	28,819	9,924
35421 35	Bending rolls, angles, bars, shapes, and tubes AND	6						
35421 43	Rotary bending and forming machines, including rotary head	11	1,647	62,437	31,319	1,954	67,028	35,886
35421 47	Ram and press bending machines	5	248	5,978	1,242	214	3,721	1,039
35421 49	Other bending and forming machines, including folders	22	2,553	104,051	52,448	2,501	103,593	29,013
35422 00	Presses (except forgings)	51	10,947	376,398	345,654	6,236	345,653	234,134
35422 01	All presses valued under \$3,025 each	6	^a 7,158	^a 5,056	2,020	3,599	4,137	43
	All presses valued at \$3,025 each or more:							
	Mechanical presses:							
	Open back inclinable, gap type:							
35422 12	50 tons and under	7	323	5,050	1,460	288	5,463	799
35422 02	51 tons to 120 tons	8	147	10,414	5,818	97	9,024	2,204
35422 03	121 tons and over	6	50	9,290	1,734	45	12,544	2,792
	Vertical straight sided and arch frame single action:							
35422 16	Single point AND	1						
	Two point:							
35422 17	300 tons and under	5	183	40,451	25,576	92	20,535	19,855
35422 18	301 tons and over	4	31	21,059	25,383	27	18,546	19,046
35422 45	Automatic presses, strip or coil field	6	437	99,208	89,321	403	78,857	45,626
35422 53	All other mechanical presses	5	118	94,710	113,427	84	100,687	95,315

See footnotes at end of table.

Table 18. Total Shipments and Unfilled Orders: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product code	Product description	Company count	1994			1993		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Number of units	Value		Number of units	Value	
35422 56	Hydraulic presses: Vertical single action, all tonnages: Housing or straight side type AND	3						
35422 57	Column type (open rod)	8	^a 111	20,210	26,341	141	25,738	18,521
	Gap or C-frame:							
35422 58	15 tons and under	7	611	6,403	^c 1,151	533	5,009	548
35422 59	16 tons to 35 tons	6	89	5,833	2,164	86	4,975	4,390
35422 60	Over 35 tons	7	^a 68	^a 5,679	^c 2,395	75	5,475	3,070
35422 92	Other hydraulic and pneumatic presses, including horizontal	14	1,621	53,035	48,864	856	54,663	21,925
35423 20	Forging machines, including forging presses and die stamping presses	4	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
35423 00	All other metal forming type machine tools	49	39,706	393,015	252,510	12,353	325,227	155,693
35423 97	All other metal forming type machine tools valued under \$3,025 each	5	34,862	22,701	1,515	7,747	7,124	827
	All other metal forming type machine tools valued at \$3,025 each or more:							
35423 43	Thread rolling machinery	5	^a 101	^b 17,662	^b 2,763	73	11,997	3,173
35423 30	Metal container-making machinery	7	1,017	105,171	77,836	818	108,987	58,590
35423 55	Die casting machines all types	5	147	61,452	39,918	88	43,520	10,810
35423 49	Riveting machines	10	^b 1,181	^a 27,095	^b 4,481	1,361	25,710	4,869
35423 93	All other metal forming type machine tools, n.e.c. ⁷	28	^a 2,398	^a 158,934	125,997	2,266	127,889	77,424

¹Data for "All lathes valued under \$3,025 each" are included in the total for "Metal cutting type machine tools valued under \$3,025."²Data for "Milling machines under \$3,025" are included in the total for "Metal cutting type machines under \$3,025."³Data for "Boring machines under \$3,025" are combined with product code 3541D 45, "Jig boring and all other boring machines."⁴Data for "Multi-spindle NC turning machines" are included with "Large single spindle turning machines" to avoid disclosing figures for individual companies.⁵Data for 3541C 53, "Power hack saws" have been combined with 3541C 61, "All other sawing and cutoff machines" to avoid disclosing figures for individual companies.⁶Data for unfilled orders for 35421 12, "Plate shearing machines mechanical" have been combined with 35421 14, "Plate shearing hydraulic machines" to avoid disclosing figures for individual companies.⁷Data for 35423 20, "Forging machines" have been combined with 35423 93 "All other metal forming machine tools, n.e.c." to avoid disclosing figures for individual companies.

- Represents zero. n.e.c. Not elsewhere classified. X Not applicable.

Note: The percent of estimation of each item is indicated as follows: ^a16 to 25 percent of this item is estimated. ^b26 to 50 percent of this item is estimated. ^cOver 50 percent of this item is estimated.

Table 19. Total Shipments of Numerically Controlled Machines, and Exports: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product description	1994			1993		
	Shipments of numerically controlled machines		Export shipments value ¹	Shipments of numerically controlled machines		Export shipments value ¹
	Quantity	Value		Quantity	Value	
Metalworking machinery	13,174	1,685,994	590,862	10,334	1,397,684	503,811
Metal cutting type machine tools ²	11,200	1,417,845	355,728	8,421	1,190,644	269,082
Boring and drilling machines	186	45,919	3,339	123	33,942	3,454
Gear cutting machines	241	91,446	34,595	169	70,128	21,666
Grinding, polishing, buffing, and lapping machines	733	207,118	58,553	530	146,101	70,078
Valued under \$3,025 each AND						
Universal external cylindrical grinding machines AND						
Surface grinding machines, all types	642	186,494	38,248	335	117,905	48,045
Honing, lapping, polishing, and buffing machines	91	20,624	20,305	195	28,196	22,033
Horizontal NC turning machines, valued at \$3,025 or more	2,616	295,987	30,396	2,018	204,898	16,709
Small single spindle NC turning machines	2,173	219,700	(D)	1,803	164,566	(D)
Medium single spindle NC turning machines	412	64,531	(D)	196	31,125	(D)
Multiple spindle and large single spindle NC turning machines	31	11,756	(D)	19	9,207	(D)
Vertical NC turning machines, valued at \$3,025 or more	88	47,445	(²)	85	53,894	(²)
Nonnumerically controlled turning machines, valued at \$3,025 or more	(X)	(X)	4,142	(X)	(X)	4,158
Milling machines	1,483	103,395	23,209	1,263	150,294	26,756
Machining centers ³	5,356	552,358	81,471	3,917	485,375	64,457
Drill, mill, and bore (manual tool change)	-	-	-	-	-	-
Drill, mill, and bore, vertical (automatic tool change)	4,087	324,571	42,732	2,761	232,766	20,811
Y-axis travel less than 20 inches	2,073	133,982	(D)	1,475	101,804	(D)
Y-axis travel 20 inches through 26 inches	1,688	139,359	15,335	1,079	99,560	7,227
Y-axis travel over 26 inches	326	51,230	(D)	207	31,402	(D)
Drill, mill, and bore, horizontal (automatic tool change)	569	204,814	27,270	683	231,075	36,636
Y-axis travel less than 27 inches	354	70,028	(³)	481	97,322	(³)
Y-axis travel 27 inches through 40 inches AND						
Y-axis travel over 40 inches	215	134,786	27,270	202	133,753	25,020
All other machining centers	700	22,973	(³)	473	21,534	(³)
Station type machines AND						
Other metal cutting machine tools, n.e.c.	497	74,177	116,086	316	46,012	61,804
Metal forming type machine tools	1,974	268,149	235,134	1,913	207,040	234,729
Punching, shearing, bending, and forming machines ⁴	1,052	173,328	99,239	963	153,125	98,805
Punching and shearing machines	601	128,786	36,032	519	109,376	29,007
Valued under \$3,025 each	(X)	(X)	(⁴)	(X)	(X)	(⁴)
Valued at \$3,025 each or more	601	128,786	36,032	519	109,376	29,007
All bending and forming machines, power operated	451	44,542	62,332	444	43,749	68,866
Valued under \$3,025 each	(X)	(X)	(⁴)	(X)	(X)	(⁴)
Valued at \$3,025 each or more	451	44,542	62,332	444	43,749	68,866
Presses (except forging)	166	66,149	33,453	100	26,939	29,432
All other metal forming type machine tools AND						
Forging machines	756	28,672	102,442	850	26,976	106,492

¹Data includes the value of all types of machines exported, as reported by MQ35W survey panel.

²Data included in total for "Metal cutting type machine tools."

³Data included in total for "Machining centers."

⁴Data included in total for "Punching, shearing, bending, and forming machines."

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. n.e.c. Not elsewhere classified. X Not applicable.

Table 20. Shipments, Exports, and Imports of Metalworking Machinery: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
	Quantity	Value	Quantity	Value at port	Quantity	Value ⁴
1994						
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	(D)	(D)	43	576	3,752	34,296
Single spindle automatic lathes	41	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 ...	(D)	(D)	224	5,863	380	7,002
All vertical lathes and vertical boring machines	759	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

See footnotes at end of table.

Table 20. Shipments, Exports, and Imports of Metalworking Machinery: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
	Quantity	Value	Quantity	Value at port	Quantity	Value ⁴
1994—Con.						
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
All other metal forming type machine tools:						
Valued under \$3,025 each	34,862	22,701	(NA)	(NA)	(NA)	(NA)
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)
1993						
Boring and drilling machines, excluding multifunction NC machines, machining centers:						
Boring machines:						
Valued under \$3,025 each	(D)	(D)	2,140	1,607	2,804	1,560
Valued at \$3,025 each or more	852	84,677	117	9,868	482	39,832
Drilling machines:						
Valued under \$3,025 each	5,318	7,112	3,080	1,967	156,594	19,274
Valued at \$3,025 each or more	1,012	29,964	841	28,470	1,052	35,664
Gear cutting machines	238	87,662	891	26,857	290	38,041
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each	51,574	16,370	10,356	3,466	752,262	27,016
Valued at \$3,025 each or more	4,494	344,524	3,020	101,611	6,815	263,088
Lathes (turning machines) under \$3,025	(D)	(D)	590	814	8,606	9,652
NC turning machines	2,318	205,232	224	26,269	3,403	370,929
Vertical NC turning machines	85	47,445	36	7,091	96	23,099
Nonnumerically controlled turning machines:						
Horizontal spindle lathes	(D)	(D)	56	1,144	3,290	36,153
Single spindle automatic lathes	28	3,928	17	166	161	1,038
Multiple spindle automatic lathes	135	24,835	56	4,768	64	9,728
All other horizontal turning machines	(D)	(D)	290	4,732	387	55,104
All other vertical turning machines	473	17,933	108	5,626	288	6,579
Milling machines:						
Valued under \$3,025 each	(D)	(D)	5,172	7,808	8,992	9,648
Valued at \$3,025 each or more	3,386	180,174	374	24,582	4,489	78,679

See footnotes at end of table.

Table 20. Shipments, Exports, and Imports of Metalworking Machinery: 1994 and 1993—Con.

[Quantity in units. Value in thousands of dollars]

Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
	Quantity	Value	Quantity	Value at port	Quantity	Value ⁴
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.....	2,554	201,364	54	8,061	2,155	188,687
Y-axis travel 26 inches and over	207	31,402	41	11,414	199	30,319
Drill, mill, and bore, horizontal (automatic tool change).....	683	231,075	39	7,265	109,319	164,817
Other machining centers	473	21,534	233	26,277	47	10,222
Station type machines	363	374,772	143	56,135	202	112,160
Other metal cutting machine tools:						
Valued under \$3,025 each.....	6,966	10,462	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more	6,381	155,786	3,361	88,557	4,141	190,700
Punching and shearing machines:						
Valued under \$3,025 each.....	2,511	3,398	1,173	923	3,575	1,883
Valued at \$3,025 each or more	4,958	210,004	1,433	52,972	1,327	82,124
Bending and forming machines:						
Valued under \$3,025 each.....	5,368	5,833	8,958	6,481	4,188	2,626
Valued at \$3,025 each or more	6,145	249,466	1,665	82,818	2,394	131,720
Presses (except forging presses).....	6,326	345,653	6,716	81,984	12,827	148,895
Forging machines, including presses	(D)	(D)	215	46,391	789	53,217
All other metal forming type machine tools:						
Valued under \$3,025 each.....	7,747	7,124	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines	88	43,520	235	6,254	262	33,701
Other metal forming machines	4,518	274,583	(NA)	(NA)	(NA)	(NA)

¹For comparison of SIC-based product codes, schedule B export numbers, and HTSUSA import numbers, see "Contact for Data Users" at the end of this subsection.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. General Imports for Consumption*.

⁴This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus import duties.

D Data withheld to avoid disclosing figures for individual companies.

NA Not available.

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.

10.6 TRUCK TRAILERS

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 168 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 \$4,113.7 million in 1994, an increase of 25 percent from shipments of \$3,092.1 million in 1993. Quantity of complete truck trailer shipments for 1994 was 234,287 units, an increase of 21 percent from shipments of 185,741 units in 1993.

Complete trailer vans shipped in 1994 increased 19 percent in quantity and 23 percent in value from the 1993 levels. The quantity of tank-type trailers shipped in 1994

increased 19 percent from 1993. The 1994 value of tank-type trailers increased 23 percent from the 1993 level. Shipments of platform trailers in 1994 increased 25 percent in units and 27 percent in value from the 1993 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: 1985 to 1994

[Number of units]

Product code	Product description	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985
37151	Complete trailers	234,287	185,741	165,268	122,361	149,117	181,478	186,483	180,142	167,312	179,808
	Vans	174,237	141,764	127,205	84,626	103,894	130,163	131,991	135,380	120,647	126,668
	Tank	4,758	3,877	3,750	4,113	4,444	4,789	5,075	4,636	4,370	5,307
	Platform	21,459	16,102	13,432	11,585	13,479	18,411	17,648	14,975	13,064	16,842
	All other complete trailers . .	33,833	23,998	20,881	22,037	27,300	28,115	31,769	25,151	29,231	30,991
	Detachable trailer bodies	17,271	12,207	(¹)	(¹)	(¹)	(¹)	5,223	438	417	252
	Detachable trailer chassis	42,897	25,483	23,408	24,491	17,214	24,779	37,729	23,014	15,360	28,876
	Dollies and converter gear	2,986	2,486	3,899	3,097	2,272	2,668	2,917	4,614	4,567	4,123

¹Data for "Detachable trailer bodies" and "Detachable trailer chassis" were combined for 1989 through 1992 to avoid disclosure of individual companies.

Table 22. 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	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37151 14	Aluminum ¹	12	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 60	FRP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Semi-insulated (nonrefrigerated)	(NA)	1,179	37	58	128	149	60	134	64	140	46	131	88	144
37151 04	Steel	2	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
37151 16	Aluminum ²	6	1,179	37	58	128	149	'60	134	64	140	46	131	88	144
37151 62	FRP	1	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
	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	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
37151 15	Aluminum ³	10	6,681	'425	'548	'782	'491	'667	'498	620	'599	'534	'508	'511	'498
37151 64	FRP	3	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
	Livestock	(NA)	2,773	208	228	225	234	215	208	255	240	260	241	237	222
37151 07	Steel	5	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
37151 17	Aluminum ⁴	8	2,773	'208	'228	'225	'234	'215	'208	'255	'240	'260	'241	'237	'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	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
37151 11	30 feet or greater ⁵	9	5,382	584	'342	'405	'1,272	'422	'510	'389	'332	'279	'292	278	'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
37151 67	FRP	(NA)	10,532	767	745	823	852	778	868	733	830	853	1,136	1,083	1,064
37151 69	Less than 30 feet long	7	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
	30 feet or greater ⁶	12	10,532	'767	'745	'823	'852	'778	'868	'733	'830	'853	'1,136	'1,083	'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	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
37151 26	Aluminum ⁷	19	7,239	513	475	523	607	552	589	756	819	637	'671	529	568
37151 70	FRP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37151 27	Tanks	(NA)	4,758	370	393	427	420	407	384	383	411	389	411	379	384
	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

See footnotes at end of table.

Table 22. 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.
37151 28	Complete trailers and chassis (except detachables)—Con. Tanks—Con. 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
37151 38	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 39	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
37151 40	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 42	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	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	(⁸)	'366	'344	336	343
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis) ⁸	38	7,002	'340	'692	'735	'707	'701	'690	'778	'769	'398	'411	'389	'392
37151 53	Detachable trailer bodies (containers), sold separately.	12	2,598	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	'1,247	(⁹)	'1,351	(⁹)	(⁹)	(⁹)
37151 54	Detachable trailer chassis and running gear, sold separately ⁹	18	57,570	'4,752	'5,806	'6,627	'5,214	'5,027	'4,867	'3,365	'4,606	'3,831	'4,678	'4,591	'4,206
37151 45	Dollies and converter gear	17	2,986	'225	'202	'219	'264	'278	'236	'235	'212	'287	'359	'258	'211

¹Data for product codes 37151 02 and 37151 14 are combined to avoid disclosing figures for individual companies.
²Data for product codes 37151 04 and 37151 62 are combined with product code 37151 16 to avoid disclosing figures for individual companies.
³Data for product codes 37151 05 and 37151 64 are combined with product code 37151 15 to avoid disclosing figures for individual companies.
⁴Data for product code 37151 07 are combined with product code 37151 17 to avoid disclosing figures for individual companies.
⁵Data for product code 37151 10 are combined with product code 37151 11 to avoid disclosing figures for individual companies.
⁶Data for product code 37151 67 are combined with product code 37151 69 to avoid disclosing figures for individual companies.
⁷Data for product code 37151 12 are combined with product code 37151 26 to avoid disclosing figures for individual companies.
⁸Data for product code 37151 44 are combined with product code 37151 49 to avoid disclosing figures for individual companies.
⁹Data for product code 37151 53 are combined with product code 37151 54 to avoid disclosing figures for individual companies.

- Represents zero. FRP Fiberglass reinforced plastic/plywood. NA Not available. 'Revised by 5 percent or more from previously published figures.

Table 23. 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	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37151 14	Aluminum ¹	12	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 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	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
37151 16	Aluminum ²	6	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 62	FRP	1	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
	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	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
37151 15	Aluminum ³	10	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 64	FRP	3	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
	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	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
37151 17	Aluminum ⁴	8	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
	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	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
37151 11	30 feet or greater ⁵	9	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
	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	1,543,228	'109,278	'120,341	'127,399	'115,133	'112,148	131,504	'110,600	137,595	'140,380	142,052	'143,915	'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	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
37151 69	30 feet or greater ⁶	12	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
	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	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
37151 26	Aluminum ⁷	19	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 70	FRP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37151 27	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
	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

See footnotes at end of table.

Table 23. 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.
37151 28	Complete trailers and chassis (except detachables)—Con. Tanks—Con.														
	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
	Dump trailers and dump chassis, highway type (rear, side, and bottom dump, including non-pneumatic 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	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	7,053	5,824	5,274	5,801
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis) ⁶	38	103,611	'4,136	'10,609	'11,652	'9,968	'10,208	'10,057	'12,544	'13,255	'5,167	'5,713	'4,999	'5,303
37151 53	Detachable trailer bodies (containers), sold separately.	12	28,762	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	(⁹)	'13,803	(⁹)	'14,959	(⁹)	(⁹)	(⁹)
37151 54	Detachable trailer chassis and running gear, sold separately ⁹	18	436,680	37,341	'45,806	'49,514	'39,966	'38,629	'38,619	'20,752	'36,670	'24,529	'35,779	'35,772	'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

¹Data for product codes 37151 02 and 37151 14 to avoid disclosing figures for individual companies.
²Data for product codes 37151 04 and 37151 62 are combined with product code 37151 16 to avoid disclosing figures for individual companies.
³Data for product codes 37151 05 and 37151 64 are combined with product code 37151 15 to avoid disclosing figures for individual companies.
⁴Data for product code 37151 07 are combined with product code 37151 17 to avoid disclosing figures for individual companies.
⁵Data for product code 37151 10 are combined with product code 37151 11 to avoid disclosing figures for individual companies.
⁶Data for product code 37151 67 are combined with product code 37151 69 to avoid disclosing figures for individual companies.
⁷Data for product code 37151 12 are combined with product code 37151 26 to avoid disclosing figures for individual companies.
⁸Data for product code 37151 44 are combined with product code 37151 49 to avoid disclosing figures for individual companies.
⁹Data for product code 37151 53 are combined with product code 37151 54 to avoid disclosing figures for individual companies.

- Represents zero. NA Not available. FRP Fiberglass reinforced plastic/plywood. [†]Revised by 5 percent or more from previously published figures.

Table 24. Quantity of Shipments of Truck Trailers, by Month and Type of Trailer: 1993

[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	185,741	14,086	14,308	17,397	15,891	15,549	15,624	13,776	15,593	16,676	16,142	14,902	15,797
	Vans	(NA)	141,764	10,944	10,999	13,630	11,892	11,900	11,955	10,347	11,934	12,803	12,243	11,113	12,004
	Closed top:														
	Insulated (refrigerated)	(NA)	21,195	1,560	1,647	2,059	1,800	1,597	1,945	1,559	1,918	1,752	1,769	1,770	1,819
37151 02	Steel	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37151 14	Aluminum ¹	11	21,195	1,560	1,647	2,059	1,800	1,597	1,945	1,559	1,918	1,752	1,769	1,770	1,819
37151 60	FRP	1	(¹)	-	-	-	-	-	-	-	-	-	-	-	(¹)
	Semi-insulated (nonrefrigerated)	(NA)	1,554	221	161	136	113	116	125	119	186	183	56	54	84
37151 04	Steel	2	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
37151 16	Aluminum ²	6	1,554	221	161	136	113	116	125	119	186	183	56	54	84
37151 62	FRP	4	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
	Drop frame type (12 inches or more drop)	(NA)	3,334	202	228	311	379	548	407	376	147	105	204	209	218
37151 05	Steel	2	(³)	-	-	-	(³)	(³)	-	-	-	(³)	-	-	(³)
37151 15	Aluminum ³	9	3,334	202	228	311	379	548	407	376	147	105	204	209	218
37151 64	FRP	4	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
	Livestock	(NA)	1,891	160	146	165	162	167	150	176	158	156	159	145	147
37151 07	Steel	3	(⁴)	(⁴)	(⁴)	-	-	-	-	-	-	-	-	-	-
37151 17	Aluminum ⁴	9	1,891	160	146	165	162	167	150	176	158	156	159	145	147
	All other closed-top dry freight vans, including curtain	(NA)	107,008	8,381	8,359	10,429	8,836	8,927	8,819	7,475	8,915	9,902	9,336	8,451	9,178
	Steel	(NA)	2,963	193	200	309	354	248	339	219	216	201	216	211	257
37151 10	Less than 30 feet long	4	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
37151 11	30 feet or greater ⁵	10	2,963	193	200	309	354	248	339	219	216	201	216	211	257
	Aluminum	(NA)	86,202	7,146	6,538	8,602	6,845	7,144	7,036	5,697	7,215	8,236	7,625	6,667	7,451
37151 23	Less than 30 feet long	16	9,112	780	916	1,272	946	952	501	959	581	691	577	436	501
37151 25	30 feet or greater	20	77,090	6,366	5,622	7,330	5,899	6,192	6,535	4,738	6,634	7,545	7,048	6,231	6,950
	FRP	(NA)	17,843	1,042	1,621	1,518	1,637	1,535	1,444	1,559	1,484	1,465	1,495	1,573	1,470
37151 67	Less than 30 feet long	8	11,070	545	1,029	990	921	904	908	1,089	973	918	954	917	922
37151 69	30 feet or greater	11	6,773	497	592	528	716	631	536	470	511	547	541	656	548
	Open tops including low-side grain and fruit	(NA)	6,782	420	458	530	602	545	509	642	610	705	719	484	558
37151 12	Steel	7	117	10	11	11	11	10	9	10	8	10	9	9	9
37151 26	Aluminum ⁶	26	6,665	410	447	519	591	535	500	632	602	695	710	475	549
37151 70	FRP	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
37151 27	Tanks	(NA)	3,877	303	298	321	361	320	329	310	307	353	323	304	348
	For flammable liquids (except casing head transport, including aircraft refuelers), all materials	9	1,379	114	120	110	111	110	108	103	94	113	126	123	147
37151 30	Coated for chemicals and acids, all materials	9	1,707	140	113	131	142	133	155	147	143	180	144	134	145

See footnotes at end of table.

Table 24. Quantity of Shipments of Truck Trailers, by Month and Type of Trailer: 1993—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. Tanks—Con.														
37151 28	For asphalt, all materials. . .	8	380	20	28	43	77	45	38	37	34	27	10	9	12
37151 32	All other, including non-coated for chemicals and acids, high pressure, food and milk, sanitary, and cryogenics, all materials	13	411	29	37	37	31	32	28	23	36	33	43	38	44
37151 33	Bulk commodity and dry materials, including pneumatic and mechanical discharge, both tank and hopper types (except van) . .	13	1,057	93	85	97	82	92	86	81	89	91	87	94	80
37151 35	Pole, logging, and pipe.	18	937	73	72	75	81	75	83	70	87	79	78	83	81
37151 37	Platform	34	16,102	1,019	1,241	1,278	1,352	1,301	1,279	1,176	1,404	1,502	1,543	1,560	1,447
	Low-bed heavy haulers, over 10-ton capacity, excluding tilt-bed trailers. . . .	(NA)	6,810	466	470	580	671	634	553	547	594	609	597	537	552
37151 38	Under 40-ton capacity.	41	4,729	341	321	416	472	462	369	377	410	401	385	380	395
37151 39	40-ton capacity and over. . .	30	2,081	125	149	164	199	172	184	170	184	208	212	157	157
	Dump trailers and dump chassis, highway type (rear, side, and bottom dump, including nonpneumatic hoppers)	(NA)	7,210	530	545	611	630	567	612	616	600	623	634	635	607
37151 40	For materials.	44	5,245	410	398	485	437	430	446	409	445	425	477	438	445
37151 42	For other, including demolition and excavation	18	1,965	120	147	126	193	137	166	207	155	198	157	197	162
37151 44	Automobile transport trailers.	7	1,315	115	108	125	103	111	85	105	110	114	98	115	126
37151 49	All other trailers and chassis (except detachable trailers and detachable trailer chassis)	44	6,669	543	490	680	719	549	642	524	468	502	539	461	552
37151 53	Detachable trailer bodies (containers), sold separately.	14	12,207	681	1,114	1,290	1,288	1,456	604	752	1,049	1,047	990	966	970
37151 54	Detachable trailer chassis and running gear, sold separately.	19	25,483	1,804	1,983	2,492	2,112	2,401	1,833	1,774	2,138	2,304	2,445	2,373	1,824
37151 45	Dollies and converter gear . . .	25	2,486	187	227	322	378	222	145	133	122	200	252	152	146

¹Data for product codes 37151 02 and 37151 60 are combined with product code 37151 14 to avoid disclosing figures for individual companies.
²Data for product codes 37151 04 and 37151 62 are combined with product code 37151 16 to avoid disclosing figures for individual companies.
³Data for product codes 37151 05 and 37151 64 are combined with product code 37151 15 to avoid disclosing figures for individual companies.
⁴Data for product code 37151 07 are combined with product code 37151 17 to avoid disclosing figures for individual companies.
⁵Data for product code 37151 10 are combined with product code 37151 11 to avoid disclosing figures for individual companies.
⁶Data for product code 37151 70 are combined with product code 37151 26 to avoid disclosing figures for individual companies.

- Represents zero. NA Not available. FRP Fiberglass reinforced plastic/plywood.

Table 25. Value of Shipments of Truck Trailers, by Month and Type of Trailer: 1993

[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	3,092,108	232,878	234,004	281,856	260,807	251,261	260,937	232,096	265,519	277,798	272,096	253,699	269,157
	Vans	(NA)	2,209,959	171,725	168,816	209,726	182,738	179,306	186,660	160,689	190,315	198,887	194,790	176,280	190,027
	Closed top:														
	Insulated (refrigerated)	(NA)	478,385	34,645	36,408	46,302	40,190	35,325	43,352	35,391	44,262	38,959	42,100	40,475	40,976
37151 02	Steel	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37151 14	Aluminum ¹	11	478,385	34,645	36,408	46,302	40,190	35,325	43,352	35,391	44,262	38,959	42,100	40,475	40,976
37151 60	FRP	1	(¹)	-	-	-	-	-	-	-	-	-	-	-	-
	Semi-insulated (nonrefrigerated)	(NA)	43,815	5,601	4,607	4,109	3,725	3,854	4,103	3,917	5,226	5,206	1,076	946	1,445
37151 04	Steel	2	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	-	-	-
37151 16	Aluminum ²	6	43,815	5,601	4,607	4,109	3,725	3,854	4,103	3,917	5,226	5,206	1,076	946	1,445
37151 62	FRP	4	(²)	(²)	-	(²)	(²)	(²)	(²)	(²)	(²)	-	-	(²)	(²)
	Drop frame type (12 inches or more drop)	(NA)	65,068	4,479	5,314	6,857	7,276	9,445	6,667	5,686	3,006	2,401	4,935	3,001	6,001
37151 05	Steel	2	(³)	-	-	-	(³)	(³)	-	-	-	(³)	-	-	(³)
37151 15	Aluminum ³	9	65,068	4,479	5,314	6,857	7,276	9,445	6,667	5,686	3,006	2,401	4,935	3,001	6,001
37151 64	FRP	4	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
	Livestock	(NA)	39,117	3,165	2,753	3,400	3,331	3,034	3,943	3,801	3,257	3,277	3,445	2,850	2,861
37151 07	Steel	3	(⁴)	(⁴)	(⁴)	-	-	-	-	-	-	-	-	-	-
37151 17	Aluminum ⁴	9	39,117	3,165	2,753	3,400	3,331	3,034	3,943	3,801	3,257	3,277	3,445	2,850	2,861
	All other closed-top dry freight vans, including curtain	(NA)	1,449,730	115,542	110,437	138,701	116,605	117,454	119,110	98,972	122,312	135,098	129,125	119,072	127,302
	Steel	(NA)	42,859	2,775	2,873	4,106	4,790	3,383	4,514	3,091	3,037	2,975	3,502	3,596	4,217
37151 10	ⁱ Less than 30 feet long	4	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)
37151 11	30 feet or greater ⁵	10	42,859	2,775	2,873	4,106	4,790	3,383	4,514	3,091	3,037	2,975	3,502	3,596	4,217
	Aluminum	(NA)	1,208,164	100,813	89,508	117,662	93,668	97,047	98,621	79,039	102,987	116,012	108,929	97,387	106,491
37151 23	Less than 30 feet long	16	93,914	7,920	8,899	12,410	9,433	9,617	5,339	9,930	6,278	7,264	6,142	5,112	5,570
37151 25	30 feet or greater	20	1,114,250	92,893	80,609	105,252	84,235	87,430	93,282	69,109	96,709	108,748	102,787	92,275	100,921
	FRP	(NA)	198,707	11,954	18,056	16,933	18,147	17,024	15,975	16,842	16,288	16,111	16,694	18,089	16,594
37151 67	Less than 30 feet long	8	101,497	4,838	9,441	9,073	8,416	8,251	8,283	10,057	8,964	8,399	8,804	8,396	8,575
37151 69	30 feet or greater	11	97,210	7,116	8,615	7,860	9,731	8,773	7,692	6,785	7,324	7,712	7,890	9,693	8,019
	Open tops, including low-side grain and fruit	(NA)	133,844	8,293	9,297	10,357	11,611	10,194	9,485	12,922	12,252	13,946	14,109	9,936	11,442
37151 12	Steel	7	2,595	214	245	219	259	208	209	232	186	212	198	214	199
37151 26	Aluminum ⁶	26	131,249	8,079	9,052	10,138	11,352	9,986	9,276	12,690	12,066	13,734	13,911	9,722	11,243
37151 70	FRP	2	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
37151 27	Tanks	(NA)	155,344	11,715	12,091	12,903	13,918	12,766	13,491	12,211	12,030	14,032	13,042	12,528	14,617
	For flammable liquids (except casing head transport, including aircraft refuelers), all materials	9	54,736	4,618	4,672	4,453	4,422	4,193	4,240	4,098	3,658	4,453	5,009	4,832	6,088
37151 30	Coated for chemicals and acids, all materials	9	71,693	5,272	4,980	5,590	5,894	5,856	6,862	5,996	5,954	7,281	5,911	5,809	6,288

See footnotes at end of table.

Table 25. Value of Shipments of Truck Trailers, by Month and Type of Trailer: 1993—Con.

[Thousands of dollars]

Product code	Product description	Number of companies	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
37151 28	Complete trailer and chassis (except detachables)—Con. Tanks—Con.														
37151 32	For asphalt, all materials. . .	8	12,146	663	936	1,462	2,372	1,402	1,177	1,167	976	961	303	301	426
37151 33	All other, including non-coated for chemicals and acids, high pressure, food and milk, sanitary, and cryogenics, all materials	13	16,769	1,162	1,503	1,398	1,230	1,315	1,212	950	1,442	1,337	1,819	1,586	1,815
37151 35	Bulk commodity and dry materials, including pneumatic and mechanical discharge, both tank and hopper types (except van) . .	13	30,368	2,777	2,632	2,896	2,379	2,658	2,485	2,239	2,543	2,529	2,392	2,621	2,217
37151 37	Pole, logging, and pipe	18	9,980	724	711	756	850	841	1,016	732	896	822	833	922	877
37151 38	Platform	34	236,390	14,379	17,914	17,945	18,938	19,278	19,234	17,597	22,130	22,147	22,031	22,582	22,215
37151 39	Low-bed heavy haulers, over 10-ton capacity, excluding tilt-bed trailers.	(NA)	133,900	9,086	9,180	10,566	13,289	11,843	11,027	11,188	11,532	12,196	11,670	11,138	11,185
37151 40	Under 40-ton capacity	41	65,087	4,553	4,135	5,033	6,006	5,778	4,774	5,531	5,682	5,599	5,675	6,046	6,275
37151 42	40-ton capacity and over. . .	30	68,813	4,533	5,045	5,533	7,283	6,065	6,253	5,657	5,850	6,597	5,995	5,092	4,910
37151 44	Dump trailers and dump chassis, highway type (rear, side, and bottom dump), including nonpneumatic hoppers.	(NA)	194,071	13,039	13,283	15,318	17,261	14,472	16,910	17,457	16,349	17,231	17,575	18,120	17,056
37151 49	For materials	44	132,281	9,301	8,866	11,471	11,282	10,310	11,781	10,498	11,631	11,027	12,374	11,918	11,822
37151 53	For other, including demolition and excavation . . .	18	61,790	3,738	4,417	3,847	5,979	4,162	5,129	6,959	4,718	6,204	5,201	6,202	5,234
37151 54	Automobile transport trailers.	7	56,353	4,526	4,513	5,114	4,376	4,632	3,755	4,685	4,937	4,850	4,302	5,094	5,569
37151 55	All other trailers and chassis (except detachable trailers and detachable trailer chassis)	44	65,743	4,907	4,864	6,632	7,058	5,465	6,359	5,298	4,787	5,104	5,461	4,414	5,394
37151 56	Detachable trailer bodies (containers), sold separately	14	134,056	6,793	10,970	13,174	13,597	16,828	7,242	8,639	11,856	12,267	10,911	10,815	10,964
37151 57	Detachable trailer chassis and running gear, sold separately	19	154,619	10,072	10,179	14,026	12,148	15,164	10,960	11,221	13,729	13,955	15,205	15,150	12,810
37151 58	Dollies and converter gear . . .	25	12,334	879	977	1,420	1,727	1,099	832	619	851	1,010	1,351	783	786

¹Data for product codes 37151 02 and 37151 60 are combined with product code 37151 14 to avoid disclosing figures for individual companies.

²Data for product codes 37151 04 and 37151 62 are combined with product code 37151 16 to avoid disclosing figures for individual companies.

³Data for product codes 37151 05 and 37151 64 are combined with product code 37151 15 to avoid disclosing figures for individual companies.

⁴Data for product code 37151 07 are combined with product code 37151 17 to avoid disclosing figures for individual companies.

⁵Data for product code 37151 10 are combined with product code 37151 11 to avoid disclosing figures for individual companies.

⁶Data for product code 37151 70 are combined with product code 37151 26 to avoid disclosing figures for individual companies.

- Represents zero. FRP Fiberglass reinforced plastic/plywood. NA Not available.

Table 26. Quantity and Value of Shipments of Truck Trailers, Vans, by Type of Material: 1994 and 1993

[Quantity in units. Value in thousands of dollars]

Month	Total		FRP		Steel		Aluminum	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994								
Total	174,237	2,859,434	10,644	130,070	6,880	96,510	156,713	2,632,854
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
1993								
Total	141,764	2,209,959	18,006	203,321	3,886	78,031	119,872	1,928,607
January	10,944	171,725	1,056	12,313	283	6,328	9,605	153,084
February	10,999	168,816	1,628	18,303	278	6,123	9,093	144,390
March	13,630	209,726	1,534	17,312	411	7,941	11,685	184,473
April	11,892	182,738	1,652	18,505	451	8,561	9,789	155,672
May	11,900	179,306	1,552	17,466	337	6,937	10,011	154,903
June	11,955	186,660	1,464	16,477	428	8,201	10,063	161,982
July	10,347	160,689	1,580	17,367	307	6,616	8,460	136,706
August	11,934	190,315	1,494	16,661	306	6,612	10,134	167,042
September	12,803	198,887	1,474	16,439	289	6,499	11,040	175,949
October	12,243	194,790	1,504	17,022	241	4,103	10,498	173,665
November	11,113	176,280	1,586	18,469	235	4,213	9,292	153,598
December	12,004	190,027	1,482	16,987	320	5,897	10,202	167,143

(FRP) Fiberglass reinforced plastic/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

11.1 AEROSPACE ORDERS

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, 1994, was \$183.5 billion. This was an 11-percent decrease from the 1993 backlog of \$207.0 billion.

Net new orders received during 1994 were \$87.0 billion, a 14-percent increase from the \$76.5 billion received in 1993. Net sales, receipts, and/or billings in 1994 totaled \$100.3 billion, a 7-percent decrease from the \$108.1 billion reported in 1993.

Over the past decade, the aerospace industry has seen a decline in net orders, falling from \$111.0 billion in 1985 to \$87.0 billion in 1994. This represents a 22-percent decrease. Net sales (shipments) of \$100.3 billion in 1994 are virtually unchanged from the 1985 value of \$100.5 billion. Backlog orders increased 28 percent, from \$143.0 billion in 1985 to \$183.5 billion 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: 1985 to 1994**

[Millions of dollars]

Year ¹	Net new orders during year ²	Net sales during year	Backlog, end of year
1994	86,977	100,332	183,458
1993	76,532	108,135	207,058
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
1985	110,968	100,522	142,953

¹Data for 1989 are not comparable with earlier years and were previously unavailable. The extent of this noncomparability is unknown.

²These 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: 1990 to 1994

[Millions of dollars]

Year	Net new orders ¹ (prime contracts and subcontracts)			Net sales, receipts, or billings			Backlog, end of year		
	Total	United States Government ²	Other customers	Total	United States Government ²	Other customers	Total	United States Government ²	Other customers
1994	86,977	50,747	36,230	100,332	54,943	45,389	183,458	67,052	116,405
1993	76,532	44,150	32,382	108,135	52,810	55,325	207,058	77,497	129,561
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
1990	145,965	56,264	89,701	136,646	73,552	63,094	250,079	82,017	168,062

¹These data represent new orders received during the year, less terminations during the year.

²These 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 due to 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: 1990 to 1994

[Millions of dollars]

Year	Net new orders ¹ (prime contracts and subcontracts)			Net sales, receipts, or billings			Backlog, end of year		
	Total	Military	Nonmilitary	Total	Military	Nonmilitary	Total	Military	Nonmilitary
1994	86,977	52,928	34,049	100,332	54,622	45,710	183,458	76,491	106,967
1993	76,532	45,045	31,487	108,135	53,291	54,844	207,058	85,813	121,246
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
1990	145,965	56,405	89,560	136,646	73,616	63,030	250,079	88,471	161,608

¹These data represent new orders received during the year, less terminations during the year.

Note: Detail items may not add to total due to independent rounding.

Table 4. Value of Net New Orders, Net Sales, and Backlog of Orders of Complete Aircraft, Space Vehicles, Missiles, and Selected Parts: 1994 and 1993

[Millions of dollars]

Product description	Number of companies	Net new orders			Shipments (or net sales)	Backlog, end of year
		Total	Prime contract	Subcontract		
1994						
Total	51	86,977	85,080	1,897	100,332	183,458
Military	(NA)	52,928	52,928	(NA)	54,622	76,491
U.S. Government	36	45,347	45,347	(NA)	48,881	59,200
Other governments	26	7,581	7,581	(NA)	5,741	17,291
Nonmilitary	(NA)	34,049	32,152	1,897	45,710	106,967
U.S. Government	20	5,400	5,400	(NA)	6,062	7,852
Other customers	35	28,649	26,752	1,897	39,648	99,115
Complete aircraft and parts	(NA)	31,985	32,101	- 116	40,175	104,223
Military	(NA)	19,150	19,150	(NA)	17,087	31,959
Nonmilitary	(NA)	12,834	12,951	- 116	23,088	72,264
Aircraft engines and parts	(NA)	10,094	9,530	564	10,843	16,471
Military	(NA)	3,478	3,478	(NA)	3,313	4,131
U.S. Government	18	2,463	2,463	(NA)	2,460	3,060
Other governments	12	1,015	1,015	(NA)	853	1,071
Nonmilitary	(NA)	6,616	6,052	564	7,530	12,340
Missile systems and parts, excluding propulsion units	(NA)	2,816	¹ 2,816	(¹)	5,311	5,984
Military	(NA)	2,785	2,785	(NA)	5,294	5,959
U.S. Government	13	2,257	2,257	(NA)	4,257	4,776
Other governments	6	528	528	(NA)	1,037	1,183
Nonmilitary	(NA)	31	¹ 31	(¹)	17	25
Space vehicle systems and parts, excluding propulsion units	(NA)	8,824	¹ 8,824	(¹)	10,284	13,139
Military	(NA)	4,896	4,896	(NA)	5,360	7,079
Nonmilitary	(NA)	3,928	¹ 3,928	(¹)	4,924	6,059
U.S. Government	10	2,115	2,115	(NA)	2,397	961
Other customers	10	1,813	¹ 1,813	(¹)	2,528	5,098
Engines and/or propulsion units for missile systems and space vehicles, including parts ² ..	(NA)	2,409	2,381	28	2,620	6,674
Military	(NA)	480	480	(NA)	1,130	1,253
Nonmilitary	(NA)	1,929	1,901	28	1,490	5,421
Other aircraft, space vehicle, and missile activities ³	(NA)	10,434	9,495	939	8,857	15,159
Military	(NA)	7,334	7,334	(NA)	6,125	10,079
U.S. Government	(NA)	5,950	5,950	(NA)	5,498	8,676
Other governments	(NA)	1,384	1,384	(NA)	626	1,403
Nonmilitary	(NA)	3,100	2,160	939	2,732	5,079
Research and development (under contract)	(NA)	6,709	6,609	100	7,197	6,824
Military	(NA)	5,394	5,394	(NA)	5,843	5,088
U.S. Government	23	5,193	5,193	(NA)	5,673	4,929
Other governments	5	200	200	(NA)	170	158
Nonmilitary	(NA)	1,315	1,215	100	^a 1,354	1,737
All other products and services	(NA)	13,707	13,329	378	15,045	14,985
Military	(NA)	9,411	9,411	(NA)	10,470	10,942
Nonmilitary	(NA)	4,296	3,918	378	4,575	4,043

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: 1994 and 1993—Con.

[Millions of dollars]

Product description	Number of companies	Net new orders			Shipments (or net sales)	Backlog, end of year
		Total	Prime contract	Subcontract		
1993¹						
Total	51	76,532	74,258	2,275	108,135	207,058
Military	(NA)	45,045	45,045	(NA)	53,291	85,813
U.S. Government	37	37,275	37,275	(NA)	46,922	68,285
Other governments	28	7,770	7,770	(NA)	6,369	17,528
Nonmilitary	(NA)	31,487	29,212	2,275	54,844	121,246
U.S. Government	20	6,876	6,876	(NA)	5,888	9,213
Other customers	34	24,611	22,336	2,275	48,956	112,033
Complete aircraft and parts	(NA)	22,591	¹ 22,591	(¹)	46,117	115,050
Military	(NA)	11,358	11,358	(NA)	13,308	32,280
U.S. Government	18	8,157	8,157	(NA)	11,394	21,120
Other governments	12	3,201	3,201	(NA)	1,914	11,160
Nonmilitary	(NA)	11,233	¹ 11,233	(¹)	32,809	82,770
Aircraft engines and parts	(NA)	8,517	8,009	508	12,186	17,900
Military	(NA)	3,665	3,665	(NA)	3,980	4,445
Nonmilitary	(NA)	4,852	4,344	508	8,206	13,455
Missile systems and parts, excluding propulsion units	(NA)	4,775	¹ 4,775	(¹)	7,713	9,306
Military	(NA)	4,234	4,234	(NA)	7,225	9,202
U.S. Government	12	3,466	3,466	(NA)	5,906	6,771
Other governments	7	768	768	(NA)	1,319	2,430
Nonmilitary	(NA)	541	¹ 541	(¹)	488	104
Space vehicle systems and parts, excluding propulsion units	(NA)	9,697	¹ 9,697	(¹)	8,309	15,203
Military	(NA)	5,106	5,106	(NA)	4,175	8,332
Nonmilitary	(NA)	4,591	¹ 4,591	(¹)	4,133	6,871
U.S. Government	10	1,668	1,668	(NA)	1,587	643
Other customers	9	1,908	¹ 1,908	(¹)	1,555	5,712
Engines and/or propulsion units for missile systems and space vehicles, including parts ²	(NA)	1,708	1,635	73	3,104	6,975
Military	(NA)	710	710	(NA)	1,619	1,903
Nonmilitary	(NA)	998	925	73	1,485	5,072
Other aircraft, space vehicle, and missile activities ³	(NA)	8,597	7,740	857	8,875	17,029
Military	(NA)	5,908	5,908	(NA)	6,104	10,601
Nonmilitary	(NA)	2,689	1,832	857	2,771	6,428
Research and development (under contract)	(NA)	7,154	7,101	53	6,652	7,748
Military	(NA)	5,213	5,213	(NA)	6,057	6,057
U.S. Government	22	5,003	5,003	(NA)	5,662	5,930
Other governments	5	210	210	(NA)	170	127
Nonmilitary	(NA)	1,941	1,888	53	821	1,690
U.S. Government	13	1,739	1,739	(NA)	594	1,606
Other customers	9	202	149	53	227	84
All other products and services	(NA)	13,494	13,410	84	15,179	17,847
Military	(NA)	8,852	8,852	(NA)	11,049	12,993
U.S. Government	25	7,283	7,283	(NA)	9,805	11,230
Other governments	15	1,569	1,569	(NA)	1,244	1,763
Nonmilitary	(NA)	4,642	4,558	84	4,130	4,855
U.S. Government	10	1,335	1,335	(NA)	1,151	1,251
Other customers	21	3,306	3,222	84	2,979	3,604

¹"Net new orders under subcontract" are included with "Prime contract net new orders" to avoid disclosing figures for individual companies.

²Data 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."

³Data for "Other missile activities" are included with data for "Other aircraft and space vehicles."

NA Not available. ¹Revised by 5 percent or more from previously published figures.

Note: Net new orders represent new orders received during the year, less terminations during the year. In some cases current backlog will not equal the backlog for the 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. The data for these respondents were not changed to force a balance. Significant imbalances due to reporting errors were investigated and corrected. The percent of estimation of each item is indicated as follows: ^a10 to 26 percent of this item has been estimated. Detail items may not add to total due to 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.

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CONTACT FOR DATA USERS

For additional information about these data, contact Rick Keach, 301-457-4800.

11.2 CIVIL AIRCRAFT AND ENGINES

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 1994, the value of complete civil aircraft shipments decreased by 23 percent to \$20,665.6 million, from the 1993 level of \$26,843.1 million. Shipments of complete civil aircraft engines decreased by 20 percent to \$3,997.2 million, from the 1993 level of \$4,931.6 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: 1994 and 1993

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

Product code	Product description	Number of companies	Quantity	Value
1994				
37215 00	Complete civil aircraft	31	3,852	20,665,567
	Civil aircraft (fixed wing, powered)	16	1,424	20,513,429
	Unladen weight not exceeding 2,000 kg (4,409 lb):			
37215 01	Single engine	12	(¹)	(¹)
37215 03	Multiengine ¹	3	822	582,172
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb)	4	(²)	(²)
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb) ²	3	602	19,931,257
	Helicopters (rotary wing)	6	351	130,220
37215 32	Unladen weight not exceeding 2,000 kg (4,409 lb)	4	(³)	(³)
37215 34	Unladen weight exceeding 2,000 kg (4,409 lb) ³	2	351	130,220
	Other civil aircraft (nonpowered) and kits	9	2,077	21,918
37215 35	Balloons, dirigibles, and airships	4	(⁴)	(⁴)
37215 37	Gliders and sailplanes	1	(⁴)	(⁴)
37215 39	Other aircraft, including aircraft sold in kits, and hang gliders ⁴ ..	4	2,077	21,918
1993				
37215 00	Complete civil aircraft	28	3,189	26,843,066
	Civil aircraft (fixed wing, powered)	14	1,416	26,713,125
	Unladen weight not exceeding 2,000 kg (4,409 lb):			
37215 01	Single engine	10	(¹)	(¹)
37215 03	Multiengine ¹	3	724	553,983
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb)	6	240	1,002,673
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb)	3	452	25,156,469
	Helicopters (rotary wing)	6	269	112,128
37215 32	Unladen weight not exceeding 2,000 kg (4,409 lb)	4	(³)	(³)
37215 34	Unladen weight exceeding 2,000 kg (4,409 lb) ³	2	269	112,128
	Other civil aircraft (nonpowered) and kits	8	1,504	17,813
37215 35	Balloons, dirigibles, and airships	4	(⁴)	(⁴)
37215 37	Gliders and sailplanes	1	(⁴)	(⁴)
37215 39	Other aircraft, including aircraft sold in kits, and hang gliders ⁴ ..	3	1,504	17,813

¹Product code 37215 01 is combined with 37215 03 to avoid disclosing figures for individual companies.²Product code 37215 05 is combined with 37215 07 to avoid disclosing figures for individual companies.³Product codes 37215 32 and 37215 34 are combined with 37215 39 to avoid disclosing figures for individual companies.⁴Product codes 37215 35 and 37215 37 are combined with 37215 39 to avoid disclosing figures for individual companies.

Table 6. Quantity and Value of Shipments of Complete Civil Aircraft Engines: 1994 and 1993

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

Product code	Product description	Number of companies	Quantity	Value
1994				
37242 00	Complete civil aircraft engines.....	12	10,971	3,997,195
37242 01	Spark-ignition reciprocating or rotary internal combustion	5	(¹)	(¹)
	Turbojet and turbofan:			
37242 03	Of a thrust not exceeding 25 kN (5,620 lb).....	2	(¹)	(¹)
37242 05	Of a thrust exceeding 25 kN (5,620 lb)	5	(¹)	(¹)
	Turboshaft (turbo propeller):			
37242 07	Of a power not exceeding 1,100 kW (820 hp)	4	(¹)	(¹)
37242 09	Of a power exceeding 1,100 kW (820 hp)	4	¹ 10,971	¹ 3,997,195
1993				
37242 00	Complete civil aircraft engines.....	8	10,129	4,931,587
37242 01	Spark-ignition reciprocating or rotary internal combustion	5	(¹)	(¹)
	Turbojet and turbofan:			
37242 03	Of a thrust not exceeding 25 kN (5,620 lb).....	1	(¹)	(¹)
37242 05	Of a thrust exceeding 25 kN (5,620 lb)	3	(¹)	(¹)
	Turboshaft (turbo propeller):			
37242 07	Of a power not exceeding 1,100 kW (820 hp)	3	(¹)	(¹)
37242 09	Of a power exceeding 1,100 kW (820 hp)	3	¹ 10,129	¹ 4,931,587

¹Data for product codes 37242 01, 37242 03, 37242 05, and 37242 07 are combined with product code 37242 09 to avoid disclosing figures for individual companies.

kN - Kilonewtons. kW - Kilowatts.

Table 7. Quantity and Value of Shipments of Complete Civil Aircraft: 1994

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

Product code	Product description	Total companies	January		February		March		April		May		June	
			Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
37215 00	Complete civil aircraft	31	278	1,337,404	288	1,341,117	358	3,199,516	306	1,395,299	312	1,235,110	324	2,433,944
	Civil aircraft (fixed wing, powered)	16	80	1,328,716	93	1,332,547	152	3,188,538	112	1,385,857	113	1,220,629	129	2,418,688
	Unladen weight not exceeding 2,000 kg (4,409 lb):													
37215 01	Single engine	12	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾
37215 03	Multiengine	3	¹ 146	¹ 18,330	¹ 56	¹ 29,833	¹ 82	¹ 68,229	¹ 77	¹ 34,511	¹ 73	¹ 60,644	¹ 77	¹ 52,515
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb)	4	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb)	3	² 34	² 1,310,386	² 37	² 1,302,714	² 70	² 3,120,309	² 35	² 1,351,346	² 40	² 1,159,985	² 52	² 2,366,173
37215 31	Helicopters (rotary wing) ³	6	¹ 26	¹ 6,833	¹ 26	¹ 6,760	¹ 36	¹ 9,199	¹ 30	¹ 7,713	¹ 31	¹ 12,691	¹ 30	¹ 13,484
37215 36	Other civil aircraft (nonpowered) and kits ⁴	9	¹ 172	¹ 1,855	¹ 169	¹ 1,810	¹ 170	¹ 1,779	¹ 164	¹ 1,729	¹ 168	¹ 1,790	¹ 165	¹ 1,772
			July		August		September		October		November		December	
37215 00	Complete civil aircraft	31	270	1,069,055	320	1,704,649	380	2,130,082	299	1,018,558	324	1,606,371	393	2,194,462
	Civil aircraft (fixed wing, powered)	16	85	1,059,512	105	1,690,038	165	2,115,495	95	1,003,828	108	1,590,818	187	2,178,763
	Unladen weight not exceeding 2,000 kg (4,409 lb):													
37215 01	Single engine	12	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾	⁽¹⁾
37215 03	Multiengine	3	¹ 50	¹ 20,016	¹ 63	¹ 30,563	¹ 89	¹ 97,014	¹ 57	¹ 28,884	¹ 65	¹ 48,398	¹ 87	¹ 93,235
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb)	4	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾	⁽²⁾
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb)	3	² 35	² 1,039,496	² 42	² 1,659,475	² 76	² 2,018,481	² 38	² 974,944	² 43	² 1,542,420	² 100	² 2,085,528
37215 31	Helicopters (rotary wing) ³	6	¹ 20	¹ 7,873	¹ 28	¹ 12,553	¹ 30	¹ 12,772	¹ 27	¹ 12,839	¹ 34	¹ 13,638	¹ 33	¹ 13,865
37215 36	Other civil aircraft (nonpowered) and kits ⁴	9	¹ 165	¹ 1,670	¹ 187	¹ 2,058	¹ 185	¹ 1,815	¹ 177	¹ 1,891	¹ 182	¹ 1,915	¹ 173	¹ 1,834

¹Product code 37215 01 is combined with 37215 03 to avoid disclosing figures for individual companies.²Product code 37215 05 is combined with 37215 07 to avoid disclosing figures for individual companies.³Includes product codes 37215 32 "Helicopters, unladen weight not exceeding 2,000 kg (4,409 lb)" and 37215 34, "Helicopters, unladen weight exceeding 2,000 kg (4,409 lb)."⁴Includes product codes 37215 35 "Balloons, dirigibles, and airships"; 37215 37 "Gliders, sailplanes"; and 37215 39, "Other aircraft, including aircraft sold in kits, including hang gliders."[†]Revised by 5 percent or more from previously published figures.

Table 8. Quantity and Value of Shipments of Complete Civil Aircraft: 1993

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

Product code	Product description	Total companies	January		February		March		April		May		June	
			Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
37215 00	Complete civil aircraft.....	28	194	1,830,823	232	1,986,408	293	3,202,672	263	2,578,315	247	2,502,407	304	3,269,147
	Civil aircraft (fixed wing, powered).....	14	105	1,825,837	77	1,979,531	131	3,195,363	107	2,571,839	94	2,491,392	142	3,255,895
	Unladen weight not exceeding 2,000 kg (4,409 lb):													
37215 01	Single engine.....	10	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37215 03	Multiengine.....	3	¹ 43	¹ 24,093	¹ 33	¹ 15,698	¹ 51	¹ 27,035	¹ 52	¹ 39,393	¹ 47	¹ 44,763	¹ 61	¹ 59,394
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb).....	6	31	143,547	9	34,102	18	74,656	8	28,011	7	29,263	28	100,487
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb).....	3	31	1,658,197	35	1,929,731	62	3,093,672	47	2,504,435	40	2,417,366	53	3,096,014
37215 31	Helicopters (rotary wing) ²	6	19	4,004	28	5,261	29	5,509	26	4,865	18	9,519	27	11,501
37215 36	Other civil aircraft (nonpowered) and kits ³	8	70	982	127	1,616	133	1,800	130	1,611	135	1,496	135	1,751
			July		August		September		October		November		December	
37215 00	Complete civil aircraft.....	28	261	1,156,858	253	2,386,157	291	1,622,026	249	1,693,769	268	1,544,310	334	3,070,174
	Civil aircraft (fixed wing, powered).....	14	115	1,145,793	122	2,375,902	144	1,599,886	103	1,681,711	105	1,533,174	171	3,056,802
	Unladen weight not exceeding 2,000 kg (4,409 lb):													
37215 01	Single engine.....	10	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37215 03	Multiengine.....	3	¹ 69	¹ 33,817	¹ 67	¹ 33,194	¹ 89	¹ 91,480	¹ 58	¹ 23,337	¹ 68	¹ 48,703	¹ 86	¹ 113,076
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb).....	6	20	98,802	15	53,866	27	80,519	19	111,397	16	53,548	42	194,475
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb).....	3	26	1,013,174	40	2,288,842	28	1,427,887	26	1,546,977	21	1,430,923	43	2,749,251
37215 31	Helicopters (rotary wing) ²	6	15	9,460	13	8,865	28	20,481	23	10,788	13	9,757	30	12,118
37215 36	Other civil aircraft (nonpowered) and kits ³	8	131	1,605	118	1,390	119	1,659	123	1,270	150	1,379	133	1,254

¹Product code 37215 01 is combined with 37215 03 to avoid disclosing figures for individual companies.

²Includes product codes 37215 32 "Helicopters, unladen weight not exceeding 2,000 kg (4,409 lb)" and 37215 34, "Helicopters, unladen weight exceeding 2,000 kg (4,409 lb)."

³Includes product codes 37215 35 "Balloons, dirigibles, and airships"; 37215 37 "Gliders, sailplanes"; and 37215 39, "Other aircraft, including aircraft sold in kits, including hang gliders."

Table 9. Quantity and Value of Shipments of Complete Civil Aircraft Engines: 1994 and 1993

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

Product code	Product description	Total companies	January		February		March		April		May		June	
			Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1994														
37242 00	Complete civil aircraft engines	12	707	279,765	703	253,316	804	295,037	851	335,318	795	271,265	946	489,195
37242 01	Spark-ignition reciprocating or rotary internal-combustion .. Turbojet and turbofan:	7	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 03	Of a thrust not exceeding 25 kN (5,620 lb)	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 05	Of a thrust exceeding 25 kN (5,620 lb)	6	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 07	Turboshaft (turbo propeller): Of a power not exceeding 1,100 kW (820 hp)	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 09	Of a power exceeding 1,100 kW (820 hp)	3	¹ 707	¹ 279,765	¹ 703	¹ 253,316	¹ 804	¹ 295,037	¹ 851	¹ 335,318	¹ 795	¹ 271,265	¹ 946	¹ 489,195
			July		August		September		October		November		December	
37242 00	Complete civil aircraft engines	12	871	268,760	966	277,582	1,088	361,389	1,141	400,038	1,084	361,929	1,015	403,601
37242 01	Spark-ignition reciprocating or rotary internal-combustion .. Turbojet and turbofan:	7	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 03	Of a thrust not exceeding 25 kN (5,620 lb)	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 05	Of a thrust exceeding 25 kN (5,620 lb)	6	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 07	Turboshaft (turbo propeller): Of a power not exceeding 1,100 kW (820 hp)	2	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 09	Of a power exceeding 1,100 kW (820 hp)	3	¹ 871	¹ 268,760	¹ 966	¹ 277,582	¹ 1,088	¹ 361,389	¹ 1,141	¹ 400,038	¹ 1,084	¹ 361,929	¹ 1,015	¹ 403,601
1993														
			January		February		March		April		May		June	
37242 00	Complete civil aircraft engines	8	657	342,206	708	471,703	865	452,818	811	388,054	870	394,646	941	532,520
37242 01	Spark-ignition reciprocating or rotary internal-combustion .. Turbojet and turbofan:	5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 03	Of a thrust not exceeding 25 kN (5,620 lb)	1	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 05	Of a thrust exceeding 25 kN (5,620 lb)	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 07	Turboshaft (turbo propeller): Of a power not exceeding 1,100 kW (820 hp)	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 09	Of a power exceeding 1,100 kW (820 hp)	3	¹ 657	¹ 342,206	¹ 708	¹ 471,703	¹ 865	¹ 452,818	¹ 811	¹ 388,054	¹ 870	¹ 394,646	¹ 941	¹ 532,520
			July		August		September		October		November		December	
37242 00	Complete civil aircraft engines	8	829	274,539	864	474,400	836	316,215	884	400,700	870	403,609	994	480,177
37242 01	Spark-ignition reciprocating or rotary internal-combustion .. Turbojet and turbofan:	5	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 03	Of a thrust not exceeding 25 kN (5,620 lb)	1	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 05	Of a thrust exceeding 25 kN (5,620 lb)	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 07	Turboshaft (turbo propeller): Of a power not exceeding 1,100 kW (820 hp)	3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
37242 09	Of a power exceeding 1,100 kW (820 hp)	3	¹ 829	¹ 274,539	¹ 864	¹ 474,400	¹ 836	¹ 316,215	¹ 884	¹ 400,700	¹ 870	¹ 403,609	¹ 994	¹ 480,177

¹Product codes 37242 01, 37242 03, 37242 05, and 37242 07 are combined with 37242 09 to avoid disclosing figures for individual companies.

kN - Kilonewtons. kW - Kilowatts. ¹Revised by 5 percent or more from previously published figures.

Table 10. Shipments, Exports, Imports, and Apparent Consumption of Complete Civil Aircraft and Aircraft Engines: 1994

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

Product code ¹	Product description	Manufacturers' shipments		Exports of domestic merchandise ^{1 2}		Imports for consumption ^{1 3}	
		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)	822	582,172	299	51,556	268	31,788
37215 05	Unladen weight exceeding 2,000 kg (4,409 lb), but not exceeding 15,000 kg (33,069 lb)	(⁴)	(⁴)	159	550,262	155	1,694,227
37215 07	Unladen weight exceeding 15,000 kg (33,069 lb) ⁴	602	19,931,257	222	15,930,808	38	1,364,424
37215 31	Helicopters (rotary wing)	351	130,220	154	82,288	216	317,846
37242 00	Complete civil aircraft engines	10,791	3,997,195	3,315	2,322,671	4,790	2,744,223

¹For 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.

²Source: Bureau of the Census report EM545, *U.S. Exports*.

³Source: Bureau of the Census report IM145, *U.S. Imports for Consumption*.

⁴Product code 37215 05 is combined with 37215 07 to avoid disclosing figures 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 Carol Beasley, 301-457-4781.

Appendix A. Survey Scope and Methodology

Survey	Publica- tion period ¹	Reporting require- ment (V/M) ²	Title	Survey panel (number)	Received coverage rate ³ / range ⁴	Active response rate ⁵ / range ⁴	Data collected and/or published ⁶
MA20A	M	V	Flour Milling Products	220	4	8	P, I
MA20D	A	V	Confectionery	484	7	2	S
M20J	M	M	Fats & Oils: Oilseed Crushings	174	9	8	P, I, C
M20K	M	M	Fats & Oils: Production, Consumption, and Stocks	1225	8	6	P, I, C
MQ22D	Q	V	Consumption on the Woolen System and Worsted Combing	143	5	5	C, P
MA22F	A	M	Textured and Spun Yarn Products	631	8	6	P
MA22K	A	M	Knit Fabric Production	613	7	3	P, M
M22P	M	M	Consumption on the Cotton System and Stocks	710	8	7	C, I, M, SH
MA22Q	A	M	Carpet and Rugs	208	9	5	S
MQ22T	Q	M	Broadwoven Fabrics (Gray)	353	8	7	P, M, LH
MQ23A	Q	M	Apparel	1177	5	7	P, SV
MA23D	A	M	Gloves and Mittens	209	7	4	S
MQ23X	Q	V	Sheets, Pillowcases, and Towels	170	8	2	S, P, I, UO
MA31A	A	M	Footwear	365	8	6	S, P
MQ31A	Q	V	Footwear	360	4	6	S, P
MA24T	A	M	Lumber Production and Mill Stocks	1986	6	5	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	191	3	5	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	790	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	300	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	9	1	SQ, P, I
MA33A	A	M	Iron and Steel Castings	727	9	0	S
MA33B	A	M	Steel Mill Products	681	9	6	C, S, R
M33D	M	V	Aluminum Ingot and Mill Products	250	7	5	SQ, R, I
MA33E	A	M	Nonferrous Castings	1270	9	0	S
M33J	M	V	Inventories of Steel-Producing Mills	25	7	0	SQ, I
MA33L	A	M	Insulated Wire and Cable	210	9	4	S
MA35R	A	M	Computers and Office and Accounting Machines	1195	9	5	S
MA36A	A	M	Switchgear, Switchboard Apparatus, Relays, and Industrial Control	1036	9	6	S
MQ36B	Q	V	Electric Lamps	35	9	3	T, EX, S, I, P
MQ36C	Q	V	Fluorescent Lamp Ballasts	14	9	9	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	1555	8	5	S
MA36Q	A	M	Semiconductors, Printed Circuit Boards, and Related Equipment	3489	7	7	S
MA38B	A	M	Selected Instruments and Related Products	3247	7	7	S
MA38R	A	M	Electromedical and Irradiation Equipment	377	9	7	S
MA36E	A	M	Electric Housewares and Fans	133	9	4	S
MA36F	A	M	Major Household Appliances	149	9	8	S
MA36M	A	M	Consumer Electronics	235	9	8	S
MA34K	A	V	Steel Shipping Drums and Pails	73	4	5	S

See footnotes at end of table.

Survey	Publication period ¹	Reporting requirement (V/M) ²	Title	Survey panel (number)	Received coverage rate ³ /range ⁴	Active response rate ⁵ /range ⁴	Data collected and/or published ⁶
MA35J	A	M	Selected Industrial Air Pollution Control Equipment	187	8	4	NOQ, NOV, S, UO, UOQ
MA35M	A	M	Air-Conditioning and Refrigeration Equipment	440	8	5	S
MA35N	A	M	Fluid Power Products, Including Aerospace	503	8	8	S
MA35P	A	M	Pumps and Compressors	540	8	5	S
MA35Q	A	M	Antifriction Bearings	152	9	7	S
MA35U	A	V	Vending Machines (Coin-Operated)	64	8	1	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, Mineral Processing Equipment	180	8	7	S
MA35L	A	M	Internal Combustion Engines	71	9	8	PC, IPT, S, CC, P
MQ35W	Q	V	Metalworking Machinery	521	6	4	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

¹Publication period: A = annual; M = monthly (data reflects twelfth month); Q = quarterly (data reflects fourth quarter)

²Reporting requirement will be either voluntary or mandatory, V or M, respectively.

³Received coverage rate is the ratio of value of shipments of establishments responding to the survey to the 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 the total value of shipments of the products collected in that survey.

⁴Coverage 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

⁵Active response rate is the ratio of the number of establishments responding to the survey to the total active establishments of that survey. For monthly and quarterly surveys this is calculated on the monthly or quarterly portion rather than the mandatory annual counterpart. Both the response rate and coverage rate would be higher if the annual portion were included.

⁶Data 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