

# Materials Summary

# 1997

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## 1997 Economic Census

*Manufacturing*

Subject Series



## U S C E N S U S B U R E A U

*Helping You Make Informed Decisions*

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



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### *Manufacturing*

#### Subject Series



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# Introduction to the Economic Census

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## PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the Nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in 2 and 7.

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the Federal Government use the data to monitor economic activity and assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

## ALL-NEW INDUSTRY CLASSIFICATIONS

Data from the 1997 Economic Census are published primarily on the basis of the North American Industry Classification System (NAICS), unlike earlier censuses, which were published according to the Standard Industrial Classification (SIC) system. NAICS is in the process of being adopted in the United States, Canada, and Mexico. Most economic census reports cover one of the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information

52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Foodservices
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

## RELATIONSHIP TO SIC

While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The industry definitions discuss the relationships between NAICS and SIC industries. Where changes are significant, it will not be possible to construct time series that include data for points both before and after 1997.

For 1997, data for auxiliary establishments (those functioning primarily to manage, service, or support the activities of their company's operating establishments, such as a central administrative office or warehouse) will not be included in the sector-specific reports. These data will be published separately.

## GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for the states, metropolitan areas (MAs), counties, parishes, and corporate municipalities including cities, towns, villages, and boroughs. Respondents were

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required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from Internal Revenue Service tax forms is used as a basis for coding.

## **BASIS OF REPORTING**

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company.

## **DOLLAR VALUES**

All dollar values presented are expressed in current dollars; i.e., 1997 data are expressed in 1997 dollars, and 1992 data, in 1992 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

## **AVAILABILITY OF ADDITIONAL DATA**

### **Reports in Print and Electronic Media**

All results of the 1997 Economic Census are available on the Census Bureau Internet site ([www.census.gov](http://www.census.gov)) and on compact discs (CD-ROM) for sale by the Census Bureau. Unlike previous censuses, only selected highlights are published in printed reports. For more information, including a description of electronic and printed reports being issued, see the Internet site, or write to U.S. Census Bureau, Washington, DC 20233-8300, or call Customer Services at 301-457-4100.

### **Special Tabulations**

Special tabulations of data collected in the 1997 Economic Census may be obtained, depending on availability of time and personnel, in electronic or tabular form. The data will be summaries subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) that govern the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief of the division named below, U.S. Census Bureau, Washington, DC 20233-8300. To discuss a special tabulation before submitting specifications, call the appropriate division:

Manufacturing and Construction Division 301-457-4673  
Service Sector Statistics Division 301-457-2668

## **HISTORICAL INFORMATION**

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing, and the other business service censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other Federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census questionnaires.

The range of industries covered in the economic censuses expanded between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. All of the census reports printed since 1967 are still available for sale on microfiche from the Census Bureau. CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases including nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

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## SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1997 Economic Census and Related Statistics* at [www.census.gov/econguide](http://www.census.gov/econguide). More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1997 Economic Census* at [www.census.gov/econ/www/history.html](http://www.census.gov/econ/www/history.html).

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with the 1997 Economic Census data:

A	Standard error of 100 percent or more.
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals.
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue.
N	Not available or not comparable.
Q	Revenue not collected at this level of detail for multiestablishment firms.
S	Withheld because estimates did not meet publication standards.

V	Represents less than 50 vehicles or .05 percent.
X	Not applicable.
Y	Disclosure withheld because of insufficient coverage of merchandise lines.
Z	Less than half the unit shown.
a	0 to 19 employees.
b	20 to 99 employees.
c	100 to 249 employees.
e	250 to 499 employees.
f	500 to 999 employees.
g	1,000 to 2,499 employees.
h	2,500 to 4,999 employees.
i	5,000 to 9,999 employees.
j	10,000 to 24,999 employees.
k	25,000 to 49,999 employees.
l	50,000 to 99,999 employees.
m	100,000 employees or more.
p	10 to 19 percent estimated.
q	20 to 29 percent estimated.
r	Revised.
s	Sampling error exceeds 40 percent.
nec	Not elsewhere classified.
nsk	Not specified by kind.
–	Represents zero (page image/print only).
(CC)	Consolidated city.
(IC)	Independent city.



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# Manufacturing

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## SCOPE

The 1997 Economic Census – Manufacturing covers all manufacturing establishments with one or more paid employees. Manufacturing is defined as the mechanical, physical, or chemical transformation of materials or substances into new products. The assembly of components into new products is also considered manufacturing, except when it is appropriately classified as construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and typically use power-driven machines and materials-handling equipment. Also included in the manufacturing sector are some establishments that make products by hand, like custom tailors and the makers of custom draperies. While manufacturers typically do not sell to the public, some establishments like bakeries and candy stores that make products on the premises may be included.

While logging and publishing are no longer in the scope of manufacturing, data for these industries are included in the manufacturing industry reports, but are not included in the manufacturing state, summary, and other reports.

## GENERAL

This report, from the 1997 Economic Census – Manufacturing, is one of a series of 480 industry reports and 51 geographic area reports, each of which provides statistics for individual industries or states, respectively. Seven of the industry reports are for industries no longer in the manufacturing sector but are included with manufacturing for the 1997 census year. Also included for this sector are General, Product, and Materials Consumed Summary reports, a special report on Concentration Ratios in Manufacturing, and data files on Location of Manufacturing Plants.

Each industry report presents data for a six-digit North American Industry Classification System (NAICS) industry. A description of the particular NAICS industry may be found in Appendix B. These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. Explanations of these and other terms may be found in Appendix A. The industry reports also include data for states with 100 employees or more in the industry.

State reports, which include the District of Columbia, present similar statistics at the “all manufacturing” level for each state and its metropolitan areas (MAs) with 250

employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

The General Summary report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

The Products and Materials Consumed reports summarize the products and materials data published in the industry reports. The Product Summary report also includes data from the Current Industrial Reports (CIR) and a special table with data for products that are primary to more than one industry, which are not in the industry reports.

The Concentration Ratios report publishes data on the percentage of value of shipments accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Hirschmann-Herfindahl Indexes for each industry.

The Location of Manufacturing data files contain statistics on the number of establishments for the three- and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

## GEOGRAPHIC AREAS COVERED

Statistics at the six-digit NAICS industry level are shown for states and the District of Columbia in both the state and industry reports for cells with 100 employees or more.

The state reports also include data at the “all manufacturing” level for a variety of geographies that meet the employment criteria.

Data are available for the metropolitan areas (MAs) with 250 employees or more. The term MA is a general term used to encompass all of the specifically defined metropolitan areas. A consolidated metropolitan statistical area (CMSA) is made up of two or more contiguous primary metropolitan statistical areas (PMSAs) with a combined population of at least 1 million. A PMSA is a subdivision of a CMSA that demonstrates very strong internal economic and social links separate from the ties to other portions of the CMSA. A metropolitan statistical area (MSA) is an integrated economic and social unit with a population of at least 50,000. An MA is made up of one or more counties meeting standards of metropolitan character. In New England, cities and towns, rather than counties, are the

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component geographic units. Determination of the MAs was made by the Office of Management and Budget (OMB) as of June 30, 1997. The population estimates were from the 1990 Census of Population or a subsequent special census. When applicable, the make-up of an MA is included in Appendix E. Changes to geographical boundaries are noted in Appendix D.

The state reports include data for counties with 500 employees or more. These are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs and census areas. Maryland, Missouri, Nevada, and Virginia have one or more places that are independent of county organizations. These places are treated as counties and places. The counties and places are defined as of January 1, 1997.

The state reports include data for places with 500 employees or more. Places are typically cities, towns, and villages. They may be incorporated municipalities, semi-independent municipalities, special economic urban areas (SEUAs), or other place equivalents.

The state reports also include data for consolidated cities with 500 employees or more. Consolidated cities are made up of separately incorporated municipalities.

## **COMPARABILITY OF THE 1992 AND 1997 CENSUSES**

The adoption of the North American Industry Classification System (NAICS) has had a major impact on the comparability of data between the 1992 and 1997 censuses. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past. If industries are not comparable between the two censuses, historic data are not shown. When applicable, Appendix G shows the product class and product comparability between the two systems.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those leaving manufacturing are logging and portions of publishing. Prominent among the industries coming into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. Data for the industries coming into manufacturing as well as those leaving manufacturing are included in the manufacturing industry report series for 1997. However, the state and summary reports only include data for industries in the NAICS definition of manufacturing.

Another change resulting from the conversion to NAICS is that data for central administrative offices (CAOs) associated with manufacturing are not included along side the manufacturing data. This change affects data in the state reports and the general summary.

## **DISCLOSURE**

In accordance with Federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments classified in a specific industry or geography is not considered a disclosure, and may be released even when other information is withheld.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. However, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures that can be suppressed even though value of shipments data are published.

## **AVAILABILITY OF MORE FREQUENT ECONOMIC DATA**

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 58,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data.

In addition to the ASM, the Census Bureau conducts a Current Industrial Reports (CIR) program. The CIR publishes detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. For the 1997 Economic Census – Manufacturing, the annual CIR data are included in the Product Summary report.

The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) program, which publishes detailed statistics for manufacturing industries at the U.S. level.

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311111, DOG &amp; CAT FOOD MFG</b>					
11114001	Wheat . . . . . 1,000 s tons..	260.8	37 755	238.3	27 245
11115001	Field corn, whole grain . . . . . mil lb..	5 485.9	337 791	S	168 736
11119901	Oats . . . . . 1,000 s tons..	13.8	2 630	D	D
11119903	Barley . . . . . 1,000 s tons..	11.1	3 064	4.7	1 209
11119905	Sorghum . . . . . 1,000 s tons..	D	D	36.7	5 390
31121101	Wheat flour . . . . . 1,000 cwt..	S	60 013	3 375.5	27 421
31121115	Wheat millfeed and screenings . . . . . 1,000 s tons..	S	57 355	P360.4	34 770
31122207	Soybean millfeed and screenings . . . . . 1,000 s tons..	51.6	10 125	37.7	7 720
31121135	Other millfeed and screenings . . . . . 1,000 s tons..	29.9	5 711	D	D
31121137	Hominy feed and corn meal . . . . . 1,000 s tons..	21.1	5 343	N	N
31122109	Corn gluten feed and meal . . . . . 1,000 s tons..	489.1	136 512	P334.3	80 521
31111900	Alfalfa meal, excluding alfalfa hay . . . . . 1,000 s tons..	D	D	10.5	1 590
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	S	9 752	S	5 762
31131007	Molasses . . . . . 1,000 s tons..	S	503	2.6	302
31122307	Cottonseed cake and meal . . . . . 1,000 s tons..	D	D	D	D
31100017	Fats and oils . . . . . 1,000 s tons..	463.7	174 086	P272.1	92 840
31161303	Meat meal and tankage . . . . . 1,000 s tons..	P1 075.7	318 622	P941.3	194 778
31161305	Poultry feather and byproducts meal . . . . . 1,000 s tons..	469.5	205 682	320.0	118 422
31170000	Fish meal and solubles (dry weight equivalent) . . . . . 1,000 s tons..	225.4	100 931	116.8	50 626
31212000	Brewers' and distillers' grains . . . . . 1,000 s tons..	233.3	70 877	111.7	21 515
31122205	Soybean cake and meal . . . . . 1,000 s tons..	627.1	154 191	S	150 272
32518827	Calcium . . . . . 1,000 s tons..	P71.2	3 029	S	4 625
32518837	Phosphorus, elemental (technical) . . . . . 1,000 s tons..	S	17 882	15.2	11 936
31194205	Salt . . . . . 1,000 s tons..	S	2 767	49.0	4 787
32518841	Other minerals, except trace minerals . . . . . 1,000 s tons..	20.9	13 663	20.2	8 744
32541109	Vitamins . . . . .	X	44 219	X	24 593
32541111	Drugs and antibiotics . . . . .	X	D	X	406
32541105	Other microingredients, including trace minerals . . . . .	X	65 670	X	47 562
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	82 972	X	117 451
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	93 051	X	36 281
31491101	Bags, textile (burlap, cotton, polypropylene, etc.) . . . . .	X	D	X	D
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	138 999	X	88 754
32222401	Bags; uncoated paper and multiwall . . . . .	X	102 370	X	90 834
33243101	Metal cans, can lids and ends . . . . .	X	377 377	X	291 774
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	618 618	X	564 013
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	434 739	X	122 289
<b>311119, OTHER ANIMAL FOOD MFG</b>					
11114001	Wheat . . . . . 1,000 s tons..	S	141 556	N	N
11115001	Field corn, whole grain . . . . . mil lb..	S	3 109 926	N	N
11119901	Oats . . . . . 1,000 s tons..	552.0	80 092	N	N
11119903	Barley . . . . . 1,000 s tons..	749.6	95 804	N	N
11119905	Sorghum . . . . . 1,000 s tons..	S	157 140	N	N
31121101	Wheat flour . . . . . 1,000 cwt..	S	43 597	N	N
31121115	Wheat millfeed and screenings . . . . . 1,000 s tons..	S	291 952	N	N
31122207	Soybean millfeed and screenings . . . . . 1,000 s tons..	988.5	178 975	N	N
31121135	Other millfeed and screenings . . . . . 1,000 s tons..	S	190 965	N	N
31121137	Hominy feed and corn meal . . . . . 1,000 s tons..	198.2	26 017	N	N
31122109	Corn gluten feed and meal . . . . . 1,000 s tons..	424.0	82 844	N	N
31111900	Alfalfa meal, excluding alfalfa hay . . . . . 1,000 s tons..	274.7	45 275	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	S	15 467	N	N
31131007	Molasses . . . . . 1,000 s tons..	767.6	77 357	N	N
31122307	Cottonseed cake and meal . . . . . 1,000 s tons..	S	193 416	N	N
31100017	Fats and oils . . . . . 1,000 s tons..	1 150.5	380 333	N	N
31161303	Meat meal and tankage . . . . . 1,000 s tons..	1 130.3	318 783	N	N
31161305	Poultry feather and byproducts meal . . . . . 1,000 s tons..	P947.2	317 502	N	N
31170000	Fish meal and solubles (dry weight equivalent) . . . . . 1,000 s tons..	283.3	126 557	N	N
31212000	Brewers' and distillers' grains . . . . . 1,000 s tons..	589.6	84 182	N	N
31122205	Soybean cake and meal . . . . . 1,000 s tons..	9 580.7	2 495 334	N	N
32518827	Calcium . . . . . 1,000 s tons..	S	51 151	N	N
32518837	Phosphorus, elemental (technical) . . . . . 1,000 s tons..	750.1	186 767	N	N
31194205	Salt . . . . . 1,000 s tons..	S	38 852	N	N
32518841	Other minerals, except trace minerals . . . . . 1,000 s tons..	S	214 439	N	N
32541109	Vitamins . . . . .	X	379 116	X	N
32541111	Drugs and antibiotics . . . . .	X	368 890	X	N
32541105	Other microingredients, including trace minerals . . . . .	X	354 149	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	9 393	X	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	45 126	X	N
31491101	Bags, textile (burlap, cotton, polypropylene, etc.) . . . . .	X	8 377	X	N
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	39 600	X	N
32222401	Bags; uncoated paper and multiwall . . . . .	X	65 031	X	N
33243101	Metal cans, can lids and ends . . . . .	X	567	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	927 326	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	2 042 991	X	N
<b>311211, FLOUR MILLING</b>					
11114003	Wheat . . . . . mil bushels..	785.0	3 990 970	875.9	3 177 824
11115003	Corn . . . . . mil bushels..	125.5	453 351	133.9	287 688
11119911	Barley . . . . . mil bushels..	P1.9	6 538	S	8 838
11119913	Oats . . . . . mil bushels..	D	D	32.6	58 030
11110005	Other grains . . . . . mil bushels..	S	D	12.4	43 755
31121101	Wheat flour . . . . . 1,000 sacks (cwt)..	16 424.0	127 929	23 336.2	146 904
32222401	Bags; uncoated paper and multiwall . . . . .	X	50 478	X	49 152
31491101	Bags, textile (burlap, cotton, polypropylene, etc.) . . . . . mil bags..	X	6 106	X	3 745
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	480 517	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	524 213	X	N
<b>311212, RICE MILLING</b>					
11116000	Rice, rough . . . . . mil lb..	S	1 431 176	13 455.5	795 795
31491101	Bags, textile (burlap, cotton, polypropylene, etc.) . . . . .	X	44 336	X	21 951
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	3 230	X	2 764
32222401	Bags; uncoated paper and multiwall . . . . .	X	D	X	4 273
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	D	X	14 532
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	48 540	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	114 497	X	D

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311213, MALT MFG</b>					
11119911	Barley ..... mil bushels..	151.8	493 365	128.9	326 855
00970099	All other materials and components, parts, containers, and supplies .....	X	7 241	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	6 355	X	D
<b>311221, WET CORN MILLING</b>					
11116000	Rice, rough ..... mil lb..	280.7	160 567	D	D
11115003	Corn ..... mil lb..	D	3 675 049	1 303.1	2 587 660
11119915	Sorghum ..... mil lb..	D	D	D	D
31491101	Bags, textile (burlap, cotton, polypropylene, etc.) .....	X	2 253	X	D
001900A3	Bags; plastics, foil, and coated paper .....	X	D	X	D
32222401	Bags; uncoated paper and multiwall .....	X	28 373	X	23 953
001900A1	Packaging paper and plastics film, coated and laminated .....	X	D	X	4 208
00970099	All other materials and components, parts, containers, and supplies .....	X	481 121	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	14 656	X	D
<b>311222, SOYBEAN PROCESSING</b>					
11111000	Soybean seeds, nuts, and beans ..... 1,000 s tons..	36 797.5	9 380 234	N	N
31122201	Crude soybean oil ..... mil lb..	1 443.7	339 041	N	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	16 107	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	875 330	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	652 135	X	N
<b>311223, OTHER OILSEED PROCESSING</b>					
11192003	Cottonseed seeds, nuts, and beans ..... 1,000 s tons..	4 232.0	580 883	N	N
31122301	Crude cottonseed oil ..... mil lb..	D	D	N	N
31122303	Once-refined cottonseed oil ..... mil lb..	D	D	N	N
11119907	Flaxseed seeds, nuts, and beans ..... 1,000 s tons..	D	D	N	N
11119909	Sunflower seeds, nuts, and beans ..... 1,000 s tons..	D	D	N	N
11199201	Peanut seeds, nuts, and beans ..... 1,000 s tons..	D	D	N	N
11100007	Other seeds, nuts, and beans (excluding cottonseed, sunflower, soybean, flaxseed, and peanuts) ..... 1,000 s tons..	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	189 974	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	57 794	X	N
<b>311225, FATS &amp; OILS REFINING &amp; BLENDING</b>					
31161115	Lard ..... mil lb..	191.2	48 020	N	N
31161105	Tallow and stearin, edible ..... mil lb..	154.6	35 472	N	N
31122301	Crude cottonseed oil ..... mil lb..	164.9	49 865	N	N
31122303	Once-refined cottonseed oil ..... mil lb..	163.3	43 733	N	N
31122001	Fully-refined cottonseed oil ..... mil lb..	117.8	31 948	N	N
31122201	Crude soybean oil ..... mil lb..	7 411.2	1 766 045	N	N
31122203	Once-refined soybean oil ..... mil lb..	D	D	N	N
31122003	Fully-refined soybean oil ..... mil lb..	P3 165.9	824 123	N	N
31122123	Crude corn oil ..... mil lb..	203.4	54 045	N	N
31122125	Once-refined corn oil ..... mil lb..	49.9	14 211	N	N
31122127	Fully-refined corn oil ..... mil lb..	169.0	51 957	N	N
31122309	Other crude oil ..... mil lb..	91 160.9	280 519	N	N
31122311	Other once-refined oil ..... mil lb..	210.6	75 170	N	N
31122005	Other fully-refined oil ..... mil lb..	9245.5	87 675	N	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	113 654	X	N
32610029	Plastics containers .....	X	282 188	X	N
32721301	Glass containers .....	X	D	X	N
33240000	Metal containers .....	X	13 224	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	1 259 628	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	254 598	X	N
<b>311230, BREAKFAST CEREAL MFG</b>					
11114003	Wheat ..... mil bushels..	910.9	72 079	N	N
11119913	Oats ..... mil bushels..	S	103 950	N	N
11115003	Corn ..... mil bushels..	D	D	N	N
11119911	Barley ..... mil bushels..	S	9 606	N	N
11116000	Rice, rough ..... mil lb..	321.5	60 911	N	N
11110003	Other grains ..... mil bushels..	S	6 291	N	N
31121119	Corn grits ..... mil lb..	419.5	47 170	N	N
31121121	Corn meal and flakes ..... mil lb..	S	58 408	N	N
31121101	Wheat flour ..... mil lb..	S	38 350	N	N
31121133	Flour, other than wheat ..... mil lb..	P723.1	100 307	N	N
31121131	Prepared four mixes ..... mil lb..	D	D	N	N
31131005	White sugar, cane and beet, in terms of sugar solids ..... 1,000 s tons..	608.9	339 926	N	N
31131009	Brown sugar, cane and beet, in terms of sugar solids ..... 1,000 s tons..	95.3	19 516	N	N
31100015	Fats and oils ..... mil lb..	87.4	38 940	N	N
31142307	Raisins ..... 1,000 cwt..	S	69 555	N	N
31142313	Dried fruits except raisins ..... 1,000 cwt..	S	23 401	N	N
31191103	Nut meats, dried or dehydrated ..... 1,000 cwt..	31.0	11 389	N	N
11100031	Nuts and nut meats, raw ..... 1,000 cwt..	S	40 234	N	N
001900A1	Packaging paper and plastics film, coated and laminated .....	X	152 376	X	N
001900A3	Bags; plastics, foil, and coated paper .....	X	74 363	X	N
32222401	Bags; uncoated paper and multiwall .....	X	D	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	484 114	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	455 361	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	47 954	X	N
<b>311311, SUGARCANE MILLS</b>					
11193000	Sugar cane ..... 1,000 s tons..	24 105.3	673 500	23 984.2	771 726
00970099	All other materials and components, parts, containers, and supplies .....	X	115 633	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	41 374	X	D

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311312, CANE SUGAR REFINING</b>					
31131100	Raw cane sugar (converted to 96 percent basis) . . . . . 1,000 s tons . . . . .	5 972.2	2 398 421	P4 664.3	1 869 940
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	D	X	D
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	69 230	X	32 122
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	D	X	D
32222401	Bags; uncoated paper and multiwall . . . . .	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	57 233	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	2 488	X	D
<b>311313, BEET SUGAR MFG</b>					
11199100	Sugar beets . . . . . 1,000 s tons . . . . .	S	1 312 943	27 617.7	1 188 071
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	7 184	X	7 560
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	7 911	X	7 222
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	3 465	X	D
32222401	Bags; uncoated paper and multiwall . . . . .	X	10 615	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	219 843	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	-	X	N
<b>311320, CHOCOLATE &amp; CONFECTIONERY MFG FROM CACAO BEANS</b>					
31122117	Crystalline fructose (dry fructose) . . . . . mil lb . . . . .	.7	348	N	N
11100003	Nuts, in shell (including peanuts) . . . . . mil lb . . . . .	D	D	D	D
31191101	Nutmeats, including peanuts, processed . . . . . mil lb . . . . .	D	D	P5.2	6 083
11100029	Nutmeats, raw . . . . . mil lb . . . . .	P6.4	7 825	D	D
31150000	Milk and milk products . . . . .	X	118 225	X	172 389
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb . . . . .	D	D	66.2	8 247
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb . . . . .	105.7	13 750	75.1	9 255
32510053	Sugar substitutes (mannitol, sorbitol, etc.) . . . . . 1,000 s tons . . . . .	D	D	S	1 152
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons . . . . .	474.1	193 072	537.2	212 834
31100021	Fats and oils, including shortening . . . . . mil lb . . . . .	986.9	43 972	87.2	39 007
31132003	Chocolate coatings . . . . . 1,000 s tons . . . . .	199.9	193 009	29.1	29 395
31132005	Unsweetened chocolate (chocolate liquor) . . . . . 1,000 s tons . . . . .	33.8	61 148	68.8	75 763
11130007	Cocoa beans . . . . . 1,000 s tons . . . . .	408.7	410 602	310.2	368 416
31132007	Cocoa, pressed cake and powder . . . . . 1,000 s tons . . . . .	48.2	33 854	65.7	48 271
31132009	Cocoa butter . . . . . mil lb . . . . .	P146.5	265 459	111.3	168 421
32510063	Essential oils and flavors, synthetic . . . . .	X	14 849	X	15 806
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	69 787	X	57 142
33299901	Aluminum foil packaging products, converted or rolls and sheets . . . . .	X	16 784	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	68 586	X	42 133
32610029	Plastics containers . . . . .	X	D	X	20 292
32721301	Glass containers . . . . .	X	D	X	D
33243101	Metal cans, can lids and ends . . . . .	X	1 611	X	16 421
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	83 561	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	88 775	X	D
<b>311330, CONFECTIONERY MFG FROM PURCHASED CHOCOLATE</b>					
11100003	Nuts, in shell (including peanuts) . . . . . mil lb . . . . .	D	D	N	N
31191101	Nutmeats, including peanuts, processed . . . . . mil lb . . . . .	158.3	165 851	N	N
11100029	Nutmeats, raw . . . . . mil lb . . . . .	42.1	40 436	N	N
00190045	Fresh and dried fruits . . . . . mil lb . . . . .	8.9	12 116	N	N
31150000	Milk and milk products . . . . .	X	293 549	X	N
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb . . . . .	41.1	6 781	N	N
31122117	Crystalline fructose (dry fructose) . . . . . mil lb . . . . .	1.1	474	N	N
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb . . . . .	402.0	53 949	N	N
32510053	Sugar substitutes (mannitol, sorbitol, etc.) . . . . . 1,000 s tons . . . . .	1.6	1 455	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons . . . . .	739.5	318 574	N	N
31100021	Fats and oils, including shortening . . . . . mil lb . . . . .	59.5	32 171	N	N
31132003	Chocolate coatings . . . . . 1,000 s tons . . . . .	277.6	335 550	N	N
31132005	Unsweetened chocolate (chocolate liquor) . . . . . 1,000 s tons . . . . .	88.6	138 566	N	N
11130007	Cocoa beans . . . . . 1,000 s tons . . . . .	D	D	N	N
31132007	Cocoa, pressed cake and powder . . . . . 1,000 s tons . . . . .	20.1	14 845	N	N
31132009	Cocoa butter . . . . . mil lb . . . . .	D	D	N	N
31134003	Chewing gum base including chicle . . . . .	X	-	X	N
32510063	Essential oils and flavors, synthetic . . . . .	X	19 754	X	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	315 796	X	N
33299901	Aluminum foil packaging products, converted or rolls and sheets . . . . .	X	23 826	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	191 175	X	N
32610029	Plastics containers . . . . .	X	18 481	X	N
32721301	Glass containers . . . . .	X	530	X	N
33243101	Metal cans, can lids and ends . . . . .	X	9 281	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	217 329	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	298 479	X	N
<b>311340, NONCHOCOLATE CONFECTIONERY MFG</b>					
11100003	Nuts, in shell (including peanuts) . . . . . mil . . . . .	P.7	890	N	N
31191101	Nutmeats, including peanuts, processed . . . . . mil lb . . . . .	19.6	21 259	N	N
11100029	Nutmeats, raw . . . . . mil . . . . .	13.7	14 527	N	N
00190045	Fresh and dried fruits . . . . . mil lb . . . . .	P19.2	19 627	N	N
31150000	Milk and milk products . . . . .	X	32 894	X	N
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb . . . . .	P171.7	19 480	N	N
31122117	Crystalline fructose (dry fructose) . . . . . mil lb . . . . .	S	1 237	N	N
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb . . . . .	915.5	117 668	N	N
32510053	Sugar substitutes (mannitol, sorbitol, etc.) . . . . . 1,000 s tons . . . . .	39.5	63 597	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons . . . . .	676.3	287 175	N	N
31100021	Fats and oils, including shortening . . . . . mil lb . . . . .	42.8	21 237	N	N
31132005	Unsweetened chocolate (chocolate liquor) . . . . . 1,000 s tons . . . . .	3.6	7 382	N	N
31132007	Cocoa, pressed cake and powder . . . . . 1,000 s tons . . . . .	2.8	2 855	N	N
31132009	Cocoa butter . . . . . mil lb . . . . .	D	D	N	N
31134003	Chewing gum base including chicle . . . . .	X	D	X	N
32510063	Essential oils and flavors, synthetic . . . . .	X	110 673	X	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	196 083	X	N
33299901	Aluminum foil packaging products, converted or rolls and sheets . . . . .	X	30 492	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	150 897	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311340, NONCHOCOLATE CONFECTIONERY MFG—Con.</b>					
32610029	Plastics containers .....	X	24 924	X	N
32721301	Glass containers .....	X	9 789	X	N
33243101	Metal cans, can lids and ends .....	X	5 303	X	N
11115007	Popcorn, whole grain .....	—	—	N	N
31100019	Fats and oils, all types (purchased as such) .....	—	—	N	N
001900A3	Bags; plastics, foil, and coated paper .....	X	D	X	N
32222401	Bags; uncoated paper and multiwall .....	X	—	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	397 754	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	153 399	X	N
<b>311411, FROZEN FRUIT, JUICE, &amp; VEGETABLE MFG</b>					
32222401	Bags; uncoated paper and multiwall .....	X	3 055	X	N
11131000	Fresh oranges .....	P3 215.2	616 193	Q3 051.2	643 106
11133100	Fresh apples .....	270.8	63 619	279.9	65 579
11133300	Fresh strawberries .....	P152.4	97 177	117.1	80 135
11130005	Other fresh fruits .....	723.0	199 237	863.6	233 706
11121901	Fresh green peas .....	P166.5	40 750	188.5	47 622
11121100	White potatoes .....	5 793.5	597 673	6 631.9	646 272
11121905	Fresh sweet corn .....	1 027.3	76 985	896.9	62 831
11121903	Fresh green (snap) or wax beans .....	234.8	53 660	188.6	43 005
11100013	Other fresh vegetables .....	2 229.8	584 537	Q1 106.5	293 485
31141101	Frozen fruits (for further processing) .....	282.0	261 641	190.9	164 109
31141103	Frozen vegetables (for further processing) .....	626.9	267 862	Q491.3	194 465
31151303	Cheese, natural and process, including (imitation cheese and cheese substitutes) .....	25.2	39 420	17.3	26 111
31131003	Sugar, cane and beet (in terms of sugar solids) .....	55.0	27 349	63.2	30 485
31121101	Wheat flour .....	268.5	6 272	S	9 581
31100019	Fats and oils, all types (purchased as such) .....	582.6	173 611	P418.2	115 597
31142105	Tomato paste (24 percent NTSS equivalent) .....	D	D	.8	274
00190032	Poultry; live, fresh, frozen, or prepared .....	D	D	2.4	2 994
31161000	Meat; fresh, frozen, or prepared .....	D	D	2.6	3 045
33299901	Aluminum foil packaging products, converted or rolls and sheets .....	X	—	X	7 502
001900A1	Packaging paper and plastics film, coated and laminated .....	X	110 869	X	71 893
001900A3	Bags; plastics, foil, and coated paper .....	X	27 357	X	19 589
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	324 831	X	264 773
33243101	Metal cans, can lids and ends .....	X	66 417	X	105 203
00970099	All other materials and components, parts, containers, and supplies .....	X	505 564	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	282 200	X	D
<b>311412, FROZEN SPECIALTY FOOD MFG</b>					
32222401	Bags; uncoated paper and multiwall .....	X	17 412	X	N
11131000	Fresh oranges .....	—	—	D	D
11133100	Fresh apples .....	D	D	D	D
11133300	Fresh strawberries .....	—	—	N	N
11130005	Other fresh fruits .....	D	D	D	D
11121901	Fresh green peas .....	D	D	D	D
11121100	White potatoes .....	29.1	13 161	42.3	13 434
11121905	Fresh sweet corn .....	D	D	D	D
11121903	Fresh green (snap) or wax beans .....	—	—	N	N
11100013	Other fresh vegetables .....	869.3	235 363	1 081.5	237 748
31141101	Frozen fruits (for further processing) .....	35.3	29 343	36.0	23 511
31141103	Frozen vegetables (for further processing) .....	427.4	194 630	402.1	171 184
31151303	Cheese, natural and process, including (imitation cheese and cheese substitutes) .....	523.2	652 055	349.1	417 449
31131003	Sugar, cane and beet (in terms of sugar solids) .....	P48.5	25 483	32.5	18 927
31121101	Wheat flour .....	10 475.3	190 979	10 218.6	138 189
31100019	Fats and oils, all types (purchased as such) .....	284.1	106 261	259.0	76 734
31142105	Tomato paste (24 percent NTSS equivalent) .....	278.3	102 400	176.2	67 344
00190032	Poultry; live, fresh, frozen, or prepared .....	S	345 246	505.9	367 936
31161000	Meat; fresh, frozen, or prepared .....	637.1	651 146	438.3	527 231
33299901	Aluminum foil packaging products, converted or rolls and sheets .....	X	23 931	X	13 643
001900A1	Packaging paper and plastics film, coated and laminated .....	X	199 393	X	83 866
001900A3	Bags; plastics, foil, and coated paper .....	X	39 986	X	34 220
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	397 876	X	375 677
33243101	Metal cans, can lids and ends .....	X	6 271	X	9 094
00970099	All other materials and components, parts, containers, and supplies .....	X	919 387	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	232 488	X	D
<b>311421, FRUIT &amp; VEGETABLE CANNING</b>					
11131000	Fresh oranges .....	3 270.5	603 735	1 635.0	282 658
11133100	Fresh apples .....	P1 513.4	249 173	1 194.8	176 452
11133901	Fresh apricots .....	479.3	25 516	46.5	12 685
11133200	Fresh grapes .....	375.6	81 232	511.1	93 705
11133903	Fresh peaches .....	599.9	143 777	559.9	132 101
11133905	Fresh pears .....	466.4	102 158	428.2	95 660
11133907	Fresh pineapples .....	D	D	351.0	57 560
11132000	Fresh grapefruit .....	343.1	61 220	D	D
11130003	Other fresh fruits .....	391.2	220 120	385.7	186 868
11121901	Fresh green peas .....	237.7	61 498	303.4	79 887
11121100	White potatoes .....	163.3	19 293	118.7	14 689
11100013	Other fresh vegetables .....	P656.6	136 964	N	N
11121907	Fresh tomatoes .....	11 055.9	653 265	8 220.2	520 022
11121905	Fresh sweet corn .....	1 917.1	134 632	1 864.7	142 954
11121903	Fresh green (snap) or wax beans .....	P564.0	94 528	528.3	86 729
31131003	Sugar, cane and beet (in terms of sugar solids) .....	P166.8	75 734	N	N
31122103	High fructose corn syrup (HFCS)(in terms of solids) .....	890.1	125 530	870.7	119 550
31122117	Crystalline fructose (dry fructose) .....	83.7	12 370	77.5	11 750
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) .....	595.5	72 283	651.5	71 174
31161003	Fresh, frozen, and prepared meats .....	S	33 858	1 157.3	33 658

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311421, FRUIT &amp; VEGETABLE CANNING—Con.</b>					
31161500	Dressed poultry purchased for processing (cooking, smoking, canning, raw-boning, freezing, dehydrating) . . . . . mil lb. . . . .	D	D	D	D
31142311	Dried fruits and beans . . . . . 1,000 s tons. . . . .	28.0	23 133	N	N
31142103	Concentrated fruit juices . . . . . mil gal. . . . .	129.2	604 316	P140.6	635 126
31141105	Frozen fruits and vegetables (for further processing) . . . . . mil lb. . . . .	677.1	381 832	N	N
31142105	Tomato paste (24 percent NTSS equivalent) . . . . . mil lb. . . . .	654.5	221 026	567.6	229 154
31121101	Wheat flour . . . . . 1,000 cwt. . . . .	968.2	1 512	D	D
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb. . . . .	128.1	38 794	N	N
32310000	Printed labels . . . . . X	X	106 400	X	87 697
00190003	Flexible packaging materials . . . . . X	X	217 857	X	99 191
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . . X	X	329 451	X	N
33243101	Metal cans, can lids and ends . . . . . X	X	1 179 260	X	1 221 148
32721301	Glass containers . . . . . X	X	556 879	X	N
11121909	Cucumbers . . . . . 1,000 s tons. . . . .	751.6	223 078	N	N
001900A3	Bags; plastics, foil, and coated paper . . . . . X	X	11 604	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . . X	X	1 152 987	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . . X	X	393 122	X	N
<b>311422, SPECIALTY CANNING</b>					
11131000	Fresh oranges . . . . . 1,000 s tons. . . . .	—	—	N	N
11133100	Fresh apples . . . . . 1,000 s tons. . . . .	83.6	15 095	N	N
11133901	Fresh apricots . . . . . 1,000 s tons. . . . .	—	—	N	N
11133200	Fresh grapes . . . . . 1,000 s tons. . . . .	—	—	N	N
11133903	Fresh peaches . . . . . 1,000 s tons. . . . .	D	D	N	N
11133905	Fresh pears . . . . . 1,000 s tons. . . . .	13.7	3 148	N	N
11133907	Fresh pineapples . . . . . 1,000 s tons. . . . .	—	—	N	N
11132000	Fresh grapefruit . . . . . 1,000 s tons. . . . .	—	—	N	N
11130003	Other fresh fruits . . . . . 1,000 s tons. . . . .	D	D	N	N
11121901	Fresh green peas . . . . . 1,000 s tons. . . . .	11.9	5 075	N	N
11121100	White potatoes . . . . . 1,000 s tons. . . . .	115.9	17 130	N	N
11100001	Other fresh vegetables . . . . . 1,000 s tons. . . . .	366.1	119 087	N	N
11121907	Fresh tomatoes . . . . . 1,000 s tons. . . . .	119.0	25 098	N	N
11121905	Fresh sweet corn . . . . . 1,000 s tons. . . . .	D	D	N	N
11121903	Fresh green (snap) or wax beans . . . . . 1,000 s tons. . . . .	38.3	8 535	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . P31.9	17 344	N	N	N
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb. . . . .	115.0	14 814	N	N
31122117	Crystalline fructose (dry fructose) . . . . . mil lb. . . . .	D	D	N	N
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb. . . . .	90.2	15 048	N	N
31161003	Fresh, frozen, and prepared meats . . . . . mil lb. . . . .	153.2	185 912	N	N
31161500	Dressed poultry purchased for processing (cooking, smoking, canning, raw-boning, freezing, dehydrating) . . . . . mil lb. . . . .	84.2	128 002	N	N
31142311	Dried fruits and beans . . . . . 1,000 s tons. . . . .	212.0	119 881	N	N
31142103	Concentrated fruit juices . . . . . mil gal. . . . .	D	D	N	N
31141105	Frozen fruits and vegetables (for further processing) . . . . . mil lb. . . . .	167.6	68 729	N	N
31142105	Tomato paste (24 percent NTSS equivalent) . . . . . mil lb. . . . .	338.7	139 781	N	N
31121101	Wheat flour . . . . . 1,000 cwt. . . . .	3 617.8	25 881	N	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb. . . . .	102.4	35 014	N	N
32310000	Printed labels . . . . . X	X	65 827	X	N
00190003	Flexible packaging materials . . . . . X	X	41 000	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . . X	X	114 759	X	N
33243101	Metal cans, can lids and ends . . . . . X	X	571 261	X	N
32721301	Glass containers . . . . . X	X	175 658	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . . X	X	496 435	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . . X	X	134 496	X	N
<b>311423, DRIED &amp; DEHYDRATED FOOD MFG</b>					
31121113	Other wheat flour (including farina) . . . . . 1,000 cwt. . . . .	1 317.0	20 934	N	N
31121107	Semolina and durum wheat flour . . . . . 1,000 cwt. . . . .	D	D	N	N
32721301	Glass containers . . . . . X	X	D	X	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb. . . . .	108.4	26 962	N	N
11121909	Cucumbers . . . . . 1,000 s tons. . . . .	D	D	N	N
11100011	Other fresh vegetables . . . . . 1,000 s tons. . . . .	8 195.6	303 143	N	N
11130001	Fresh fruits . . . . . 1,000 s tons. . . . .	247.5	54 406	N	N
31142301	Dried fruits . . . . . 1,000 s tons. . . . .	337.1	349 377	N	N
31122101	Corn syrup . . . . . mil lb. . . . .	D	D	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons. . . . .	14.5	7 301	N	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . . X	X	81 822	X	N
001900A3	Bags; plastics, foil, and coated paper . . . . . X	X	25 215	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . . X	X	64 905	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . . X	X	444 107	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . . X	X	74 883	X	N
<b>311511, FLUID MILK MFG</b>					
11212000	Whole milk . . . . . mil cwt. . . . .	P622.1	8 790 146	631.6	9 263 061
31151101	Fluid skim milk . . . . . mil cwt. . . . .	952.4	642 487	P14.4	220 159
31151103	Cream . . . . . mil cwt. . . . .	96.4	390 102	4.7	265 794
31151200	Butter . . . . . mil lb. . . . .	S	10 302	S	24 580
31151401	Condensed and evaporated milk . . . . . mil lb. . . . .	9177.6	90 553	215.4	80 873
31151407	Dry milk . . . . . mil lb. . . . .	P149.3	153 852	P143.2	115 812
31151301	Natural cheese, other than cottage cheese . . . . . mil lb. . . . .	5.9	8 661	P10.1	11 480
31152001	Ice cream mix (excluding lowfat and nonfat) . . . . . mil gal. . . . .	P16.2	40 123	P20.0	46 358
31152003	Sherbet mix . . . . . mil gal. . . . .	7	1 035	3.5	5 468
31152005	Ice cream mix, lowfat . . . . . mil gal. . . . .	11.4	21 836	P5.5	10 796
31152007	Yogurt mix . . . . . mil gal. . . . .	S	10 930	P2.1	5 347
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb. . . . .	960.4	20 024	P70.1	25 057
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb. . . . .	P908.1	103 406	P737.6	88 061
31122117	Crystalline fructose (dry fructose) . . . . . mil lb. . . . .	17.0	4 073	P18.7	3 216
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb. . . . .	P136.0	23 785	P153.7	21 275
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons. . . . .	9194.9	73 916	185.7	68 479
31151403	Whey, liquid, concentrated, dried; and modified whey products . . . . . mil lb. . . . .	P244.0	64 544	P105.2	39 982
00190035	Casein and caseinates . . . . . mil lb. . . . .	S	D	S	7 189
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) . . . . . mil lb. . . . .	961.8	54 636	P73.1	54 971
00190036	Flavorings (natural, imitation, etc.), except chocolate . . . . . X	X	334 655	X	272 849



**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311511, FLUID MILK MFG—Con.</b>					
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb. . . . .	P466.4	195 813	P514.3	176 804
001900A1	Packaging paper and plastics film, coated and laminated. . . . .	X	247 045	X	139 881
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	24 757	X	23 247
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	49 192	X	27 021
32721301	Glass containers . . . . .	X	2 974	X	4 146
32610029	Plastics containers . . . . .	X	393 716	X	337 320
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	495 779	X	504 283
33243101	Metal cans, can lids and ends . . . . .	X	17 761	X	22 221
31152009	Ice cream mix, nonfat . . . . . mil gal. . . . .	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	762 897	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	656 052	X	D
<b>311512, CREAMERY BUTTER MFG</b>					
11212000	Whole milk . . . . . mil cwt. . . . .	S	207 621	7.3	87 885
31151103	Cream . . . . . mil cwt. . . . .	S	630 598	S	571 824
31151200	Butter . . . . . mil lb. . . . .	q110.2	127 855	56.9	45 052
31151401	Condensed and evaporated milk . . . . . mil lb. . . . .	D	D	S	1 416
001900A1	Packaging paper and plastics film, coated and laminated. . . . .	X	16 689	X	6 229
32610029	Plastics containers . . . . .	X	D	X	5 015
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	17 150	X	13 029
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	71 578	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	6 379	X	5 372
<b>311513, CHEESE MFG</b>					
11212000	Whole milk . . . . . mil cwt. . . . .	q599.5	8 200 658	P505.9	6 489 880
31151101	Fluid skim milk . . . . . mil cwt. . . . .	S	79 656	2.1	38 739
31151103	Cream . . . . . mil cwt. . . . .	q12.7	352 642	S	89 517
31151200	Butter . . . . . mil lb. . . . .	S	43 506	7.3	8 071
31151401	Condensed and evaporated milk . . . . . mil lb. . . . .	S	62 619	P141.6	75 231
31151407	Dry milk . . . . . mil lb. . . . .	289.7	334 242	121.8	112 148
31151301	Natural cheese, other than cottage cheese . . . . . mil lb. . . . .	P2 698.0	3 862 226	2 347.9	3 080 411
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb. . . . .	S	84 931	61.7	30 099
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb. . . . .	24.3	3 646	D	D
31122117	Crystalline fructose (dry fructose) . . . . . mil lb. . . . .	D	D	D	D
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb. . . . .	P4.9	1 233	D	D
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons. . . . .	15.6	4 707	q10.5	3 776
31151403	Whey, liquid, concentrated, dried; and modified whey products . . . . . mil lb. . . . .	q579.6	148 594	P387.1	80 470
00190035	Casein and caseinates . . . . . mil lb. . . . .	P59.5	136 576	59.1	118 468
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) . . . . . mil lb. . . . .	D	D	1.6	1 156
00190036	Flavorings (natural, imitation, etc.), except chocolate . . . . .	X	142 866	X	82 262
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb. . . . .	D	D	1.3	430
001900A1	Packaging paper and plastics film, coated and laminated. . . . .	X	178 023	X	115 858
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	95 167	X	37 722
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	19 771	X	17 227
32721301	Glass containers . . . . .	X	19 642	X	D
32610029	Plastics containers . . . . .	X	71 701	X	26 965
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	207 287	X	138 884
33243101	Metal cans, can lids and ends . . . . .	X	31 825	X	42 114
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	581 829	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	287 056	X	861 372
<b>311514, DRY, CONDENSED, &amp; EVAPORATED DAIRY PRODUCT MFG</b>					
11212000	Whole milk . . . . . mil cwt. . . . .	148.2	1 982 391	129.2	1 559 042
31151101	Fluid skim milk . . . . . mil cwt. . . . .	S	17 992	S	85 846
31151103	Cream . . . . . mil cwt. . . . .	q3.0	141 379	2.6	115 995
31151200	Butter . . . . . mil lb. . . . .	S	98 523	D	D
31151401	Condensed and evaporated milk . . . . . mil lb. . . . .	P220.0	144 889	P313.3	125 833
31151407	Dry milk . . . . . mil lb. . . . .	324.5	278 401	283.7	236 419
31151301	Natural cheese, other than cottage cheese . . . . . mil lb. . . . .	221.6	107 353	P79.6	46 144
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb. . . . .	q243.5	90 857	P235.4	78 472
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb. . . . .	q309.8	43 822	q113.4	13 828
31122117	Crystalline fructose (dry fructose) . . . . . mil lb. . . . .	P29.0	8 069	6.6	1 646
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb. . . . .	P268.2	43 011	208.6	31 277
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons. . . . .	179.9	89 660	153.4	71 392
31151403	Whey, liquid, concentrated, dried; and modified whey products . . . . . mil lb. . . . .	1 404.0	113 898	P1 095.5	133 737
00190035	Casein and caseinates . . . . . mil lb. . . . .	P125.1	244 355	95.9	150 440
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) . . . . . mil lb. . . . .	24.6	16 500	26.9	17 355
00190036	Flavorings (natural, imitation, etc.), except chocolate . . . . .	X	57 953	X	54 970
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb. . . . .	q14.0	7 189	D	D
001900A1	Packaging paper and plastics film, coated and laminated. . . . .	X	58 473	X	30 131
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	36 090	X	24 641
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	18 511	X	11 599
32721301	Glass containers . . . . .	X	24 675	X	23 293
32610029	Plastics containers . . . . .	X	41 396	X	30 025
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	90 163	X	87 832
33243101	Metal cans, can lids and ends . . . . .	X	172 190	X	X
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	676 088	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	158 646	X	D

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311520, ICE CREAM &amp; FROZEN DESSERT MFG</b>					
11212000	Whole milk . . . . . mil cwt..	917.6	248 770	P22.1	294 985
31151101	Fluid skim milk . . . . . mil cwt..	S	61 389	S	59 817
31151103	Cream . . . . . mil cwt..	99.4	434 730	5.3	321 135
31151200	Butter . . . . . mil lb..	S	7 924	1.9	1 718
31151401	Condensed and evaporated milk . . . . . mil lb..	174.1	132 673	261.8	123 863
31151407	Dry milk . . . . . mil lb..	S	64 246	85.4	57 676
31152001	Ice cream mix (excluding lowfat and nonfat) . . . . . mil gal..	937.8	107 222	47.5	123 592
31152003	Sherbet mix . . . . . mil gal..	S	18 758	3.9	8 139
31152005	Ice cream mix, lowfat . . . . . mil gal..	S	7 486	5.1	13 931
31152007	Yogurt mix . . . . . mil gal..	S	13 182	P4.1	9 176
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	D	D	6.3	3 207
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb..	295.6	37 547	P284.4	46 174
31122117	Crystalline fructose (dry fructose) . . . . . mil lb..	D	D	1.9	251
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb..	330.9	47 182	P269.1	32 842
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	P248.5	113 403	236.5	91 964
31151403	Whey, liquid, concentrated, dried; and modified whey products . . . . . mil lb..	S	13 675	971.0	20 365
00190035	Casein and caseinates . . . . . mil lb..	S	1 943	.8	817
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) . . . . . mil lb..	P120.3	101 650	108.0	95 138
00190036	Flavorings (natural, imitation, etc.), except chocolate . . . . . mil lb..	X	268 908	X	284 629
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb..	76.6	24 773	P62.6	16 146
001900A1	Packaging paper and plastics film, coated and laminated . . . . . mil lb..	X	153 920	X	69 943
001900A3	Bags; plastics, foil, and coated paper . . . . . mil lb..	X	12 767	X	30 306
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . . mil lb..	X	4 454	X	6 589
32610029	Plastics containers . . . . . mil lb..	X	33 493	X	32 271
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . . mil lb..	X	342 526	X	338 507
31152009	Ice cream mix, nonfat . . . . . mil gal..	1.8	4 994	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . . mil lb..	X	267 707	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . . mil lb..	X	284 564	X	222 700
<b>311611, ANIMAL (EXCEPT POULTRY) SLAUGHTERING</b>					
11211003	Cattle slaughtered (number of head) . . . . . 1,000..	30 290.5	22 722 567	31 068.3	25 650 825
11211001	Cattle slaughtered (live weight) . . . . . mil lb..	60 963.5	S	35 747.9	X
11211007	Calves slaughtered (number of head) . . . . . 1,000..	900.3	360 461	578.1	243 797
11211005	Calves slaughtered (live weight) . . . . . mil lb..	287.3	X	174.5	X
11221003	Hogs slaughtered (number of head) . . . . . 1,000..	978 804.5	10 557 429	86 308.4	9 676 967
11221001	Hogs slaughtered (live weight) . . . . . mil lb..	D	D	21 511.9	X
11241005	Sheep and lambs slaughtered (number of head) . . . . . 1,000..	1 504.1	182 409	3 568.5	288 796
11241003	Sheep and lambs slaughtered (live weight) . . . . . mil lb..	D	D	9549.2	X
31161107	Fresh and frozen beef . . . . . mil lb..	1 851.1	1 524 582	585.3	481 527
31161109	Fresh and frozen veal . . . . . mil lb..	S	41 142	917.2	15 626
31161113	Fresh and frozen pork . . . . . mil lb..	9667.0	584 868	P701.7	433 381
31161111	Other fresh and frozen red meats . . . . . mil lb..	S	109 432	31.8	27 102
31161101	Meat materials for sausage and canning not separable by species . . . . . mil lb..	P86.5	42 443	42.7	17 442
31161117	Processed pork (cured, smoked, etc.) . . . . . mil lb..	S	9 701	34.0	28 926
31161103	Other purchased meat materials (cured beef, cured lamb, etc.) . . . . . mil lb..	D	D	20.9	24 791
00190032	Poultry; live, fresh, frozen, or prepared . . . . . mil lb..	X	D	X	57 129
31161119	Hides, skins, and pelts . . . . . mil lb..	X	D	X	22 991
31194201	Spices and curing materials . . . . . mil lb..	X	123 672	X	69 743
31161200	Animal and collagen casings . . . . . mil lb..	X	15 883	X	23 226
001900A1	Packaging paper and plastics film, coated and laminated . . . . . mil lb..	X	784 422	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . . mil lb..	X	420 026	X	N
32610023	Synthetic casings, including cellulosic and fibrous reinforced . . . . . mil lb..	X	177 164	X	48 980
00970099	All other materials and components, parts, containers, and supplies . . . . . mil lb..	X	1 395 844	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . . mil lb..	X	2 182 914	X	N
<b>311612, MEAT PROCESSED FROM CARCASSES</b>					
11211001	Cattle slaughtered (live weight) . . . . . mil lb..	D	D	N	N
11211005	Calves slaughtered (live weight) . . . . . mil lb..	3 011.9	X	N	N
11211003	Cattle slaughtered (number of head) . . . . . 1,000..	5.2	1 356	N	N
11241005	Sheep and lambs slaughtered (number of head) . . . . . 1,000..	D	X	N	N
11241003	Sheep and lambs slaughtered (live weight) . . . . . mil lb..	180.5	X	N	N
11221003	Hogs slaughtered (number of head) . . . . . 1,000..	266.7	29 536	N	N
11221001	Hogs slaughtered (live weight) . . . . . mil lb..	51 537.8	X	N	N
11211007	Calves slaughtered (number of head) . . . . . 1,000..	D	D	N	N
31161107	Fresh and frozen beef . . . . . mil lb..	4 183.0	4 430 259	N	N
31161109	Fresh and frozen veal . . . . . mil lb..	929.1	54 293	N	N
31161113	Fresh and frozen pork . . . . . mil lb..	P4 433.2	3 922 321	N	N
31161111	Other fresh and frozen red meats . . . . . mil lb..	144.0	145 615	N	N
31161101	Meat materials for sausage and canning not separable by species . . . . . mil lb..	147.4	333 141	N	N
31161117	Processed pork (cured, smoked, etc.) . . . . . mil lb..	313.0	366 003	N	N
31161103	Other purchased meat materials (cured beef, cured lamb, etc.) . . . . . mil lb..	96.0	116 692	N	N
00190032	Poultry; live, fresh, frozen, or prepared . . . . . mil lb..	X	557 482	X	N
31194201	Spices and curing materials . . . . . mil lb..	X	435 159	X	N
31161119	Hides, skins, and pelts . . . . . mil lb..	X	D	X	N
31161200	Animal and collagen casings . . . . . mil lb..	X	88 157	X	N
32610023	Synthetic casings, including cellulosic and fibrous reinforced . . . . . mil lb..	X	201 849	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . . mil lb..	X	307 916	X	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . . mil lb..	X	349 124	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . . mil lb..	X	514 753	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . . mil lb..	X	2 292 861	X	N
<b>311613, RENDERING &amp; MEAT BYPRODUCT PROCESSING</b>					
31122123	Crude corn oil . . . . . mil lb..	D	D	N	N
31161115	Lard . . . . . mil lb..	D	D	N	N
31122303	Once-refined cottonseed oil . . . . . mil lb..	D	D	N	N
31122203	Once-refined soybean oil . . . . . mil lb..	D	D	N	N
31122201	Crude soybean oil . . . . . mil lb..	D	D	N	N
31122309	Other crude oil . . . . . mil lb..	D	D	N	N
31122005	Other fully-refined oil . . . . . mil lb..	D	D	N	N
31122003	Fully-refined soybean oil . . . . . mil lb..	D	D	N	N
31161105	Tallow and stearin, edible . . . . . mil lb..	D	D	N	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . . mil lb..	X	1 397	X	N
32610029	Plastics containers . . . . . mil lb..	X	D	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311613, RENDERING &amp; MEAT BYPRODUCT PROCESSING—Con.</b>					
33240000	Metal containers .....	X	1 287	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	761 467	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	247 013	X	N
<b>311615, POULTRY PROCESSING</b>					
11232001	Young chickens slaughtered (including commercial broilers) .....	mil lb..	P27 436.0	9 035 445	N
11232003	Hens (or fowl) and other chickens slaughtered .....	mil lb..	Q1 394.8	188 263	N
11233000	Turkeys slaughtered .....	mil lb..	5 829.3	2 541 364	N
11239000	Other poultry and small game slaughtered (including ducks, geese, rabbits, etc.) .....	X	17 523	X	N
31161500	Dressed poultry purchased for processing (cooking, smoking, canning, raw-boning, freezing, dehydrating) .....	mil lb..	7 114.5	3 361 556	N
11231005	Shell eggs .....	1,000 cases (30 doz) ..	S	12 614	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	493 445	X	N
001900A1	Packaging paper and plastics film, coated and laminated .....	X	237 995	X	N
001900A3	Bags; plastics, foil, and coated paper .....	X	131 639	X	N
33243101	Metal cans, can lids and ends .....	X	20 424	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	1 777 032	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	792 783	X	N
<b>311711, SEAFOOD CANNING</b>					
11411101	Alaska pollack .....	1,000 s tons..	-	N	N
11411103	Tuna .....	1,000 s tons..	D	D	D
11411105	Salmon .....	1,000 s tons..	75.5	108 431	P119.1
11411107	Sardines .....	1,000 s tons..	D	D	P31.4
11411109	Ground fish (cod, cusk, haddock, hake, Atlantic Ocean perch, Atlantic pollock, and whiting) .....	1,000 s tons..	S	3 291	8.4
11411111	Flounder .....	X	-	X	4 925
11411113	Other fin fish .....	X	34 822	X	D
11411201	Shrimp .....	X	30 124	X	43 480
11411203	Crabs .....	X	535	X	D
11411205	Oysters .....	X	D	X	56
11411207	Clams .....	X	43 411	X	D
11411209	Other shellfish .....	X	D	X	45 387
31171201	Surimi .....	1,000 s tons..	D	N	D
31171203	Frozen fish blocks .....	1,000 s tons..	D	N	N
31100019	Fats and oils, all types (purchased as such) .....	mil lb..	S	6 834	3.4
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	10 171	X	23 331
001900A1	Packaging paper and plastics film, coated and laminated .....	X	4 863	X	S
33243101	Metal cans, can lids and ends .....	X	56 324	X	7 521
00970099	All other materials and components, parts, containers, and supplies .....	X	29 986	X	9 498
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	60 908	X	X
<b>311712, FRESH &amp; FROZEN SEAFOOD PROCESSING</b>					
11411101	Alaska pollack .....	1,000 s tons..	176.8	257 849	79.0
11411103	Tuna .....	1,000 s tons..	9.0	33 395	P3.5
11411105	Salmon .....	1,000 s tons..	P135.2	256 797	241.2
11411107	Sardines .....	1,000 s tons..	D	D	D
11411109	Ground fish (cod, cusk, haddock, hake, Atlantic Ocean perch, Atlantic pollock, and whiting) .....	1,000 s tons..	P220.7	238 225	223.5
11411111	Flounder .....	X	22 883	X	280 551
11411113	Other fin fish .....	X	339 837	X	28 191
11411201	Shrimp .....	X	586 306	X	377 413
11411203	Crabs .....	X	207 482	X	568 950
11411205	Oysters .....	X	27 849	X	280 064
11411207	Clams .....	X	46 618	X	34 711
11411209	Other shellfish .....	X	58 749	X	32 097
31171201	Surimi .....	1,000 s tons..	Q34.9	80 114	X
31171203	Frozen fish blocks .....	1,000 s tons..	P81.3	163 409	X
31100019	Fats and oils, all types (purchased as such) .....	mil lb..	D	D	131 529
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	101 167	X	105 820
001900A1	Packaging paper and plastics film, coated and laminated .....	X	36 834	X	241.6
33243101	Metal cans, can lids and ends .....	X	12 654	X	D
00970099	All other materials and components, parts, containers, and supplies .....	X	320 607	X	570 763
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	579 944	X	D
<b>311812, COMMERCIAL BAKERIES</b>					
31121111	White bread-type wheat flour (except prepared mixes) .....	mil lb..	P9 655.9	1 271 950	N
31121109	Cake-type wheat flour (except prepared mixes) .....	mil lb..	548.1	77 386	N
31121103	Cookie and cracker-type wheat flour (except prepared mixes) .....	mil lb..	P182.2	26 232	N
31122121	Wheat gluten .....	mil lb..	333.9	102 791	N
31121105	Other wheat flour, including whole wheat, and clear flour (except prepared mixes) .....	mil lb..	P776.4	118 932	N
31100005	Prepared doughnut mixes, cake and yeast types .....	mil lb..	P235.7	81 866	N
31100007	Prepared bread mixes, including franchise mixes .....	mil lb..	P93.5	40 337	N
31100009	Prepared cake mixes .....	mil lb..	P65.3	24 615	N
31100011	Other prepared mixes, including sweetgoods .....	mil lb..	P29.9	37 444	N
31131001	Sugar, cane and beet (in terms of sugar solids) .....	1,000 s tons..	608.3	239 283	N
31122111	Glucose syrup (corn syrup), conventional or regular (in terms of solids) .....	mil lb..	318.7	49 634	N
31122103	High fructose corn syrup (HFCS)(in terms of solids) .....	mil lb..	761.6	106 091	N
31100003	Other natural sweeteners, including dextrose, honey, molasses, blends of corn sweeteners and sugar (in terms of solids) .....	mil lb..	250.8	70 623	N
32510057	Artificial sweeteners (in terms of solids) .....	mil lb..	P3.8	2 015	N
31120011	100 percent vegetable shortening .....	mil lb..	684.2	199 446	N
31100023	Animal and blends of animal and vegetable shortening .....	mil lb..	69.6	22 527	N
31161115	Lard .....	mil lb..	P6.8	2 567	N
31100025	Other fats and oils (cooking oils, butter, margarine, puff paste, etc.) .....	mil lb..	269.7	108 827	N
31199903	Compressed yeast .....	mil lb..	331.9	99 726	N
31199905	Active dry yeast .....	mil lb..	Q114.0	43 220	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311812, COMMERCIAL BAKERIES—Con.</b>					
31141107	Frozen fruits .....	72.7	54 149	N	N
31142305	Dried fruits and nuts, including raisins .....	.5	104 406	N	N
31134001	Glace, candied and crystallized fruits, fruit peel, nuts, and other vegetable substances .....				
31142101	Jams, jellies and preserves, including fruit butter and maraschino cherries .....	11.8	10 191	N	N
31199901	Liquid, dried, and frozen eggs (in terms of dry weight equivalent) .....	39.2	25 859	N	N
31151305	Cheese, process .....	89.3	77 916	N	N
31151405	Milk and milk replacers, including dry milk, dry whey, blends, soy whey, and others .....	34.6	26 152	N	N
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) .....	83.9	53 078	N	N
33299901	Aluminum foil packaging products, converted or rolls and sheets .....	100.5	51 032	X	N
001900A1	Packaging paper and plastics film, coated and laminated .....	X	27 679	X	N
001900A3	Bags; plastics, foil, and coated paper .....	X	166 102	X	N
32222401	Bags; uncoated paper and multiwall .....	X	275 143	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	32 293	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	259 414	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	875 017	X	N
			795 908	X	N
<b>311813, FROZEN CAKES, PIES, &amp; OTHER PASTRIES MFG</b>					
31121111	White bread-type wheat flour (except prepared mixes) .....	239.3	31 142	q187.9	20 837
31121109	Cake-type wheat flour (except prepared mixes) .....	105.4	16 779	q79.3	8 790
31121103	Cookie and cracker-type wheat flour (except prepared mixes) .....	21.4	4 093	q8.5	1 088
31122121	Wheat gluten .....	8.1	1 507	1.1	616
31121105	Other wheat flour, including whole wheat, and clear flour (except prepared mixes) .....	117.2	14 030	96.1	10 193
31100005	Prepared doughnut mixes, cake and yeast types .....	54.2	23 073	37.8	11 740
31100007	Prepared bread mixes, including franchise mixes .....	1	84	D	D
31100009	Prepared cake mixes .....	25.1	11 304	P11.8	5 062
31100011	Other prepared mixes, including sweetgoods .....	28.2	12 205	S	4 234
31131001	Sugar, cane and beet (in terms of sugar solids) .....	S	55 231	p77.7	46 848
31122111	Glucose syrup (corn syrup), conventional or regular (in terms of solids) .....	22.1	3 532	39.8	5 326
31122103	High fructose corn syrup (HFCS)(in terms of solids) .....	42.3	6 877	p30.1	4 124
31100003	Other natural sweeteners, including dextrose, honey, molasses, blends of corn sweeteners and sugar (in terms of solids) .....	44.2	9 364	12.0	3 419
32510057	Artificial sweeteners (in terms of solids) .....	.2	710	D	D
31120011	100 percent vegetable shortening .....	140.6	43 732	P102.5	35 130
31100023	Animal and blends of animal and vegetable shortening .....	6.4	2 382	5.2	1 563
31161115	Lard .....	5.4	1 804	12.0	2 670
31100025	Other fats and oils (cooking oils, butter, margarine, puff paste, etc.) .....	57.6	28 291	48.5	18 149
31199903	Compressed yeast .....	6.8	3 747	9.7	5 206
31199905	Active dry yeast .....	1.0	1 806	2.8	1 185
31141107	Frozen fruits .....	178.8	97 691	p132.4	75 692
31142305	Dried fruits and nuts, including raisins .....	S	28 009	p119.3	20 344
31134001	Glace, candied and crystallized fruits, fruit peel, nuts, and other vegetable substances .....	D	D	D	D
31142101	Jams, jellies and preserves, including fruit butter and maraschino cherries .....	S	4 385	7.1	4 356
31199901	Liquid, dried, and frozen eggs (in terms of dry weight equivalent) .....	S	40 504	p39.9	21 973
31151305	Cheese, process .....	31.8	34 768	p19.4	17 308
31151405	Milk and milk replacers, including dry milk, dry whey, blends, soy whey, and others .....	S	28 896	34.4	18 703
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) .....	106.5	20 057	q10.8	10 338
33299901	Aluminum foil packaging products, converted or rolls and sheets .....	X	39 045	X	34 766
001900A1	Packaging paper and plastics film, coated and laminated .....	X	32 857	X	17 134
001900A3	Bags; plastics, foil, and coated paper .....	X	10 035	X	4 219
32222401	Bags; uncoated paper and multiwall .....	X	D	X	318
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	115 625	X	72 766
00970099	All other materials and components, parts, containers, and supplies .....	X	214 443	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	92 996	X	D
<b>311821, COOKIE &amp; CRACKER MFG</b>					
31121111	White bread-type wheat flour (except prepared mixes) .....	368.9	43 055	N	N
31121109	Cake-type wheat flour (except prepared mixes) .....	134.6	16 214	N	N
31121103	Cookie and cracker-type wheat flour (except prepared mixes) .....	3 014.7	334 072	N	N
31122121	Wheat gluten .....	1.8	1 438	N	N
31121105	Other wheat flour, including whole wheat, and clear flour (except prepared mixes) .....	250.8	31 397	N	N
31100005	Prepared doughnut mixes, cake and yeast types .....	D	D	N	N
31100007	Prepared bread mixes, including franchise mixes .....	S	3 006	N	N
31100009	Prepared cake mixes .....	D	D	N	N
31100011	Other prepared mixes, including sweetgoods .....	S	15 487	N	N
31131001	Sugar, cane and beet (in terms of sugar solids) .....	540.0	242 903	N	N
31122111	Glucose syrup (corn syrup), conventional or regular (in terms of solids) .....	q116.9	14 002	N	N
31122103	High fructose corn syrup (HFCS)(in terms of solids) .....	S	18 756	N	N
31100003	Other natural sweeteners, including dextrose, honey, molasses, blends of corn sweeteners and sugar (in terms of solids) .....	P156.4	43 018	N	N
32510057	Artificial sweeteners (in terms of solids) .....	S	5 611	N	N
31120011	100 percent vegetable shortening .....	540.4	173 729	N	N
31100023	Animal and blends of animal and vegetable shortening .....	S	13 783	N	N
31161115	Lard .....	p3.2	968	N	N
31100025	Other fats and oils (cooking oils, butter, margarine, puff paste, etc.) .....	P209.5	80 686	N	N
31199903	Compressed yeast .....	9.5	5 001	N	N
31199905	Active dry yeast .....	p1.9	2 848	N	N
31141107	Frozen fruits .....	D	D	N	N
31142305	Dried fruits and nuts, including raisins .....	p.5	75 594	N	N
31134001	Glace, candied and crystallized fruits, fruit peel, nuts, and other vegetable substances .....	3.7	3 731	N	N
31142101	Jams, jellies and preserves, including fruit butter and maraschino cherries .....	S	69 489	N	N
31199901	Liquid, dried, and frozen eggs (in terms of dry weight equivalent) .....	q13.7	17 812	N	N
31151305	Cheese, process .....	45.1	81 403	N	N
31151405	Milk and milk replacers, including dry milk, dry whey, blends, soy whey, and others .....	p19.7	12 368	N	N
31132001	Chocolate (compounds, cocoa, chocolate liquor, coatings, chocolate flavoring, etc.) .....	178.1	141 079	N	N
33299901	Aluminum foil packaging products, converted or rolls and sheets .....	X	13 283	X	N
001900A1	Packaging paper and plastics film, coated and laminated .....	X	249 111	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311821, COOKIE &amp; CRACKER MFG—Con.</b>					
001900A3	Bags; plastics, foil, and coated paper	X	47 499	X	N
32222401	Bags; uncoated paper and multiwall	X	3 539	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	358 298	X	N
00970099	All other materials and components, parts, containers, and supplies	X	383 394	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	179 768	X	N
<b>311822, FLOUR MIXES &amp; DOUGH MFG FROM PURCHASED FLOUR</b>					
11114003	Wheat . . . . . mil bushels..	S	37 667	D	D
11119913	Oats . . . . . mil bushels..	S	57	S	459
11115003	Corn . . . . . mil bushels..	D	D	N	N
11119911	Barley . . . . . mil bushels..	D	D	N	N
11116000	Rice, rough . . . . . mil lb..	D	D	N	N
11110003	Other grains . . . . . mil bushels..	D	D	D	D
31121119	Corn grits . . . . . mil lb..	D	D	D	D
31121121	Corn meal and flakes . . . . . mil lb..	S	10 149	13.8	1 267
31121101	Wheat flour . . . . . mil lb..	19 536.7	418 843	20 397.8	465 050
31121133	Flour, other than wheat . . . . . mil lb..	P2 262.4	276 575	2 400.5	245 393
31121131	Prepared four mixes . . . . . mil lb..	S	8 748	1 400.6	11 847
31131005	White sugar, cane and beet, in terms of sugar solids . . . . . 1,000 s tons..	479.0	269 424	263.0	130 177
31131009	Brown sugar, cane and beet, in terms of sugar solids . . . . . 1,000 s tons..	S	3 537	6.0	2 632
31100015	Fats and oils . . . . . mil lb..	372.2	146 033	315.6	103 901
31142307	Raisins . . . . . 1,000 cwt..	S	3 519	S	4 316
31142313	Dried fruits except raisins . . . . . 1,000 cwt..	S	6 953	D	D
31191103	Nut meats, dried or dehydrated . . . . . 1,000 cwt..	S	5 799	D	D
11100031	Nuts and nut meats, raw . . . . . 1,000 cwt..	927.2	8 214	14.3	2 457
001900A1	Packaging paper and plastics film, coated and laminated	X	101 625	X	43 978
001900A3	Bags; plastics, foil, and coated paper	X	19 504	X	5 875
32222401	Bags; uncoated paper and multiwall	X	14 608	X	12 515
32221001	Paperboard containers, boxes, and corrugated paperboard	X	224 944	X	179 399
00970099	All other materials and components, parts, containers, and supplies	X	453 246	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	266 160	X	D
<b>311823, DRY PASTA MFG</b>					
31121107	Semolina and durum wheat flour . . . . . 1,000 cwt..	20 391.0	294 045	18 205.1	257 872
31121113	Other wheat flour (including farina) . . . . . 1,000 cwt..	431.5	5 069	458.1	5 161
001900A1	Packaging paper and plastics film, coated and laminated	X	43 612	X	31 384
001900A3	Bags; plastics, foil, and coated paper	X	12 391	X	2 575
32221001	Paperboard containers, boxes, and corrugated paperboard	X	62 230	X	75 927
00970099	All other materials and components, parts, containers, and supplies	X	147 406	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	90 007	X	26 369
<b>311830, TORTILLA MFG</b>					
11115001	Field corn, whole grain . . . . . 1,000 s tons..	9128.6	23 712	N	N
31121127	Corn flour . . . . . mil lb..	P795.4	107 839	N	N
31121101	Wheat flour . . . . . 1,000 cwt..	P9 346.3	118 236	N	N
11100027	Spices, raw . . . . . mil lb..	1.4	357	N	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	P53.8	21 036	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	20 659	X	N
001900A1	Packaging paper and plastics film, coated and laminated	X	14 321	X	N
001900A3	Bags; plastics, foil, and coated paper	X	34 517	X	N
32222401	Bags; uncoated paper and multiwall	X	557	X	N
00970099	All other materials and components, parts, containers, and supplies	X	31 553	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	50 340	X	N
<b>311911, ROASTED NUTS &amp; PEANUT BUTTER MFG</b>					
11100003	Nuts, in shell (including peanuts) . . . . . mil lb..	P842.2	433 388	1 122.4	635 711
31191101	Nutmeats, including peanuts, processed . . . . . mil lb..	273.8	275 548	150.9	125 696
11100029	Nutmeats, raw . . . . . mil lb..	1 135.6	1 032 293	N	N
00190045	Fresh and dried fruits . . . . . mil lb..	9.0	8 637	P13.6	13 067
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	26.6	12 164	N	N
31100021	Fats and oils, including shortening . . . . . 1,000 s tons..	P26.0	20 443	46.4	16 812
001900A1	Packaging paper and plastics film, coated and laminated	X	42 549	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	55 146	X	N
32721301	Glass containers . . . . .	X	14 147	X	N
33243101	Metal cans, can lids and ends . . . . .	X	26 880	X	N
00970099	All other materials and components, parts, containers, and supplies	X	272 541	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	118 069	X	N
<b>311919, OTHER SNACK FOOD MFG</b>					
11199203	Shelled peanuts . . . . . mil lb..	P3.5	2 625	29.3	9 956
11115001	Field corn, whole grain . . . . . 1,000 s tons..	669.0	107 648	529.6	85 888
11121100	White potatoes . . . . . 1,000 s tons..	3 979.8	726 912	4 366.0	658 505
11115007	Popcorn, whole grain . . . . . mil lb..	83.1	16 303	135.1	17 143
31121117	Corn grits, meal, and flakes . . . . . 1,000 cwt..	D	D	D	D
31121127	Corn flour . . . . . mil lb..	D	D	720.2	125 728
31121101	Wheat flour . . . . . 1,000 cwt..	P4 287.0	45 185	N	N
11100027	Spices, raw . . . . . mil lb..	P12.5	15 126	P14.3	12 918
31122101	Corn syrup . . . . . mil lb..	10.2	1 342	D	D
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	7.7	4 641	3.0	1 697
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	1 275.2	384 786	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	175 572	X	N
001900A1	Packaging paper and plastics film, coated and laminated	X	421 282	X	N
001900A3	Bags; plastics, foil, and coated paper	X	50 589	X	N
32222401	Bags; uncoated paper and multiwall	X	12 460	X	N
33243101	Metal cans, can lids and ends . . . . .	X	132 810	X	28 352
00970099	All other materials and components, parts, containers, and supplies	X	451 271	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	120 768	X	N
<b>311920, COFFEE &amp; TEA MFG</b>					
11130009	Green coffee . . . . . 1,000 cwt..	P21 495.5	3 156 789	N	N
11130011	Raw tea . . . . . mil lb..	69.4	71 801	N	N
001900A1	Packaging paper and plastics film, coated and laminated	X	110 234	X	N
001900A3	Bags; plastics, foil, and coated paper	X	45 516	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	116 938	X	N
32610043	Plastic containers and plastic can and jar lids	X	25 546	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311920, COFFEE &amp; TEA MFG—Con.</b>					
32721301	Glass containers . . . . .	X	15 050	X	N
33243101	Metal cans, can lids and ends . . . . .	X	159 568	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	278 053	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	167 707	X	N
<b>311930, FLAVORING SYRUP &amp; CONCENTRATE MFG</b>					
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	P40.3	24 510	N	N
31122105	Up to 50% fructose corn syrup, in terms of solids . . . . . mil lb..	174.6	18 933	N	N
31122107	50% or more fructose corn syrup, in terms of solids . . . . . mil lb..	D	D	N	N
31100003	Other natural sweeteners, including dextrose, honey, molasses, blends of corn sweeteners and sugar (in terms of solids) . . . . . mil lb..	951.5	14 648	N	N
32510057	Artificial sweeteners (in terms of solids) . . . . . mil lb..	2 410.4	151 981	N	N
31193001	Concentrated liquid beverage bases (finished drink basis), with some juice content . . . . . mil cases, 192 oz case equiv..	P4.6	8 592	N	N
31193003	Other concentrated liquid beverage bases (finished drink basis) . . . . . mil cases, 192 oz case equiv..	S	192 784	N	N
31193005	Syrup beverage bases (finished drink basis) . . . . . mil cases, 192 oz case equiv..	2.2	4 724	N	N
31142103	Concentrated fruit juices . . . . . mil gal..	3.2	33 423	N	N
00190050	Plastics wrappings, trays, carriers, etc., including preforms . . . . .	X	1 513	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	38 370	X	N
32610027	Plastics bottles and cans . . . . .	X	15 582	X	N
32721309	Refillable glass containers with or without paperboard wrapping . . . . .	X	D	X	N
32721311	Nonrefillable glass containers with or without paperboard wrapping or plastic shielding . . . . .	X	7 483	X	N
33243101	Metal cans, can lids and ends . . . . .	X	3 668	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	558 719	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	155 539	X	N
<b>311941, MAYONNAISE, DRESSING, &amp; OTHER PREPARED SAUCE MFG</b>					
11100011	Other fresh vegetables . . . . . 1,000 s tons..	53.5	36 160	N	N
11130001	Fresh fruits . . . . . 1,000 s tons..	D	D	N	N
31142301	Dried fruits . . . . . 1,000 s tons..	D	D	N	N
31122101	Corn syrup . . . . . mil lb..	246.8	26 538	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	P78.4	45 189	N	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	P1 537.5	429 464	N	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	82 435	X	N
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	35 818	X	N
32721301	Glass containers . . . . .	X	327 299	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	92 172	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 515 502	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	146 882	X	N
<b>311942, SPICE &amp; EXTRACT MFG</b>					
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	86.0	46 469	N	N
31142103	Concentrated fruit juices . . . . . mil gal..	.9	13 620	N	N
11130009	Green coffee . . . . . 1,000 cwt..	D	D	N	N
11100027	Spices, raw . . . . . mil lb..	407.6	539 236	N	N
31142309	Dried vegetables, except potatoes and corn . . . . . mil lb..	45.6	52 975	N	N
31121101	Wheat flour . . . . . 1,000 cwt..	2 176.6	25 023	N	N
31121127	Corn flour . . . . . mil lb..	D	D	N	N
31122101	Corn syrup . . . . . mil lb..	S	6 338	N	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	177.9	72 608	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	46 413	X	N
32610027	Plastics bottles and cans . . . . .	X	4 893	X	N
33243101	Metal cans, can lids and ends . . . . .	X	17 707	X	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	34 272	X	N
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	18 753	X	N
32222401	Bags; uncoated paper and multiwall . . . . .	X	3 968	X	N
32721301	Glass containers . . . . .	X	12 658	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	853 585	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	177 773	X	N
<b>311991, PERISHABLE PREPARED FOOD MFG</b>					
00190041	Sweetcorn, fresh or frozen . . . . . 1,000 s tons..	P.4	301	N	N
11121100	White potatoes . . . . . 1,000 s tons..	314.1	64 096	N	N
11100025	Other fresh vegetables . . . . . 1,000 s tons..	9404.3	188 400	N	N
31142309	Dried vegetables, except potatoes and corn . . . . . mil lb..	.9	1 102	N	N
11115001	Field corn, whole grain . . . . . 1,000 s tons..	P15.2	2 783	N	N
31121117	Corn grits, meal, and flakes . . . . . 1,000 cwt..	D	D	N	N
31121127	Corn flour . . . . . mil lb..	25.4	7 606	N	N
31121101	Wheat flour . . . . . 1,000 cwt..	761.2	8 612	N	N
11100027	Spices, raw . . . . . mil lb..	S	4 472	N	N
31122101	Corn syrup . . . . . mil lb..	S	408	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	P16.6	10 191	N	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	S	13 662	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	101 417	X	N
001900A1	Packaging paper and plastics film, coated and laminated . . . . .	X	35 774	X	N
001900A3	Bags; plastics, foil, and coated paper . . . . .	X	6 087	X	N
32222401	Bags; uncoated paper and multiwall . . . . .	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	482 485	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	225 529	X	N
<b>311999, ALL OTHER MISCELLANEOUS FOOD MFG</b>					
11231005	Shell eggs . . . . . 1,000 cases (30 doz)..	946 476.3	681 517	N	N
31142103	Concentrated fruit juices . . . . . mil gal..	D	D	N	N
11121100	White potatoes . . . . . 1,000 s tons..	5.2	2 354	N	N
31142309	Dried vegetables, except potatoes and corn . . . . . mil lb..	910.5	19 595	N	N
11115007	Popcorn, whole grain . . . . . mil lb..	784.5	117 829	N	N
31121117	Corn grits, meal, and flakes . . . . . 1,000 cwt..	D	D	N	N
31121127	Corn flour . . . . . mil lb..	11.6	1 683	N	N
31121101	Wheat flour . . . . . 1,000 cwt..	8 146.6	102 935	N	N
11100027	Spices, raw . . . . . mil lb..	34.7	23 272	N	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>311999, ALL OTHER MISCELLANEOUS FOOD MFG—Con.</b>					
31122101	Corn syrup . . . . . mil lb..	343.5	41 401	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	277.4	148 779	N	N
31100019	Fats and oils, all types (purchased as such) . . . . . mil lb..	197.4	68 642	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	261 004	X	N
32721301	Glass containers . . . . .	X	34 243	N	N
33243101	Metal cans, can lids and ends . . . . .	X	28 029	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 628 901	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	739 852	X	N
<b>312111, SOFT DRINK MFG</b>					
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	<sup>9</sup> 109.8	68 605	N	N
31122105	Up to 50% fructose corn syrup, in terms of solids . . . . . mil lb..	<sup>P3</sup> 164.3	343 147	N	N
31122107	50% or more fructose corn syrup, in terms of solids . . . . . mil lb..	<sup>P7</sup> 930.7	1 027 132	N	N
31100003	Other natural sweeteners, including dextrose, honey, molasses, blends of corn sweeteners and sugar (in terms of solids) . . . . . mil lb..				
32510057	Artificial sweeteners (in terms of solids) . . . . . mil lb..	<sup>9</sup> 296.9	26 000	N	N
31193001	Concentrated liquid beverage bases (finished drink basis), with some juice content . . . . . mil cases, 192 oz case equiv..	<sup>P441.4</sup>	25 846	N	N
31193003	Other concentrated liquid beverage bases (finished drink basis) . . . . . mil cases, 192 oz case equiv..	<sup>95</sup> 464.7	275 823	N	N
31193005	Syrup beverage bases (finished drink basis) . . . . . mil cases, 192 oz case equiv..		4 232 665	N	N
31142103	Concentrated fruit juices . . . . . mil gal..	S	815 154	N	N
00190050	Plastics wrappings, trays, carriers, etc., including preforms . . . . .	S	357 830	N	N
		X	313 753	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	491 787	X	N
32610027	Plastics bottles and cans . . . . .	X	1 670 628	X	N
32721309	Refillable glass containers with or without paperboard wrapping . . . . .	X	42 919	X	N
32721311	Nonrefillable glass containers with or without paperboard wrapping or plastic shielding . . . . .	X	333 256	X	N
33243101	Metal cans, can lids and ends . . . . .	X	3 799 676	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 320 852	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 794 958	X	N
<b>312112, BOTTLED WATER MFG</b>					
00190050	Plastics wrappings, trays, carriers, etc., including preforms . . . . .	X	2 293	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	16 934	X	N
32610027	Plastics bottles and cans . . . . .	X	53 260	X	N
32721309	Refillable glass containers with or without paperboard wrapping . . . . .	X	D	X	N
32721311	Nonrefillable glass containers with or without paperboard wrapping or plastic shielding . . . . .	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	49 910	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	222 697	X	N
<b>312120, BREWERIES</b>					
11119911	Barley . . . . . mil bushels..	S	1 362	15.5	69 294
11115005	Corn, purchased as grain . . . . . mil bushels..	D	D	D	D
31121119	Corn grits . . . . . 1,000 cwt..	<sup>95</sup> 492.4	49 720	7 043.6	66 155
31121121	Corn meal and flakes . . . . . 1,000 cwt..	D	D	D	D
31121300	Malt . . . . . 1,000 cwt..	<sup>P56</sup> 282.2	791 968	50 252.1	721 084
31122119	Dextrose and corn syrup, including corn syrup solids (in terms of dry weight) . . . . . mil lb..	620.9	53 428	605.4	68 472
31122103	High fructose corn syrup (HFCS)(in terms of solids) . . . . . mil lb..	421.9	43 695	D	D
31122117	Crystalline fructose (dry fructose) . . . . . mil lb..	—	—	N	N
31131003	Sugar, cane and beet (in terms of sugar solids) . . . . . 1,000 s tons..	<sup>96.7</sup>	1 682	D	D
32510053	Sugar substitutes (mannitol, sorbitol, etc.) . . . . . 1,000 s tons..	D	D	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	616 960	X	563 543
32721303	Glass containers, excluding those capitalized . . . . .	X	1 565 310	X	1 470 028
33243101	Metal cans, can lids and ends . . . . .	X	2 224 266	X	2 815 051
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	937 928	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	378 377	X	D
<b>312130, WINERIES</b>					
00190016	All other materials, ingredients, and supplies consumed in wine manufacturing . . . . .	X	531 521	X	N
11133200	Fresh grapes . . . . . 1,000 s tons..	S	1 356 565	3 031.0	778 819
31213001	Purchased wines used for blending . . . . . mil wine gal..	S	827 025	239.0	352 400
31213003	Purchased wines used for other purposes . . . . . mil wine gal..	22.6	119 986	S	13 151
32721305	Glass containers used for wine and brandy manufacture . . . . . 1,000 gross..	S	440 508	11 377.0	393 388
32221003	Paperboard boxes and containers used for wine and brandy manufacture . . . . .	X	65 293	X	36 668
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	5 446	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	193 477	X	D
<b>312140, DISTILLERIES</b>					
00190018	All other materials, ingredients, and supplies consumed in the processing and bottling of distilled liquors . . . . .	X	52 656	X	N
11115005	Corn, purchased as grain . . . . . mil bushels..	X	41 128	X	37 287
11110001	Other grains (rye, barley, etc.) used in grain distilling . . . . . mil bushels..	1.9	9 550	D	N
31121300	Malt . . . . . 1,000 cwt..	S	8 373	494.3	8 025
32192005	Cooperage used in grain distilling . . . . . millions..	.6	46 262	492.8	39 078
00190017	All other materials, ingredients, and supplies consumed in distilling operations . . . . .	X	2 278	X	N
31214001	Neutral spirits used in the processing of whiskey . . . . . mil tax gal..	S	5 428	14.7	10 985
31214005	Neutral spirits used in the processing of vodka . . . . . mil tax gal..	<sup>P36.5</sup>	32 892	<sup>P78.7</sup>	86 255
31214007	Neutral spirits used in the processing of gin . . . . . mil tax gal..	S	1 961	31.4	24 646
31214009	Neutral spirits used in the processing of other liquor . . . . . mil tax gal..	S	130 052	23.9	106 204
31214003	Aged whiskey used in the processing and bottling of distilled liquors . . . . . mil tax gal..	<sup>P54.3</sup>	270 866	44.4	154 359
32221005	Paperboard boxes and containers used in the processing and bottling of distilled liquors . . . . .	X	23 436	X	23 459
32610029	Plastics containers . . . . .	X	63 046	X	26 502
32721307	Glass containers used in the processing and bottling of distilled liquors . . . . .	X	337 601	X	313 307
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	211 973	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	233 828	X	13 988

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NAICS material code	Industry and materials consumed	1997		1992		
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)	
<b>312210, TOBACCO STEMMING &amp; REDRYING</b>						
11191000	Unstemmed leaf tobacco including green tobacco not packed .....	mil lb..	955.2	1 806 588	N	N
31220000	Unstemmed leaf tobacco, redried and packed .....	mil lb..	45.1	97 350	N	N
31221000	Stemmed leaf tobacco, excluding processed sheet and homogenized tobacco .....	mil lb..	312.8	522 375	N	N
31222903	Reconstituted tobacco, processed sheet and homogenized .....	mil lb..	D	D	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	D	X	X	N	N
32520003	Manmade fibers, staple, and tow .....	X	X	X	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	3	X	N	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	17 402	X	N	N
<b>312221, CIGARETTE MFG</b>						
11191000	Unstemmed leaf tobacco including green tobacco not packed .....	mil lb..	D	D	D	D
31220000	Unstemmed leaf tobacco, redried and packed .....	mil lb..	D	D	D	D
31221000	Stemmed leaf tobacco, excluding processed sheet and homogenized tobacco .....	mil lb..	833.0	2 127 113	1 013.0	2 157 177
31222903	Reconstituted tobacco, processed sheet and homogenized .....	mil lb..	D	D	297.9	183 615
32221001	Paperboard containers, boxes, and corrugated paperboard .....	D	X	X	294 868	
32520003	Manmade fibers, staple, and tow .....	X	X	X	305 349	
00970099	All other materials and components, parts, containers, and supplies .....	X	1 171 641	X	1 120 258	
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	-	X	N	N
<b>312229, OTHER TOBACCO PRODUCT MFG</b>						
11191000	Unstemmed leaf tobacco including green tobacco not packed .....	mil lb..	39.0	60 803	N	N
31220000	Unstemmed leaf tobacco, redried and packed .....	mil lb..	91.7	183 544	N	N
31221000	Stemmed leaf tobacco, excluding processed sheet and homogenized tobacco .....	mil lb..	107.7	189 923	N	N
31222903	Reconstituted tobacco, processed sheet and homogenized .....	mil lb..	45.5	57 613	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	X	X	N	N
32520003	Manmade fibers, staple, and tow .....	X	D	X	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	D	X	N	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	9 340	X	N	N
<b>313111, YARN SPINNING MILLS</b>						
11192001	Raw cotton fibers .....	1,000 bales..	45 618.3	2 296 783	N	N
11200000	Raw wool, mohair, and other animal fibers (scoured weight) .....	mil lb..	438.2	46 150	N	N
31499905	Wool tops .....	mil lb..	425.9	95 310	D	D
00999829	All other fibers (silk, jute, reused wool, waste, etc.) .....	mil lb..	441.5	27 491	72.3	15 756
32522105	Rayon and acetate staple and tow .....	mil lb..	70.6	142 001	N	N
32522215	Nylon staple and tow .....	mil lb..	553.8	717 486	926.9	992 123
32522223	Polyester staple and tow .....	mil lb..	751.9	620 564	763.0	598 811
32522225	Acrylic staple and tow .....	mil lb..	4235.1	213 334	144.6	159 699
32522227	All other manmade fiber staple and tow (except glass) .....	mil lb..	22.9	101 158	466.7	108 137
31311101	Spun yarn, all fibers .....	mil lb..	427.7	47 367	N	N
32522211	Nylon filament yarns .....	mil lb..	88.2	158 299	95.9	148 495
32522221	Polyester filament yarns .....	D	D	D	100.5	97 272
32522205	All other manmade filament yarns .....	mil lb..	D	D	11.7	3 386
32513003	Dyes, lakes, and toners .....	X	X	X	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	20 203	X	N	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	227 702	X	N	N
313112, YARN TEXTURING, THROWING, & TWISTING MILLS			X	54 778	X	N
11192001	Raw cotton fibers .....	1,000 bales..	D	D	N	N
00999829	All other fibers (silk, jute, reused wool, waste, etc.) .....	mil lb..	1.2	4 342	N	N
32522105	Rayon and acetate staple and tow .....	mil lb..	D	D	N	N
32522223	Polyester staple and tow .....	mil lb..	4210.4	161 306	N	N
32522215	Nylon staple and tow .....	mil lb..	166.9	164 160	N	N
31311101	Spun yarn, all fibers .....	mil lb..	61.5	40 523	N	N
32522221	Polyester filament yarns .....	mil lb..	875.5	952 903	N	N
32522211	Nylon filament yarns .....	mil lb..	789.6	1 282 682	N	N
32522205	All other manmade filament yarns .....	mil lb..	S	72 984	N	N
32513003	Dyes, lakes, and toners .....	X	X	X	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	91 108	X	N	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	135 744	X	N	N
<b>313113, THREAD MILLS</b>						
11192001	Raw cotton fibers .....	1,000 bales..	D	D	N	N
32522215	Nylon staple and tow .....	mil lb..	D	D	N	N
32522105	Rayon and acetate staple and tow .....	mil lb..	D	D	N	N
32522223	Polyester staple and tow .....	mil lb..	D	D	N	N
32522225	Acrylic staple and tow .....	mil lb..	-	-	N	N
31311101	Spun yarn, all fibers .....	mil lb..	14.7	135 868	N	N
32522211	Nylon filament yarns .....	mil lb..	6.9	52 614	N	N
32522221	Polyester filament yarns .....	mil lb..	13.8	24 059	N	N
32522205	All other manmade filament yarns .....	mil lb..	S	6 240	N	N
32513003	Dyes, lakes, and toners .....	X	X	X	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	28 238	X	N	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	7 968	X	N	N
<b>313210, BROADWOVEN FABRIC MILLS</b>						
11192001	Raw cotton fibers .....	1,000 bales..	4 164.1	1 685 115	N	N
11200000	Raw wool, mohair, and other animal fibers (scoured weight) .....	mil lb..	73.9	162 041	N	N
31499905	Wool tops .....	mil lb..	D	D	N	N
32522105	Rayon and acetate staple and tow .....	mil lb..	110.8	175 863	N	N
32522215	Nylon staple and tow .....	mil lb..	115.4	22 402	N	N
32522223	Polyester staple and tow .....	mil lb..	656.5	416 526	N	N
32522227	All other manmade fiber staple and tow (except glass) .....	mil lb..	S	163 543	N	N
00999829	All other fibers (silk, jute, reused wool, waste, etc.) .....	mil lb..	D	D	N	N
32522101	Rayon, acetate, and/or lyocell filament yarns .....	mil lb..	140.1	282 724	N	N
32522211	Nylon filament yarns .....	mil lb..	168.0	480 792	N	N
32522221	Polyester filament yarns .....	mil lb..	499.1	869 292	N	N
32522203	All other filament yarns, except glass .....	mil lb..	231.7	421 975	N	N
32721207	Glass filament yarn and roving .....	mil lb..	S	306 883	N	N
31311101	Spun yarn, all fibers .....	mil lb..	1 049.8	1 890 047	N	N
31321027	Broadwoven fabrics .....	mil sq yd..	S	737 912	N	N
32513003	Dyes, lakes, and toners .....	X	X	X	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	1 321 569	X	N	N



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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>313210, BROADWOVEN FABRIC MILLS—Con.</b>					
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	394 131	X	N
<b>313221, NARROW FABRIC MILLS</b>					
31311103	Cotton yarns	X	40 643	X	N
32522221	Polyester filament yarns	X	95 174	X	N
32522211	Nylon filament yarns	X	124 779	X	N
32522213	Filament rayon, acetate, and Lyocell yarns	X	16 746	X	N
31311001	All other yarns	X	76 523	X	N
32629907	Bare rubber thread	X	37 878	X	N
31311113	Spun polyester yarns	X	24 461	X	N
11192001	Raw cotton fibers 1,000 bales	D	D	X	N
32522105	Rayon and acetate staple and tow mil lb.	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies	X	92 752	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	46 059	X	N
<b>313222, SCHIFFLI MACHINE EMBROIDERY</b>					
31321013	Polyester broadwoven fabrics (piece goods) mil sq yd.	.3	3 647	N	N
31321003	Cotton broadwoven fabrics (piece goods) mil sq yd.	S	3 155	N	N
31321009	Rayon and acetate broadwoven fabrics (piece goods) mil sq yd.	D	D	N	N
31321021	Other broadwoven fabrics (piece goods) mil sq yd.	S	4 589	N	N
31322103	Narrow fabrics (12 inches or less in width) mil sq yd.	S	2 792	N	N
31311003	Yarn, all fibers mil lb.	S	8 667	N	N
31332001	Plastics coated, impregnated, or laminated fabrics mil sq yd.	S	1 101	N	N
31500000	Garments purchased to be printed and resold	X	9 263	X	N
32591011	Printing ink, for printing on garments	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	1 335	X	N
00970099	All other materials and components, parts, containers, and supplies	X	5 893	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	13 630	X	N
<b>313230, NONWOVEN FABRIC MILLS</b>					
11192001	Raw cotton fibers 1,000 bales	S	29 363	N	N
00190019	Cotton waste mil lb.	S	21 493	N	N
31122305	Cotton linters (net weight) mil lb.	D	D	N	N
11200000	Raw wool, mohair, and other animal fibers (scoured weight) mil lb.	6.2	12 517	N	N
00999823	Wool noils and waste mil lb.	D	D	N	N
32522105	Rayon and acetate staple and tow mil lb.	44.2	87 349	N	N
32522201	Noncellulosic (polyester, nylon, etc.) manmade textile fibers mil lb.	P406.2	566 141	N	N
31311003	Yarn, all fibers mil lb.	S	132 941	N	N
31320003	Textile fabrics	X	69 391	X	N
32212003	Paper (cellulosic wadding) mil lb.	78.7	82 449	N	N
32552009	Adhesives and binders (resins) mil lb.	P99.3	107 083	N	N
32500015	Additives (fire retardants, water repellants, softeners, and antistatics, etc.)	X	45 368	X	N
00999825	New and used rags, clips, etc. mil lb.	D	D	N	N
32521139	Vinyl and vinyl copolymer resins, all forms	X	10 814	X	N
32521115	Plastics resins (except vinyl) consumed in the form of granules, pellets, powders, liquids, etc. mil lb.	P805.2	562 676	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	90 628	X	N
32513003	Dyes, lakes, and toners	X	27 744	X	N
00970099	All other materials and components, parts, containers, and supplies	X	438 820	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	115 845	X	N
<b>313241, WEFT KNIT FABRIC MILLS</b>					
31324000	Knit fabrics mil lb.	S	7 220	N	N
32520003	Manmade fibers, staple, and tow mil lb.	S	53 834	N	N
11192001	Raw cotton fibers 1,000 bales	D	D	N	N
11241001	Raw wool fibers mil lb.	9.3	711	N	N
31311105	Carded cotton yarn mil lb.	P202.3	301 314	N	N
31311107	Combed cotton yarn mil lb.	S	267 249	N	N
31311109	Spun rayon and acetate yarn mil lb.	S	13 269	N	N
31311111	Spun nylon yarn mil lb.	1.7	5 322	N	N
31311113	Spun polyester yarns mil lb.	243.7	381 074	N	N
32522101	Rayon, acetate, and/or lyocell filament yarns mil lb.	S	18 625	N	N
32522211	Nylon filament yarn mil lb.	13.5	30 044	N	N
32522221	Polyester filament yarn mil lb.	P83.2	130 598	N	N
31311115	Acrylic yarns mil lb.	S	23 769	N	N
31311121	Wool yarn mil lb.	D	D	N	N
31311001	All other yarns mil lb.	P91.9	162 155	N	N
00970099	All other materials and components, parts, containers, and supplies	X	194 548	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	146 348	X	N
<b>313249, OTHER KNIT FABRIC &amp; LACE MILLS</b>					
31324000	Knit fabrics mil lb.	S	45 021	N	N
32520003	Manmade fibers, staple, and tow mil lb.	S	25 735	N	N
11192001	Raw cotton fibers 1,000 bales	D	D	N	N
31311105	Carded cotton yarn mil lb.	S	43 379	N	N
31311107	Combed cotton yarn mil lb.	S	45 760	N	N
31311109	Spun rayon and acetate yarn mil lb.	4.0	7 871	N	N
31311111	Spun nylon yarn mil lb.	P27.8	71 788	N	N
31311113	Spun polyester yarns mil lb.	S	144 205	N	N
32522101	Rayon, acetate, and/or lyocell filament yarns mil lb.	S	25 087	N	N
32522211	Nylon filament yarn mil lb.	58.7	155 827	N	N
32522221	Polyester filament yarn mil lb.	P129.5	234 823	N	N
31311115	Acrylic yarns mil lb.	D	D	N	N
31311001	All other yarns mil lb.	S	167 470	N	N
00970099	All other materials and components, parts, containers, and supplies	X	191 527	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	95 005	X	N
<b>313311, BROADWOVEN FABRIC FINISHING MILLS</b>					
31311101	Spun yarn, all fibers mil lb.	569.5	132 602	N	N
31321027	Broadwoven fabrics mil sq yd.	6 149.5	2 768 382	N	N
32513003	Dyes, lakes, and toners	X	623 158	X	N
31324000	Knit fabrics mil lb.	S	30 623	N	N
00970099	All other materials and components, parts, containers, and supplies	X	441 974	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	583 365	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>313312, TEXTILE &amp; FABRIC FINISHING MILLS</b>					
31311101	Spun yarn, all fibers . . . . . mil lb.	364.3	646 223	N	N
31321027	Broadwoven fabrics . . . . . mil sq yd.	506.1	13 894	N	N
32513003	Dyes, lakes, and toners . . . . .	X	203 640	X	N
31324000	Knit fabrics . . . . . mil lb.	S	981 758	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	165 945	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	213 212	X	N
<b>313320, FABRIC COATING MILLS</b>					
32520003	Manmade fibers, staple, and tow . . . . .	X	40 668	X	N
31311003	Yarn, all fibers . . . . .	X	43 520	X	N
31320013	Cotton fabrics . . . . .	X	85 041	X	N
31320015	Manmade fiber fabrics, including glass . . . . .	X	213 229	X	N
32212003	Paper (cellulosic wadding) . . . . .	X	15 969	X	N
32552009	Adhesives and binders (resins) . . . . .	X	45 594	X	N
32510059	Plasticizers . . . . .	X	42 334	X	N
32521139	Vinyl and vinyl copolymer resins, all forms . . . . .	X	54 169	X	N
32521115	Plastics resins (except vinyl) consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	38 707	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	33 641	X	N
32521213	Ethylene-propylene type plastics and synthetic rubber . . . . .	X	2 190	X	N
32521203	SBR-type synthetic rubber . . . . .	X	5 221	X	N
32629005	Rubber compounds and mixtures purchased (dry rubber solids content) . . . . .	X	12 050	X	N
32520007	Other plastics materials and synthetic resins, synthetic rubber, cellulosic and other manmade fibers, except glass . . . . .	X	29 387	X	N
11321005	Natural latex rubber (dry solids content) . . . . .	X	D	X	N
11321003	Natural dry rubber . . . . .	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	271 893	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	205 222	X	N
<b>314110, CARPET &amp; RUG MILLS</b>					
31311123	Spun wool and chiefly wool yarns . . . . . mil lb.	31.6	84 414	11.1	29 512
31311111	Spun nylon yarn . . . . . mil lb.	673.9	1 525 770	P802.7	1 559 880
31311113	Spun polyester yarns . . . . . mil lb.	P82.1	140 772	P123.4	153 730
31311117	Spun polypropylene yarns . . . . . mil lb.	S	114 577	Q104.2	121 147
31311119	All other spun yarns . . . . . mil lb.	P19.2	40 355	P20.3	35 805
32522211	Nylon filament yarns . . . . . mil lb.	1 096.4	2 171 547	P480.8	1 006 703
32522221	Polyester filament yarns . . . . . mil lb.	S	42 466	P4.6	6 765
32522231	Polypropylene filament yarns . . . . . mil lb.	487.5	445 042	188.3	231 960
32522207	All other filament yarns . . . . . mil lb.	D	D	P26.2	38 688
32520001	All other manmade fiber staple, and tow . . . . . mil lb.	D	D	N	N
32522215	Nylon staple and tow . . . . . mil lb.	P64.5	121 815	D	D
32522217	Polypropylene staple and tow . . . . . mil lb.	39.1	82 266	P44.7	36 136
32522223	Polyester staple and tow . . . . . mil lb.	Q27.1	35 091	27.0	15 962
00999829	All other fibers (silk, jute, reused wool, waste, etc.) . . . . . mil lb.	3.9	23 820	D	D
31320017	Polypropylene fiber fabrics primary backing . . . . . mil sq yd.	843.6	315 663	Q659.6	190 525
31320019	All other manmade fiber fabrics primary backing . . . . . mil sq yd.	Q232.6	137 709	P106.8	73 300
31320021	All other fabrics (except manmade) primary backing . . . . . mil sq yd.	2.2	1 690	4.1	5 061
31320031	Jute secondary backing . . . . .	X	79 574	X	80 022
32620003	Foam or high density rubber cushion secondary backing . . . . .	X	26 487	X	13 670
32610041	Other cushion secondary backings (including vinyl, polyurethane, etc.) . . . . .	X	56 182	X	95 884
31320023	Woven and nonwoven manmade fiber fabrics secondary backing . . . . .	X	193 489	X	107 350
31320025	All other secondary backing (including scrim, solid vinyl, etc.) . . . . .	X	42 928	X	47 441
32513003	Dyes, lakes, and toners . . . . .	X	190 546	X	185 494
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	648 016	X	710 999
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	163 763	X	93 831
<b>314121, CURTAIN &amp; DRAPERY MILLS</b>					
31321003	Cotton broadwoven fabrics (piece goods) . . . . .	X	60 889	X	N
31321009	Rayon and acetate broadwoven fabrics (piece goods) . . . . .	X	65 738	X	N
31321013	Polyester broadwoven fabrics (piece goods) . . . . .	X	118 875	X	N
31321015	Nylon broadwoven fabrics (piece goods) . . . . .	X	8 565	X	N
31321021	Other broadwoven fabrics (piece goods) . . . . .	X	68 335	X	N
31322103	Narrow fabrics (12 inches or less in width) . . . . .	X	1 015	X	N
31311003	Yarn, all fibers . . . . .	X	40 034	X	N
31332001	Plastics coated, impregnated, or laminated fabrics . . . . .	X	10 947	X	N
32520003	Manmade fibers, staple, and tow . . . . .	X	852	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	7 546	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	124 115	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	296 972	X	N
<b>314129, OTHER HOUSEHOLD TEXTILE PRODUCT MILLS</b>					
31321003	Cotton broadwoven fabrics (piece goods) . . . . .	X	543 694	X	N
31321009	Rayon and acetate broadwoven fabrics (piece goods) . . . . .	X	14 909	X	N
31321013	Polyester broadwoven fabrics (piece goods) . . . . .	X	265 363	X	N
31321015	Nylon broadwoven fabrics (piece goods) . . . . .	X	20 141	X	N
31321021	Other broadwoven fabrics (piece goods) . . . . .	X	808 928	X	N
31322103	Narrow fabrics (12 inches or less in width) . . . . .	X	29 989	X	N
31311003	Yarn, all fibers . . . . .	X	195 176	X	N
31332001	Plastics coated, impregnated, or laminated fabrics . . . . .	X	23 140	X	N
32520003	Manmade fibers, staple, and tow . . . . .	X	169 194	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	32 987	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 244 579	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	321 074	X	N
<b>314911, TEXTILE BAG MILLS</b>					
31321003	Cotton broadwoven fabrics (piece goods) . . . . .	X	41 130	X	N
31321009	Rayon and acetate broadwoven fabrics (piece goods) . . . . .	X	3 608	X	N
31321013	Polyester broadwoven fabrics (piece goods) . . . . .	X	23 343	X	N
31321015	Nylon broadwoven fabrics (piece goods) . . . . .	X	25 977	X	N
31321021	Other broadwoven fabrics (piece goods) . . . . .	X	48 353	X	N
31322103	Narrow fabrics (12 inches or less in width) . . . . .	X	7 676	X	N
31311003	Yarn, all fibers . . . . .	X	20 130	X	N
31332001	Plastics coated, impregnated, or laminated fabrics . . . . .	X	65 725	X	N
32520003	Manmade fibers, staple, and tow . . . . .	X	13 874	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>314911, TEXTILE BAG MILLS—Con.</b>					
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	14 651	X	N
00970099	All other materials and components, parts, containers, and supplies	X	92 012	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	68 929	X	N
<b>314912, CANVAS &amp; RELATED PRODUCT MILLS</b>					
31321003	Cotton broadwoven fabrics (piece goods)	X	29 679	X	27 220
31321009	Rayon and acetate broadwoven fabrics (piece goods)	X	4 035	X	1 139
31321013	Polyester broadwoven fabrics (piece goods)	X	28 720	X	17 335
31321015	Nylon broadwoven fabrics (piece goods)	X	35 598	X	24 284
31321021	Other broadwoven fabrics (piece goods)	X	22 185	X	20 132
31322103	Narrow fabrics (12 inches or less in width)	X	7 858	X	5 833
31311003	Yarn, all fibers	X	7 403	X	1 045
31332001	Plastics coated, impregnated, or laminated fabrics	X	77 730	X	54 294
32520003	Manmade fibers, staple, and tow	X	8 919	X	1 121
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	10 154	X	2 975
00970099	All other materials and components, parts, containers, and supplies	X	187 684	X	104 732
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	235 514	X	192 628
<b>314991, ROPE, CORDAGE, &amp; TWINE MILLS</b>					
32520003	Manmade fibers, staple, and tow	X	53 093	X	37 717
31311003	Yarn, all fibers	X	85 476	X	80 437
31320013	Cotton fabrics	X	D	X	D
31320015	Manmade fiber fabrics, including glass	X	D	X	D
32212003	Paper (cellulosic wadding)	X	D	X	3 492
32552009	Adhesives and binders (resins)	X	1 025	X	D
32510059	Plasticizers	X	377	X	D
32521139	Vinyl and vinyl copolymer resins, all forms	X	D	X	D
32521115	Plastics resins (except vinyl) consumed in the form of granules, pellets, powders, liquids, etc.	X	51 354	X	40 864
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	D	X	D
32521213	Ethylene-propylene type plastics and synthetic rubber	X	D	X	N
32520007	Other plastics materials and synthetic resins, synthetic rubber, cellulosic and other manmade fibers, except glass	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	57 239	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	38 452	X	36 238
<b>314992, TIRE CORD &amp; TIRE FABRIC MILLS</b>					
32522215	Nylon staple and tow	D	D	D	D
32522223	Polyester staple and tow	D	D	90.7	100 097
32522101	Rayon, acetate, and/or lyocell filament yarns	D	D	3.5	5 859
32522211	Nylon filament yarns	119.2	223 598	49.7	61 506
32522221	Polyester filament yarns	171.1	304 088	82.5	110 681
32522203	All other filament yarns, except glass	D	D	D	D
32721207	Glass filament yarn and roving	D	D	1.5	2 195
31311101	Spun yarn, all fibers	D	D	D	D
31321027	Broadwoven fabrics	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies	X	141 034	X	73 337
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	4 380	X	D
<b>314999, ALL OTHER MISCELLANEOUS TEXTILE PRODUCT MILLS</b>					
11192001	Raw cotton fibers	27.5	5 887	X	N
00190019	Cotton waste	S	40 091	X	N
31122305	Cotton linters (net weight)	S	23 917	X	N
11200000	Raw wool, mohair, and other animal fibers (scoured weight)	D	D	X	N
00999823	Wool noils and waste	D	D	X	N
32522105	Rayon and acetate staple and tow	17.7	6 616	X	N
32522201	Noncellulosic (polyester, nylon, etc.) manmade textile fibers	1386.5	214 213	X	N
31311003	Yarn, all fibers	S	243 547	X	N
31320003	Textile fabrics	X	485 328	X	N
32212003	Paper (cellulosic wadding)	D	D	X	N
32552009	Adhesives and binders (resins)	P32.7	22 588	X	N
32500015	Additives (fire retardants, water repellants, softeners, and antistatics, etc.)	X	11 562	X	N
00999825	New and used rags, clips, etc.	98.8	52 377	X	N
32521139	Vinyl and vinyl copolymer resins, all forms	X	2 399	X	N
32521115	Plastics resins (except vinyl) consumed in the form of granules, pellets, powders, liquids, etc.	S	73 314	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	36 579	X	N
32513003	Dyes, lakes, and toners	X	14 591	X	N
31322103	Narrow fabrics (12 inches or less in width)	S	24 683	X	N
31332001	Plastics coated, impregnated, or laminated fabrics	S	66 307	X	N
31500000	Garments purchased to be printed and resold	X	240 210	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	24 269	X	N
32100019	Rough and dressed lumber	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 065 263	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	266 335	X	N
<b>315111, SHEER HOSIERY MILLS</b>					
31511101	Hosiery shipped in the greige, except pantyhose	X	28 584	X	N
31511103	Pantyhose shipped in the greige	X	120 070	X	N
31311103	Cotton yarns	X	32 113	X	N
31311111	Spun nylon yarn	X	223 460	X	N
31311115	Acrylic yarns	X	9 791	X	N
32522211	Nylon filament yarns	X	117 781	X	N
32522229	Spandex filament yarns	X	82 800	X	N
31311001	All other yarns	X	9 345	X	N
00190003	Flexible packaging materials	X	34 823	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	40 577	X	N
00970099	All other materials and components, parts, containers, and supplies	X	28 738	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	40 794	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>315119, OTHER HOSIERY &amp; SOCK MILLS</b>					
31511101	Hosiery shipped in the greige, except pantyhose .....	X	340 269	X	N
31511103	Pantyhose shipped in the greige .....	X	D	X	N
31311103	Cotton yarns .....	X	386 079	X	N
31311111	Spun nylon yarn .....	X	63 282	X	N
31311115	Acrylic yarns .....	X	49 822	X	N
32522211	Nylon filament yarns .....	X	43 246	X	N
32522229	Spandex filament yarns .....	X	22 746	X	N
31311001	All other yarns .....	X	85 138	X	N
00190003	Flexible packaging materials .....	X	37 234	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	31 399	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	132 492	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	D	X	N
<b>315191, OUTERWEAR KNITTING MILLS</b>					
31324000	Knit fabrics .....	43.9	327 547	N	N
32520003	Manmade fibers, staple, and tow .....	1.7	5 016	N	N
11192001	Raw cotton fibers .....	D	D	N	N
11241001	Raw wool fibers .....	D	D	N	N
31311105	Carded cotton yarn .....	295.2	560 605	N	N
31311107	Combed cotton yarn .....	937.2	82 013	N	N
31311109	Spun rayon and acetate yarn .....	S	2 505	N	N
31311111	Spun nylon yarn .....	S	913	N	N
31311113	Spun polyester yarns .....	D	D	N	N
32522101	Rayon, acetate, and/or lyocell filament yarns .....	S	1 629	N	N
32522211	Nylon filament yarn .....	S	2 316	N	N
32522221	Polyester filament yarn .....	P1.8	3 822	N	N
31311115	Acrylic yarns .....	S	46 885	N	N
31311121	Wool yarn .....	11.8	61 372	N	N
31311001	All other yarns .....	S	11 528	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	306 981	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	273 217	X	N
<b>315192, UNDERWEAR &amp; NIGHTWEAR KNITTING MILLS</b>					
31324000	Knit fabrics .....	S	33 411	N	N
31311105	Carded cotton yarn .....	959.8	87 756	N	N
31311107	Combed cotton yarn .....	S	40 404	N	N
31311111	Spun nylon yarn .....	D	D	N	N
31311113	Spun polyester yarns .....	S	8 642	N	N
32522101	Rayon, acetate, and/or lyocell filament yarns .....	D	D	N	N
32522211	Nylon filament yarn .....	8.7	30 227	N	N
32522221	Polyester filament yarn .....	2.1	4 946	N	N
31311115	Acrylic yarns .....	D	D	N	N
31311001	All other yarns .....	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	39 579	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	10 571	X	N
<b>315211, MEN'S &amp; BOYS' CUT &amp; SEW APPAREL CONTRACTORS</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	57 667	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	10 471	X	N
31324000	Knit fabrics .....	X	40 009	X	N
31311003	Yarn, all fibers .....	X	5 316	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	11 667	X	N
31500000	Garments purchased to be printed and resold .....	X	1 587	X	N
32591011	Printing ink, for printing on garments .....	X	46	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	34 073	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	45 706	X	N
<b>315212, WOMEN'S, GIRLS', &amp; INFANTS' CUT &amp; SEW APPAREL CONTRACTORS</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	49 019	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	5 299	X	N
31324000	Knit fabrics .....	X	45 103	X	N
31311003	Yarn, all fibers .....	X	10 673	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	7 801	X	N
31500000	Garments purchased to be printed and resold .....	X	1 006	X	N
32591011	Printing ink, for printing on garments .....	X	223	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	33 090	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	264 424	X	N
<b>315221, MEN'S &amp; BOYS' CUT &amp; SEW UNDERWEAR &amp; NIGHTWEAR MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	69 374	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	7 380	X	N
31324000	Knit fabrics .....	X	173 941	X	N
31311003	Yarn, all fibers .....	X	D	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	46 963	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	75 790	X	N
<b>315222, MEN'S &amp; BOYS' CUT &amp; SEW SUIT, COAT, &amp; OVERCOAT MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	504 438	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	40 815	X	N
31324000	Knit fabrics .....	X	6 468	X	N
31311003	Yarn, all fibers .....	X	6 836	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	37 690	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	75 468	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	105 534	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>315223, MEN'S &amp; BOYS' CUT &amp; SEW SHIRT (EXC WORK SHIRT) MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	363 347	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	66 926	X	N
31324000	Knit fabrics .....	X	1 553 915	X	N
31311003	Yarn, all fibers .....	X	59 071	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	54 720	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	503 743	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	237 616	X	N
<b>315224, MEN'S &amp; BOYS' CUT &amp; SEW TROUSER, SLACK, &amp; JEAN MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	1 078 126	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	D	X	N
31324000	Knit fabrics .....	X	55 626	X	N
31311003	Yarn, all fibers .....	X	28 994	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	130 920	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	185 203	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	D	X	N
<b>315225, MEN'S &amp; BOYS' CUT &amp; SEW WORK CLOTHING MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	542 558	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	D	X	N
31324000	Knit fabrics .....	X	18 815	X	N
31311003	Yarn, all fibers .....	X	D	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	73 418	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	58 329	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	48 318	X	N
<b>315228, MEN'S &amp; BOYS' CUT &amp; SEW OTHER OUTERWEAR MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	271 708	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	14 824	X	N
31324000	Knit fabrics .....	X	148 220	X	N
31311003	Yarn, all fibers .....	X	19 835	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	29 436	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	65 986	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	148 196	X	N
<b>315231, WOMEN'S &amp; GIRLS' CUT/SEW LINGERIE &amp; NIGHTWEAR MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	238 836	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	103 147	X	N
31324000	Knit fabrics .....	X	1 061 383	X	N
31311003	Yarn, all fibers .....	X	36 764	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	31 170	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	93 609	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	124 742	X	N
<b>315232, WOMEN'S &amp; GIRLS' CUT &amp; SEW BLOUSE &amp; SHIRT MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	528 097	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	68 985	X	N
31324000	Knit fabrics .....	X	515 299	X	N
31311003	Yarn, all fibers .....	X	89 840	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	62 765	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	83 702	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	181 231	X	N
<b>315233, WOMEN'S &amp; GIRLS' CUT &amp; SEW DRESS MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	858 014	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	141 818	X	N
31324000	Knit fabrics .....	X	305 769	X	N
31311003	Yarn, all fibers .....	X	57 227	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	90 385	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	63 912	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	325 366	X	N
<b>315234, WOMEN'S &amp; GIRLS' CUT &amp; SEW SUIT, COAT, SKIRT MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	795 232	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	36 958	X	N
31324000	Knit fabrics .....	X	96 631	X	N
31311003	Yarn, all fibers .....	X	21 114	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	70 340	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	30 381	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	148 874	X	N
<b>315239, WOMEN'S &amp; GIRLS' CUT &amp; SEW OTHER OUTERWEAR MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	1 335 753	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	360 759	X	N
31324000	Knit fabrics .....	X	463 061	X	N
31311003	Yarn, all fibers .....	X	68 287	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	150 841	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	151 051	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	285 331	X	N
<b>315291, INFANTS' CUT &amp; SEW APPAREL MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	143 706	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	2 734	X	N
31324000	Knit fabrics .....	X	159 760	X	N
31311003	Yarn, all fibers .....	X	20 229	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	17 398	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	17 828	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>315291, INFANTS' CUT &amp; SEW APPAREL MFG—Con.</b>					
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	16 134	X	N
<b>315292, FUR &amp; LEATHER APPAREL MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	2 782	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	566	X	N
31324000	Knit fabrics .....	X	D	X	N
31311003	Yarn, all fibers .....	X	D	X	N
31611001	Finished leather .....	X	28 024	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	2 333	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	11 441	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	63 070	X	N
<b>315299, ALL OTHER CUT &amp; SEW APPAREL MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	102 105	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	10 699	X	N
31324000	Knit fabrics .....	X	61 513	X	N
31311003	Yarn, all fibers .....	X	7 009	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	5 494	X	N
31611001	Finished leather .....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	48 748	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	D	X	N
<b>315991, HAT, CAP, &amp; MILLINERY MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	141 045	X	95 074
31322103	Narrow fabrics (12 inches or less in width) .....	X	24 415	X	40 826
31323003	Wool felt .....	X	24 714	X	6 675
31599100	Hat bodies .....	X	48 815	X	71 656
00970099	All other materials and components, parts, containers, and supplies .....	X	77 766	X	71 111
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	29 049	X	64 844
<b>315992, GLOVE &amp; MITTEN MFG</b>					
31321023	Broadwoven fabrics (piece goods) ..... mil sq yd. .	916.3	30 061	X	N
31324000	Knit fabrics .....	X	26 994	X	N
31311003	Yarn, all fibers .....	X	17 496	X	N
31611013	Leather .....	X	38 384	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	38 270	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	25 647	X	N
<b>315993, MEN'S &amp; BOYS' NECKWEAR MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	153 166	X	150 039
31322103	Narrow fabrics (12 inches or less in width) .....	X	39 289	X	36 088
31324000	Knit fabrics .....	X	D	X	2 820
31311003	Yarn, all fibers .....	X	D	X	D
31611001	Finished leather .....	X	D	X	D
33999301	Buttons, zippers, and slide fasteners .....	X	583	X	D
00970099	All other materials and components, parts, containers, and supplies .....	X	11 659	X	18 864
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	12 443	X	31 495
<b>315999, OTHER APPAREL ACCESSORIES &amp; OTHER APPAREL MFG</b>					
31321023	Broadwoven fabrics (piece goods) .....	X	172 647	X	N
31322103	Narrow fabrics (12 inches or less in width) .....	X	10 866	X	N
31324000	Knit fabrics .....	X	2 407	X	N
31311003	Yarn, all fibers .....	X	45 806	X	N
33999301	Buttons, zippers, and slide fasteners .....	X	5 431	X	N
31611001	Finished leather .....	X	148 047	X	N
31332001	Plastics coated, impregnated, or laminated fabrics ..... mil sq yd. .	S	84 226	X	N
31500000	Garments purchased to be printed and resold .....	X	4 554	X	N
32591011	Printing ink, for printing on garments .....	X	2 083	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb. .	D	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	13 513	X	N
32520003	Manmade fibers, staple, and tow .....	X	4 483	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	143 243	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	D	X	N
<b>316110, LEATHER &amp; HIDE TANNING &amp; FINISHING</b>					
31161119	Hides, skins, and pelts .....	X	1 498 738	X	1 217 550
32500025	Tanning materials, dressings, dyes, and finishing agents .....	X	257 834	X	281 522
31611003	Finished upper leather .....	X	69 786	X	129 234
31611011	Finished soling leather .....	X	D	X	33 116
31611007	All other finished leather .....	X	19 107	X	16 867
00970099	All other materials and components, parts, containers, and supplies .....	X	84 938	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	81 565	X	N
<b>316211, RUBBER &amp; PLASTICS FOOTWEAR MFG</b>					
11321001	Natural rubber .....	X	12 109	X	18 745
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	49 660	X	18 970
32521201	Synthetic rubber, including vulcanizable elastomers .....	X	14 008	X	19 960
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) .....	X	8 039	X	13 394
32510059	Plasticizers .....	X	D	X	6 731
32510085	All other industrial organic chemicals .....	X	D	X	4 092
32552003	Glues and adhesives .....	X	2 706	X	2 325
32500053	All other chemical and allied products .....	X	5 943	X	D
31320003	Textile fabrics .....	X	53 616	X	81 693
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	13 677	X	15 073

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>316211, RUBBER &amp; PLASTICS FOOTWEAR MFG—Con.</b>					
32600055	Soles and heels of rubber and plastic	X	55 298	X	N
32600035	Composition cut stock and findings	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	D	X	N
31611005	Other finished leather	—	—	X	N
31699905	Leather and other material cut stock and findings except outsoles and innersoles	X	15 047	X	N
32600057	Other parts of plastics and natural and synthetic rubber	X	15 725	X	N
31611009	Finished upper leather	S	26 686	X	N
31699903	Outer soles and innersoles of leather, either as finished soles or blockers	X	2 365	X	N
31611011	Finished soling leather	D	D	X	N
31332001	Plastics coated, impregnated, or laminated fabrics	X	7 399	X	N
00190095	Sewn uppers, bought from others, not manufactured with materials produced in the same establishment	X	41 484	X	N
00970099	All other materials and components, parts, containers, and supplies	X	8 730	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	15 449	X	61 142
<b>316212, HOUSE SLIPPER MFG</b>					
31332001	Plastics coated, impregnated, or laminated fabrics	X	17 096	X	27 051
32600057	Other parts of plastics and natural and synthetic rubber	X	D	X	4 545
32600035	Composition cut stock and findings	X	D	X	D
31699905	Leather and other material cut stock and findings except outsoles and innersoles	X	D	X	767
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	D	X	D
31611009	Finished upper leather	S	17 521	11.6	16 520
31611011	Finished soling leather	D	D	.6	2 692
31611005	Other finished leather	D	D	X	D
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	2 581	X	4 898
32521201	Synthetic rubber, including vulcanizable elastomers	X	D	X	N
11321001	Natural rubber	X	—	X	N
32500053	All other chemical and allied products	X	—	X	N
32510059	Plasticizers	X	—	X	N
31320003	Textile fabrics	X	7 523	X	N
00190095	Sewn uppers, bought from others, not manufactured with materials produced in the same establishment	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	N
32600055	Soles and heels of rubber and plastic	X	1 186	X	N
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.)	X	—	X	N
32510085	All other industrial organic chemicals	X	—	X	N
31699903	Outer soles and innersoles of leather, either as finished soles or blockers	X	—	X	N
32552003	Glues and adhesives	X	507	X	N
00970099	All other materials and components, parts, containers, and supplies	X	16 213	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	2 626	X	779
<b>316213, MEN'S FOOTWEAR (EXCEPT ATHLETIC) MFG</b>					
31332001	Plastics coated, impregnated, or laminated fabrics	X	15 596	X	34 068
32600057	Other parts of plastics and natural and synthetic rubber	X	10 765	X	24 035
32600035	Composition cut stock and findings	X	30 552	X	32 742
31699905	Leather and other material cut stock and findings except outsoles and innersoles	X	D	X	67 093
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	5 651	X	D
31611009	Finished upper leather	S	321 777	P195.8	485 223
31611011	Finished soling leather	S	32 483	25.2	61 427
31611005	Other finished leather	28.7	14 577	X	38 846
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	20 520	X	D
00190095	Sewn uppers, bought from others, not manufactured with materials produced in the same establishment	X	35 070	X	N
11321001	Natural rubber	X	D	X	N
32510059	Plasticizers	X	—	X	N
32510085	All other industrial organic chemicals	X	D	X	N
31320003	Textile fabrics	X	31 971	X	N
31699903	Outer soles and innersoles of leather, either as finished soles or blockers	X	19 906	X	N
32500053	All other chemical and allied products	X	6 608	X	N
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.)	X	2 114	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	9 885	X	N
32552003	Glues and adhesives	X	11 534	X	N
32600055	Soles and heels of rubber and plastic	X	49 011	X	N
32521201	Synthetic rubber, including vulcanizable elastomers	X	489	X	N
00970099	All other materials and components, parts, containers, and supplies	X	104 618	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	38 050	X	15 477
<b>316214, WOMEN'S FOOTWEAR (EXCEPT ATHLETIC) MFG</b>					
31332001	Plastics coated, impregnated, or laminated fabrics	X	16 724	X	32 123
32600057	Other parts of plastics and natural and synthetic rubber	X	D	X	16 914
32600035	Composition cut stock and findings	X	12 956	X	D
31699905	Leather and other material cut stock and findings except outsoles and innersoles	X	2 111	X	22 505
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	1 160	X	D
31611009	Finished upper leather	S	91 590	68.7	184 889
31611011	Finished soling leather	92.7	16 814	P31.5	36 249
31611005	Other finished leather	D	D	X	D
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	25 699	X	14 654
31320003	Textile fabrics	X	10 101	X	N
32510059	Plasticizers	X	—	X	N
32521201	Synthetic rubber, including vulcanizable elastomers	X	D	X	N
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.)	X	—	X	N
32552003	Glues and adhesives	X	2 638	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>316214, WOMEN'S FOOTWEAR (EXCEPT ATHLETIC) MFG—Con.</b>					
32510085	All other industrial organic chemicals	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	N
00190095	Sewn uppers, bought from others, not manufactured with materials produced in the same establishment	X	D	X	N
32600055	Soles and heels of rubber and plastic	X	9 526	X	N
31699903	Outer soles and innersoles of leather, either as finished soles or blockers	X	D	X	N
32500053	All other chemical and allied products	X	2 551	X	N
00970099	All other materials and components, parts, containers, and supplies	X	27 662	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	45 784	X	16 118
<b>316219, OTHER FOOTWEAR MFG</b>					
31332001	Plastics coated, impregnated, or laminated fabrics	X	2 902	X	21 883
32600057	Other parts of plastics and natural and synthetic rubber	X	D	X	12 906
32600035	Composition cut stock and findings	X	1 090	X	D
31699905	Leather and other material cut stock and findings except outsoles and innersoles	X	731	X	16 557
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	D	X	D
31611009	Finished upper leather	16.6	22 843	19.2	38 186
31611011	Finished soling leather	1.6	3 777	S	7 250
31611005	Other finished leather	D	D	X	422
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	2 810	X	7 678
11321001	Natural rubber	X	D	X	N
32500053	All other chemical and allied products	X	D	X	N
32510085	All other industrial organic chemicals	X	D	X	N
32510059	Plasticizers	X	—	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	N
31699903	Outer soles and innersoles of leather, either as finished soles or blockers	X	1 837	X	N
32600055	Soles and heels of rubber and plastic	X	2 816	X	N
32521201	Synthetic rubber, including vulcanizable elastomers	X	D	X	N
32552003	Glues and adhesives	X	1 169	X	N
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.)	X	—	X	N
31320003	Textile fabrics	X	1 868	X	N
00190095	Sewn uppers, bought from others, not manufactured with materials produced in the same establishment	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	14 924	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	15 839	X	4 299
<b>316991, LUGGAGE MFG</b>					
31321023	Broadwoven fabrics (piece goods)	X	84 607	X	66 056
31332001	Plastics coated, impregnated, or laminated fabrics	X	33 295	X	85 183
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	8 152	X	9 456
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	30 874	X	19 409
31611001	Finished leather	X	52 633	X	38 472
33251017	Trunk and luggage hardware, including locks	X	38 021	X	37 906
00970099	All other materials and components, parts, containers, and supplies	X	66 104	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	63 411	X	D
<b>316992, WOMEN'S HANDBAG &amp; PURSE MFG</b>					
31321023	Broadwoven fabrics (piece goods)	X	4 333	X	7 647
31332001	Plastics coated, impregnated, or laminated fabrics	X	9 912	X	8 793
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	3 065	X	6 258
31611001	Finished leather	X	54 097	X	82 018
33251017	Trunk and luggage hardware, including locks	X	1 573	X	D
00970099	All other materials and components, parts, containers, and supplies	X	D	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	17 299	X	24 434
<b>316993, PERSONAL LEATHER GOOD (EXCEPT WOMEN'S HANDBAG &amp; PURSE) MFG</b>					
31321023	Broadwoven fabrics (piece goods)	X	14 724	X	13 304
31332001	Plastics coated, impregnated, or laminated fabrics	X	12 796	X	10 928
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	242
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	D	X	2 093
31611001	Finished leather	X	42 296	X	42 586
33251017	Trunk and luggage hardware, including locks	X	2 115	X	2 135
00970099	All other materials and components, parts, containers, and supplies	X	73 229	X	52 141
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	-28 250	X	8 791
<b>316999, ALL OTHER LEATHER GOOD MFG</b>					
31161119	Hides, skins, and pelts	X	D	X	N
32500025	Tanning materials, dressings, dyes, and finishing agents	X	D	X	N
31611003	Finished upper leather	X	D	X	N
31611011	Finished soling leather	X	D	X	N
31611007	All other finished leather	X	4 003	X	N
31321023	Broadwoven fabrics (piece goods)	X	15 096	X	12 709
31332001	Plastics coated, impregnated, or laminated fabrics	X	6 827	X	4 360
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	331	X	198
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	4 449	X	5 530
31611001	Finished leather	X	66 186	X	63 547
33251017	Trunk and luggage hardware, including locks	X	4 329	X	1 239
00970099	All other materials and components, parts, containers, and supplies	X	131 870	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	95 652	X	N



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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>321113, SAWMILLS</b>					
11311000	Stumpage cost (cost of timber, excluding land, cut and consumed at same establishment).....	X	2 198 406	X	N
11331015	Hardwood logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	1 375 891	N	N
11331017	Softwood logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	6 722 869	N	N
32100023	Hardwood rough lumber..... mil bd ft..	<sup>Q</sup> 237.0	152 355	N	N
32100029	Softwood rough lumber..... mil bd ft..	<sup>P</sup> 442.9	162 919	N	N
32100027	Hardwood dressed lumber..... mil bd ft..	S	21 214	N	N
32100033	Softwood dressed lumber..... mil bd ft..	<sup>P</sup> 270.0	116 884	N	N
32552003	Glues and adhesives..... mil lb..	S	13 770	N	N
00970099	All other materials and components, parts, containers, and supplies.....	X	621 137	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.....	X	3 395 267	X	N
<b>321114, WOOD PRESERVATION</b>					
11331013	Poles, piling, and other round or hewn wood products.....	X	258 552	X	216 252
32100023	Hardwood rough lumber.....	X	217 630	X	132 317
32100029	Softwood rough lumber..... mil bd ft..	<sup>P</sup> 1 492.4	649 353	S	362 937
32100021	Dressed lumber..... mil bd ft..	3 142.4	1 436 824	<sup>P</sup> 1 704.1	540 894
32519219	Creosote oil consumed in the same establishment..... mil gal..	<sup>P</sup> 41.7	36 215	<sup>Q</sup> 46.7	38 335
32519203	Pentachlorophenol.....	X	23 636	X	23 985
32518801	Waterborne preservatives..... mil lb (oxide basis)..	<sup>Q</sup> 95.0	101 771	S	77 952
00970099	All other materials and components, parts, containers, and supplies.....	X	71 366	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.....	X	607 522	X	311 859
<b>321211, HARDWOOD VENEER &amp; PLYWOOD MFG</b>					
11311000	Stumpage cost (cost of timber, excluding land, cut and consumed at same establishment).....	X	26 302	X	43 145
11331015	Hardwood logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	309 087	N	183 229
11331017	Softwood logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	42 344	N	54 810
32121105	Hardwood veneer..... mil sq ft sm..	S	442 298	2 583.3	351 179
32121203	Softwood veneer..... mil sq ft (1 in. basis)..	S	93 743	867.9	61 515
32121101	Hardwood plywood..... mil sq ft sm..	S	98 729	S	131 653
32121903	Particleboard (wood)..... mil sq ft (3/4 in. basis)..	<sup>P</sup> 162.2	51 545	<sup>Q</sup> 181.6	43 209
32121907	Medium density fiberboard (MDF)..... mil sq ft (3/4 in. basis)..	S	70 397	<sup>P</sup> 109.5	34 872
32552003	Glues and adhesives.....	X	43 926	X	29 121
00970099	All other materials and components, parts, containers, and supplies.....	X	101 310	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.....	X	328 352	X	150 611
<b>321212, SOFTWOOD VENEER &amp; PLYWOOD MFG</b>					
11311000	Stumpage cost (cost of timber, excluding land, cut and consumed at same establishment).....	X	346 854	X	440 456
11331015	Hardwood logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	64 617	N	26 595
11331017	Softwood logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	2 145 934	N	1 479 952
32121105	Hardwood veneer..... mil sq ft sm..	S	27 355	<sup>P</sup> 224.1	28 514
32121203	Softwood veneer..... mil sq ft (1 in. basis)..	715.4	362 996	S	402 295
32552003	Glues and adhesives.....	X	207 593	X	197 326
00970099	All other materials and components, parts, containers, and supplies.....	X	270 204	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.....	X	279 534	X	94 117
<b>321213, ENGINEERED WOOD MEMBER (EXCEPT TRUSS) MFG</b>					
32100033	Softwood dressed lumber..... mil bd ft..	<sup>P</sup> 364.1	186 789	N	N
32121901	Reconstituted wood products, including particleboard, oriented strandboard, medium density fiberboard, and hardboard.....	X	88 732	X	N
00970099	All other materials and components, parts, containers, and supplies.....	X	568 160	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.....	X	25 921	X	N
<b>321214, TRUSS MFG</b>					
32100023	Hardwood rough lumber.....	X	118 469	X	N
32100029	Softwood rough lumber..... mil bd ft..	S	219 565	N	N
32100027	Hardwood dressed lumber..... mil bd ft..	S	63 174	N	N
32100033	Softwood dressed lumber..... mil bd ft..	<sup>P</sup> 1 501.3	649 414	N	N
32121901	Reconstituted wood products, including particleboard, oriented strandboard, medium density fiberboard, and hardboard.....	X	12 868	X	N
33231201	Fabricated structural iron, steel, and aluminum including truss plates.....	X	81 172	X	N
00970099	All other materials and components, parts, containers, and supplies.....	X	66 353	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.....	X	589 416	X	N
<b>321219, RECONSTITUTED WOOD PRODUCT MFG</b>					
11331019	Logs and bolts..... mil bd ft Intl 1/4 in. scale..	S	80 891	D	D
11331021	Pulpwood..... 1,000 standard cords..	<sup>P</sup> 6 811.0	400 579	D	D
32100015	Chips, slabs, edgings, sawdust, and other wood waste, except planer shavings..... 1,000 s tons..	8 062.4	243 438	5 767.8	174 538
32100017	Planer shavings..... 1,000 s tons..	4 258.9	156 008	4 376.2	139 696
32121909	Hardboard.....	X	91 365	X	37 827
32121907	Medium density fiberboard (MDF)..... mil sq ft (3/4 in. basis)..	S	62 923	<sup>P</sup> 93.3	30 095
32121903	Particleboard (wood)..... mil sq ft (3/4 in. basis)..	S	186 598	<sup>P</sup> 477.0	106 384
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products..... 1,000 gallons..	<sup>P</sup> 8 083.6	69 488	<sup>Q</sup> 7 496.9	62 169
32552007	Urethane adhesives..... mil lb (dry basis)..	S	36 078	N	N
32521141	Urea and melamine resins..... mil lb (dry basis)..	<sup>P</sup> 2 465.1	331 136	<sup>P</sup> 1 617.2	184 524

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>321219, RECONSTITUTED WOOD PRODUCT MFG—Con.</b>					
32521143	Phenolic and other tar acid resins . . . . . mil lb (dry basis) . .	9446.9	172 516	9462.2	114 166
32410009	Petroleum wax . . . . . mil lb (dry basis) . .	9334.2	61 173	P266.1	44 672
00190054	Vinyl and paper overlays . . . . . mil sq ft sm . .	S	98 570	P1 688.8	86 769
32521113	All other plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	8 823	X	27 679
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	272 641	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	256 926	X	97 270
<b>321911, WOOD WINDOW &amp; DOOR MFG</b>					
32100023	Hardwood rough lumber . . . . .	X	80 222	X	N
32100029	Softwood rough lumber . . . . .	X	140 502	X	N
32100027	Hardwood dressed lumber . . . . .	X	61 840	X	N
32100033	Softwood dressed lumber . . . . .	X	178 088	X	N
32191201	Softwood cut stock . . . . .	X	579 073	X	N
32191203	Hardwood cut stock and dimension, excluding furniture frames . . . . .	X	66 552	X	N
32121101	Hardwood plywood . . . . .	X	120 095	X	N
32121201	Softwood plywood . . . . .	X	35 032	X	N
32121105	Hardwood veneer . . . . .	X	45 278	X	N
32121903	Particleboard (wood) . . . . .	X	56 581	X	N
32121909	Hardboard . . . . .	X	59 816	X	N
32121907	Medium density fiberboard (MDF) . . . . .	X	40 458	X	N
32552003	Glues and adhesives . . . . .	X	54 397	X	N
32721103	Glass (float, sheet and plate) . . . . .	X	307 949	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	122 953	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	37 756	X	N
32351009	Builders' hardware (including door locks, locksets, lock trim, screen hardware, etc.) . . . . .	X	210 947	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	561 695	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 739 328	X	N
<b>321912, CUT STOCK, RESAWING LUMBER, &amp; PLANING</b>					
11311000	Stumpage cost (cost of timber, excluding land, cut and consumed at same establishment) . . . . .	X	26 335	X	N
11331015	Hardwood logs and bolts . . . . . mil bd ft Intl 1/4 in. scale . .	S	96 710	N	N
11331017	Softwood logs and bolts . . . . . mil bd ft Intl 1/4 in. scale . .	S	115 983	N	N
32100023	Hardwood rough lumber . . . . . mil bd ft . .	9795.4	589 895	N	N
32100029	Softwood rough lumber . . . . . mil bd ft . .	2 286.9	935 600	N	N
32100027	Hardwood dressed lumber . . . . . mil bd ft . .	S	171 834	N	N
32100033	Softwood dressed lumber . . . . . mil bd ft . .	S	751 339	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	117 343	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	794 287	X	N
<b>321918, OTHER MILLWORK (INCLUDING FLOORING)</b>					
11331015	Hardwood logs and bolts . . . . .	X	80 927	X	N
32100023	Hardwood rough lumber . . . . .	X	562 285	X	N
32100029	Softwood rough lumber . . . . .	X	217 457	X	N
32100027	Hardwood dressed lumber . . . . .	X	78 346	X	N
32100033	Softwood dressed lumber . . . . .	X	419 594	X	N
32191201	Softwood cut stock . . . . .	X	75 824	X	N
32552003	Glues and adhesives . . . . .	X	14 783	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	290 208	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	687 109	X	N
<b>321920, WOOD CONTAINER &amp; PALLET MFG</b>					
11331019	Logs and bolts . . . . . mil bd ft Intl 1/4 in. scale . .	S	148 944	N	N
32100023	Hardwood rough lumber . . . . .	X	401 513	X	N
32100029	Softwood rough lumber . . . . . mil bd ft . .	S	131 836	N	N
32100027	Hardwood dressed lumber . . . . . mil bd ft . .	P329.4	103 140	N	N
32100033	Softwood dressed lumber . . . . . mil bd ft . .	9592.4	153 095	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	S	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	S	X	N
<b>321991, MANUFACTURED HOME (MOBILE HOME) MFG</b>					
33100001	Metal mill shapes and forms, including castings (steel, aluminum, etc.) . . . . .	X	59 373	X	40 879
33232203	Steel siding . . . . .	X	51 962	X	N
33232205	Aluminum siding . . . . .	X	28 096	X	N
32619903	Vinyl siding . . . . .	X	139 996	X	N
33291300	Metal plumbing fixtures, fittings, and trim (including enameled) (except forgings) . . . . .	X	97 339	X	40 095
33232101	Metal doors and door units, windows and window units . . . . .	X	247 026	X	112 290
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	87 779	X	42 383
32612200	Plastics fabricated pipe and pipe fittings . . . . .	X	121 013	X	50 103
32121003	Plywood . . . . .	X	79 078	X	50 350
32121903	Particleboard (wood) . . . . .	X	153 135	X	68 915
32121905	Oriented strand board (OSB) and waferboard . . . . .	X	152 431	X	64 255
32742001	Gypsum building board: 5/16 inch thick . . . . .	X	234 253	X	N
32742003	Gypsum building board: greater than 5/16 inch thick . . . . .	X	85 598	X	N
32100021	Dressed lumber . . . . .	X	681 978	X	273 147
32191003	Wood millwork, including molding, doors, and windows . . . . .	X	153 702	X	67 522
33711000	Kitchen cabinets, wood . . . . .	X	133 473	X	50 443
31411001	Floor coverings, textile . . . . .	X	189 691	X	83 307
32619200	Linoleum and other hard-surfaced floor covering . . . . .	X	70 529	X	29 272
00190000	Heating equipment and air conditioners, including heat pumps . . . . .	X	111 867	X	58 393
001900B3	Current-carrying wiring devices, including switches, connectors, lampholders, etc. . . . .	X	143 996	X	74 063
32799303	Mineral fiber blankets, batts, and boards . . . . .	X	109 463	X	64 778
00190046	Loose fill insulating materials (mineral fiber, cellulose fiber, and other) . . . . .	X	47 272	X	28 551
33251009	Builders' hardware (including door locks, locksets, lock trim, screen hardware, etc.) . . . . .	X	72 173	X	30 286
33710003	Household-type furniture, including tables, sofas, beds, mattresses, etc. . . . .	X	47 429	X	32 953
001900B2	Household appliances, including refrigerators, cooking equipment, and other household appliances, exc. air conditioners . . . . .	X	307 029	X	132 740

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>321991, MANUFACTURED HOME (MOBILE HOME) MFG—Con.</b>				
32621003	Pneumatic tires and inner tubes .....	X	81 633	X	42 627
33600003	Trailer axles, wheels, brakes, undercarriages, and other metal vehicular parts .....	X	325 879	X	157 187
00970099	All other materials and components, parts, containers, and supplies .....	X	457 579	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	1 527 376	X	564 596
	<b>321992, PREFABRICATED WOOD BUILDING MFG</b>				
32100023	Hardwood rough lumber .....	X	44 019	X	24 620
32100029	Softwood rough lumber .....	S	92 578	189.8	60 821
32100027	Hardwood dressed lumber .....	S	17 254	S	12 495
32100033	Softwood dressed lumber .....	S	229 587	325.0	127 951
32121201	Softwood plywood .....	S	48 010	113.9	37 733
32742005	Gypsum building board .....	X	21 810	X	16 734
33251009	Builders' hardware (including door locks, locksets, lock trim, screen hardware, etc.) .....	X	23 735	X	15 525
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.) .....	X	15 863	X	13 474
00190056	Windows and window units, including wood, metal, and vinyl .....	S	63 486	P405.8	54 921
32191100	Wood doors and door units .....	X	30 150	X	14 975
33232103	Metal doors and door units .....	91.4	16 647	83.2	13 688
33711000	Kitchen cabinets, wood .....	X	40 253	X	30 311
32121901	Reconstituted wood products, including particleboard, oriented strandboard, medium density fiberboard, and hardboard .....	X	46 053	X	22 366
33232207	Metal siding, including aluminum, steel .....	X	59 912	X	38 987
33231201	Fabricated structural iron, steel, and aluminum including truss plates .....	X	19 585	X	15 482
001900B3	Current-carrying wiring devices, including switches, connectors, lampholders, etc. ....	X	17 671	X	17 471
31411001	Floor coverings, textile .....	X	17 818	X	18 550
00970099	All other materials and components, parts, containers, and supplies .....	X	170 546	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	624 666	X	448 394
	<b>321999, ALL OTHER MISCELLANEOUS WOOD PRODUCT MFG</b>				
11331015	Hardwood logs and bolts .....	S	72 653	N	N
32100023	Hardwood rough lumber .....	SS	85 519	N	N
32100029	Softwood rough lumber .....	SS	102 115	N	N
32100027	Hardwood dressed lumber .....	SS	21 398	N	N
32100033	Softwood dressed lumber .....	SS	71 185	N	N
32191203	Hardwood cut stock and dimension, excluding furniture frames .....	X	30 131	X	N
32100007	Chips, slabs, edgings, shavings, sawdust, and other wood waste .....	X	33 108	X	N
32121101	Hardwood plywood .....	S	27 547	X	N
32121201	Softwood plywood .....	S	22 259	N	N
32121901	Reconstituted wood products, including particleboard, oriented strandboard, medium density fiberboard, and hardboard .....	X	21 266	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products .....	91 270.6	15 982	N	N
33200005	Fabricated metal products, including forgings .....	X	23 068	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	40 060	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	194 065	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	822 336	X	N
	<b>322110, PULP MILLS</b>				
11331005	Spruce and true fir pulpwood bolts and logs .....	D	D	D	D
11331007	Hemlock pulpwood bolts and logs .....	D	D	1 183.8	94 864
11331009	Southern pine pulpwood bolts and logs .....	D	D	4 669.2	301 477
11331023	Other softwood pulpwood bolts and logs, including Douglas fir and Jack pine .....	D	D	D	D
32100009	Softwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues .....	3 026.2	257 514	4 940.6	459 838
11331011	Southern mixed hardwood pulpwood bolts and logs .....	D	D	2 866.6	175 296
11331025	Other hardwood pulpwood bolts and logs .....	D	D	1 270.6	80 636
32100011	Hardwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues .....	1 199.7	94 581	1 939.1	131 853
32518103	Chlorine (100 percent Cl basis) .....	63.9	13 576	268.6	24 197
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) .....	430.3	79 515	688.8	178 918
32518823	Sodium chlorate (100 percent NaClO3) .....	169.8	54 820	281.6	96 327
32510007	Other sodium compounds .....	X	11 765	X	10 916
32518813	Aluminum sulfate (17 percent Al2O3) .....	910.8	1 170	20.6	2 340
32599811	Rosin sizing .....	-	-	9.1	3 801
32741003	Lime .....	132.5	8 815	314.1	21 055
21232400	Kaolin and ball clay .....	D	D	114.8	17 317
31122113	Starch .....	D	D	67.2	12 177
32521131	Synthetic resins .....	D	D	D	D
32513103	Titanium dioxide, composite and pure (100 percent TiO2) .....	D	D	16.7	14 371
32518829	Calcium carbonate, precipitated (100 percent CaCO2) .....	-	-	D	D
32500009	All other chemicals, including organic .....	X	98 221	X	155 742
32210029	Woodpulp produced at affiliated or associated mills at other locations .....	-	-	D	D
32210031	Woodpulp purchased market wood pulp .....	D	D	42.6	21 261
00190006	Mixed wastepaper, except plant's own broke paper .....	630.4	79 372	D	D
00190007	Mechanical news wastepaper, except plant's own broke paper .....	-	-	N	N
00190072	Other mechanical wastepaper, except plant's own broke paper .....	-	-	N	N
00190073	Corrugated wastepaper, including kraft, except plant's own broke paper .....	D	D	14.2	925
00190009	High grade pulp substitutes wastepaper, except plant's own broke paper .....	D	D	D	D
00190010	High grade deinking wastepaper, except plant's own broke paper .....	D	D	D	D

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>322110, PULP MILLS—Con.</b>					
31122305	Cotton linters (net weight) . . . . . mil lb..	D	D	429.7	44 872
32210033	Linter pulp . . . . . 1,000 s tons..	—	—	N	N
00190015	Other fibrous materials, including rags, straw, and bagasse . . . . . 1,000 s tons..	D	D	D	D
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	—	X	N
31323001	Nonwoven fabrics . . . . . mil sq yd..	—	—	N	N
001900A2	Packaging paper and plastics film, coated, laminated, printed, etc. . . . .	X	5 398	X	N
32552003	Glues and adhesives . . . . . mil lb..	.4	492	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	D	X	3 278
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	156 863	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	24 614	X	8 660
<b>322121, PAPER (EXCEPT NEWSPRINT) MILLS</b>					
11331005	Spruce and true fir pulpwood bolts and logs . . . . . 1,000 standard cords..	1 203.9	130 244	N	N
11331007	Hemlock pulpwood bolts and logs . . . . . 1,000 standard cords..	683.1	54 854	N	N
11331009	Southern pine pulpwood bolts and logs . . . . . 1,000 standard cords..	10 905.4	572 060	N	N
11331023	Other softwood pulpwood bolts and logs, including Douglas fir and Jack pine . . . . . 1,000 standard cords..	2 368.6	122 711	N	N
32100009	Softwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues . . . . . 1,000 standard cords..	10 211.5	681 989	N	N
11331011	Southern mixed hardwood pulpwood bolts and logs . . . . . 1,000 standard cords..	P7 743.4	431 852	N	N
11331025	Other hardwood pulpwood bolts and logs . . . . . 1,000 standard cords..	8 933.0	489 739	N	N
32100011	Hardwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues . . . . . 1,000 standard cords..	8 416.1	562 000	N	N
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	365.0	82 021	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	1 257.8	247 702	N	N
32518823	Sodium chlorate (100 percent NaClO3) . . . . . 1,000 s tons..	682.9	241 576	N	N
32510007	Other sodium compounds . . . . .	X	45 345	X	N
32518813	Aluminum sulfate (17 percent Al2O3) . . . . . 1,000 s tons..	149.6	19 616	N	N
32599811	Rosin sizing . . . . . mil lb (dry basis)..	188.5	93 225	N	N
32741003	Lime . . . . . 1,000 s tons..	734.3	40 967	N	N
21232400	Kaolin and ball clay . . . . . 1,000 s tons..	2 036.2	322 274	N	N
31122113	Starch . . . . . mil lb..	2 192.1	419 869	N	N
32521131	Synthetic resins . . . . . mil lb..	425.1	279 707	N	N
32513103	Titanium dioxide, composite and pure (100 percent TiO2) . . . . . 1,000 s tons..	382.7	326 403	N	N
32518829	Calcium carbonate, precipitated (100 percent CaCO2) . . . . . 1,000 s tons..	1 832.8	261 717	N	N
32500009	All other chemicals, including organic . . . . .	X	1 473 728	X	N
32210029	Woodpulp produced at affiliated or associated mills at other locations . . . . . 1,000 s tons (dry basis)..	1 980.7	889 868	N	N
32210031	Woodpulp purchased market wood pulp . . . . . 1,000 s tons (dry basis)..	7 825.0	3 259 888	N	N
00190006	Mixed wastepaper, except plant's own broke paper . . . . . 1,000 s tons..	1 819.1	367 079	N	N
00190007	Mechanical news wastepaper, except plant's own broke paper . . . . . 1,000 s tons..	446.6	22 997	N	N
00190072	Other mechanical wastepaper, except plant's own broke paper . . . . . 1,000 s tons..	313.3	38 654	N	N
00190073	Corrugated wastepaper, including kraft, except plant's own broke paper . . . . . 1,000 s tons..	1 597.1	235 975	N	N
00190009	High grade pulp substitutes wastepaper, except plant's own broke paper . . . . . 1,000 s tons..	439.7	133 513	N	N
00190010	High grade deinking wastepaper, except plant's own broke paper . . . . . 1,000 s tons..	P1 448.3	282 329	N	N
31122305	Cotton linters (net weight) . . . . . mil lb..	470.0	38 509	N	N
32210033	Linter pulp . . . . . 1,000 s tons..	S	27 455	N	N
00190015	Other fibrous materials, including rags, straw, and bagasse . . . . . 1,000 s tons..	284.2	106 516	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	52 209	X	N
31323001	Nonwoven fabrics . . . . . mil sq yd..	S	172 684	N	N
001900A2	Packaging paper and plastics film, coated, laminated, printed, etc. . . . .	X	413 098	X	N
32552003	Glues and adhesives . . . . . mil lb..	100.9	76 275	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	481 771	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	3 332 075	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	792 906	X	N
<b>322122, NEWSPRINT MILLS</b>					
11331005	Spruce and true fir pulpwood bolts and logs . . . . . 1,000 standard cords..	819.1	73 149	N	N
11331007	Hemlock pulpwood bolts and logs . . . . . 1,000 standard cords..	D	D	N	N
11331009	Southern pine pulpwood bolts and logs . . . . . 1,000 standard cords..	3 884.2	255 406	N	N
11331023	Other softwood pulpwood bolts and logs, including Douglas fir and Jack pine . . . . . 1,000 standard cords..	D	D	N	N
32100009	Softwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues . . . . . 1,000 standard cords..	1 855.7	148 846	N	N
11331011	Southern mixed hardwood pulpwood bolts and logs . . . . . 1,000 standard cords..	336.6	20 127	N	N
11331025	Other hardwood pulpwood bolts and logs . . . . . 1,000 standard cords..	D	D	N	N
32100011	Hardwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues . . . . . 1,000 standard cords..	589.0	38 462	N	N
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	56.1	13 330	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	165.8	28 261	N	N
32518823	Sodium chlorate (100 percent NaClO3) . . . . . 1,000 s tons..	34.3	12 485	N	N
32510007	Other sodium compounds . . . . .	X	54 195	X	N
32518813	Aluminum sulfate (17 percent Al2O3) . . . . . 1,000 s tons..	83.3	14 944	N	N
32599811	Rosin sizing . . . . . mil lb (dry basis)..	13.9	5 460	N	N
32741003	Lime . . . . . 1,000 s tons..	79.3	5 455	N	N
21232400	Kaolin and ball clay . . . . . 1,000 s tons..	249.0	51 317	N	N
31122113	Starch . . . . . mil lb..	44.6	11 256	N	N
32521131	Synthetic resins . . . . . mil lb..	D	D	N	N
32513103	Titanium dioxide, composite and pure (100 percent TiO2) . . . . . 1,000 s tons..	3.2	2 878	N	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)	
<b>322122, NEWSPRINT MILLS—Con.</b>						
32518829	Calcium carbonate, precipitated (100 percent CaCO2) . . . . .	1,000 s tons..	13.8	2 579	N	N
32500009	All other chemicals, including organic . . . . .		X	245 177	X	N
32210029	Woodpulp produced at affiliated or associated mills at other locations . . . . .	1,000 s tons (dry basis)..		D	N	N
32210031	Woodpulp purchased market wood pulp . . . . .	1,000 s tons (dry basis)..		D	N	N
00190006	Mixed wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	346.1	169 226	N	N
00190007	Mechanical news wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	273.1	26 303	N	N
00190072	Other mechanical wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	3 123.7	229 807	N	N
00190073	Corrugated wastepaper, including kraft, except plant's own broke paper . . . . .	1,000 s tons..	276.4	19 707	N	N
00190009	High grade pulp substitutes wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	152.4	22 893	N	N
00190010	High grade deinking wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	D	D	N	N
			128.4	13 009	N	N
31122305	Cotton linters (net weight) . . . . .	mil lb..	—	—	N	N
32210033	Linters pulp . . . . .	1,000 s tons..	—	—	N	N
00190015	Other fibrous materials, including rags, straw, and bagasse . . . . .	1,000 s tons..	—	—	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .		X	D	X	N
31323001	Nonwoven fabrics . . . . .	mil sq yd..	—	—	N	N
001900A2	Packaging paper and plastics film, coated, laminated, printed, etc. . . . .		X	36 124	X	N
32552003	Glues and adhesives . . . . .	mil lb..	D	D	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .		X	—	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	305 116	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	36 429	X	N
<b>322130, PAPERBOARD MILLS</b>						
11331005	Spruce and true fir pulpwood bolts and logs . . . . .	1,000 standard cords..		D	480.6	39 628
11331007	Hemlock pulpwood bolts and logs . . . . .	1,000 standard cords..		D	D	D
11331009	Southern pine pulpwood bolts and logs . . . . .	1,000 standard cords..	16 584.7	1 409 503	15 610.9	1 138 011
11331023	Other softwood pulpwood bolts and logs, including Douglas fir and Jack pine . . . . .	1,000 standard cords..		D	769.4	100 871
32100009	Softwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues . . . . .	1,000 standard cords..	P13 302.1	1 031 638	10 715.9	794 666
11331011	Southern mixed hardwood pulpwood bolts and logs . . . . .	1,000 standard cords..	4 745.9	363 157	3 980.5	232 182
11331025	Other hardwood pulpwood bolts and logs . . . . .	1,000 standard cords..	P1 455.7	97 329	1 214.1	84 241
32100011	Hardwood pulpwood wood chips, slabs, cores, sawdust, bark, and other mill residues . . . . .	1,000 standard cords..	7 364.0	401 339	4 158.2	266 187
32518103	Chlorine (100 percent Cl basis) . . . . .	1,000 s tons..	130.9	29 133	172.8	20 904
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . .	1,000 s tons..	894.3	142 395	717.6	174 132
32518823	Sodium chlorate (100 percent NaClO3) . . . . .	1,000 s tons..	254.8	89 849	142.5	50 507
32510007	Other sodium compounds . . . . .		X	39 502	X	52 836
32518813	Aluminum sulfate (17 percent Al2O3) . . . . .	1,000 s tons..	292.1	29 152	246.9	26 510
32599811	Rosin sizing . . . . .	mil lb (dry basis)..	P143.7	75 234	P142.7	51 373
32741003	Lime . . . . .	1,000 s tons..	510.6	33 374	361.3	23 464
21232400	Kaolin and ball clay . . . . .	1,000 s tons..	526.1	70 909	405.8	56 346
31122113	Starch . . . . .	mil lb..	879.7	165 875	496.4	103 792
32521131	Synthetic resins . . . . .	mil lb..	298.0	145 941	214.9	90 341
32513103	Titanium dioxide, composite and pure (100 percent TiO2) . . . . .	mil lb..	85.2	89 338	95.1	85 297
32518829	Calcium carbonate, precipitated (100 percent CaCO2) . . . . .	1,000 s tons..	Q201.7	27 572	92.7	9 783
32500009	All other chemicals, including organic . . . . .		X	541 253	X	410 434
32210029	Woodpulp produced at affiliated or associated mills at other locations . . . . .	1,000 s tons (dry basis)..	156.9	72 515	D	D
32210031	Woodpulp purchased market wood pulp . . . . .	1,000 s tons (dry basis)..		222.5	101 614	86.0
00190006	Mixed wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	P1 951.9	71 920	Q1 215.2	44 374
00190007	Mechanical news wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	1 269.6	50 023	1 267.6	47 341
00190072	Other mechanical wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	821.4	51 526	548.4	31 460
00190073	Corrugated wastepaper, including kraft, except plant's own broke paper . . . . .	1,000 s tons..	16 088.0	1 725 959	10 020.5	599 343
00190009	High grade pulp substitutes wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	662.9	110 750	546.4	117 144
00190010	High grade deinking wastepaper, except plant's own broke paper . . . . .	1,000 s tons..	122.1	17 710	189.5	35 157
31122305	Cotton linters (net weight) . . . . .	mil lb..	D	D	D	D
32210033	Linters pulp . . . . .	1,000 s tons..	D	D	N	N
00190015	Other fibrous materials, including rags, straw, and bagasse . . . . .	1,000 s tons..	D	D	D	D
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .		X	D	X	N
31323001	Nonwoven fabrics . . . . .	mil sq yd..	D	D	N	N
001900A2	Packaging paper and plastics film, coated, laminated, printed, etc. . . . .		X	40 769	X	N
32552003	Glues and adhesives . . . . .	mil lb..	S	977	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .		X	91 427	X	57 546
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	1 203 162	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	307 734	X	99 131
<b>322211, CORRUGATED &amp; SOLID FIBER BOX MFG</b>						
32210005	Paper and paperboard, except boxes and containers . . . . .	1,000 s tons..	P32 394.3	11 407 691	P27 070.2	10 014 502
32610021	Fabricated plastics products, including closures, ends, film, and strapping, etc. . . . .		X	125 333	X	47 450
33120017	Steel sheet and strip, including tin plate . . . . .		X	D	X	N
33131503	Aluminum sheet, plate, and foil . . . . .		X	D	X	N
33211500	Metal closures and crowns for containers . . . . .		X	1 438	X	N
32410009	Petroleum wax . . . . .	mil lb..	Q346.2	120 360	Q286.4	95 045
32552003	Glues and adhesives . . . . .		X	202 072	X	214 446
32591003	Printing ink . . . . .	mil lb..	S	153 719	S	132 162
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	858 887	X	599 358
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	1 913 450	X	1 119 189

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>322212, FOLDING PAPERBOARD BOX MFG</b>					
32210005	Paper and paperboard, except boxes and containers . . . . . 1,000 s tons . .	94 978.8	3 071 644	94 718.2	2 947 345
32610021	Fabricated plastics products, including closures, ends, film, and strapping, etc. . . . .	X	50 322	X	29 969
33120017	Steel sheet and strip, including tin plate . . . . .	X	D	X	N
33131503	Aluminum sheet, plate, and foil . . . . .	X	20 303	X	N
33211500	Metal closures and crowns for containers . . . . .	X	D	X	N
32410009	Petroleum wax . . . . . mil lb. . . . .	12.3	6 440	S	5 667
32552003	Glues and adhesives . . . . .	X	37 520	X	29 704
32591003	Printing ink . . . . . mil lb. . . . .	P67.5	210 940	985.2	219 414
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	496 848	X	432 368
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	482 868	X	355 813
<b>322213, SETUP PAPERBOARD BOX MFG</b>					
32210005	Paper and paperboard, except boxes and containers . . . . . 1,000 s tons . .	S	109 286	S	85 936
32610021	Fabricated plastics products, including closures, ends, film, and strapping, etc. . . . .	X	5 307	X	2 343
33120017	Steel sheet and strip, including tin plate . . . . .	X	27	X	N
33131503	Aluminum sheet, plate, and foil . . . . .	X	713	X	N
33211500	Metal closures and crowns for containers . . . . .	X	187	X	N
32410009	Petroleum wax . . . . . mil lb. . . . .	-	-	N	N
32552003	Glues and adhesives . . . . .	X	3 013	S	3 721
32591003	Printing ink . . . . . mil lb. . . . .	S	1 166	X	2 293
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	31 655	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	41 670	X	55 699
<b>322214, FIBER CAN, TUBE, DRUM, &amp; SIMILAR PRODUCTS MFG</b>					
32210005	Paper and paperboard, except boxes and containers . . . . . 1,000 s tons . .	P1 590.7	683 671	1 112.1	423 980
32610021	Fabricated plastics products, including closures, ends, film, and strapping, etc. . . . .	X	21 771	X	13 816
33120017	Steel sheet and strip, including tin plate . . . . .	X	60 738	X	N
33131503	Aluminum sheet, plate, and foil . . . . .	X	6 508	X	N
33211500	Metal closures and crowns for containers . . . . .	X	81 783	X	N
32410009	Petroleum wax . . . . . mil lb. . . . .	S	280	S	1 105
32552003	Glues and adhesives . . . . .	X	48 312	X	31 140
32591003	Printing ink . . . . . mil lb. . . . .	S	1 119	S	5 242
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	218 784	X	239 860
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	101 694	X	142 270
<b>322215, NONFOLDING SANITARY FOOD CONTAINER MFG</b>					
32210005	Paper and paperboard, except boxes and containers . . . . . 1,000 s tons . .	P1 330.6	1 031 160	1 236.0	975 792
32610021	Fabricated plastics products, including closures, ends, film, and strapping, etc. . . . .	X	42 349	X	37 628
33120017	Steel sheet and strip, including tin plate . . . . .	X	D	X	N
33131503	Aluminum sheet, plate, and foil . . . . .	X	D	X	N
33211500	Metal closures and crowns for containers . . . . .	X	-	X	N
32410009	Petroleum wax . . . . . mil lb. . . . .	90.5	29 168	115.6	36 247
32552003	Glues and adhesives . . . . .	X	D	X	5 794
32591003	Printing ink . . . . . mil lb. . . . .	P11.3	37 716	P12.9	34 176
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	172 252	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	62 689	X	116 818
<b>322221, COATED &amp; LAMINATED PACKAGING PAPER &amp; PLASTICS FILM MFG</b>					
32212007	Paper . . . . . 1,000 s tons . .	533.6	511 054	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb. . . . .	135.2	76 944	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	76 512	X	N
33131509	Aluminum foil, plain . . . . . mil lb. . . . .	23.7	42 849	N	N
32552003	Glues and adhesives . . . . .	X	10 785	X	N
32591003	Printing ink . . . . . mil lb. . . . .	P12.9	33 837	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	10 636	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	87 323	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	50 659	X	N
<b>322222, COATED &amp; LAMINATED PAPER MFG</b>					
32212007	Paper . . . . . 1,000 s tons . .	92 101.7	2 249 078	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	310 534	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	379 854	X	N
31332007	Coated or laminated fabrics, including vinyl coated . . . . .	X	178 330	X	N
32552003	Glues and adhesives . . . . .	X	467 559	X	N
32591003	Printing ink . . . . .	X	75 126	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	145 991	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 090 387	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	611 656	X	N
<b>322223, PLASTICS, FOIL, &amp; COATED PAPER BAG MFG</b>					
32212007	Paper . . . . . 1,000 s tons . .	P124.5	129 621	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb. . . . .	P12.8	7 392	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	19 865	X	N
33131509	Aluminum foil, plain . . . . . mil lb. . . . .	3.1	4 333	N	N
32552003	Glues and adhesives . . . . .	X	11 919	X	N
32591003	Printing ink . . . . . mil lb. . . . .	3.4	8 668	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	6 408	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	28 679	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	13 548	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>322224, UNCOATED PAPER &amp; MULTIWALL BAG MFG</b>					
32212007	Paper ..... 1,000 s tons..	P1 700.2	1 030 582	P2 380.4	1 318 532
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb..	P104.0	50 380	P227.0	91 529
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	D	X	47 076
33131509	Aluminum foil, plain ..... mil lb..	D	D	N	N
32552003	Glues and adhesives .....	X	49 481	X	44 768
32591003	Printing ink ..... mil lb..	*34.1	67 670	P40.0	64 570
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	29 837	X	25 900
00970099	All other materials and components, parts, containers, and supplies .....	X	108 865	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	181 369	X	34 529
<b>322225, LAMINATED ALUMINUM FOIL MFG FOR FLEXIBLE PACKAGING USES</b>					
33131507	Aluminum and aluminum-base alloy plain foil ..... mil lb..	P82.0	120 025	N	N
32222503	Aluminum foil, converted (quantity represents metal content) ..... mil lb..	*82.9	135 996	N	N
33200089	Other fabricated metal products (except forgings) ..... mil lb..	D	D	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	250 395	X	N
32500069	Other chemicals and allied products ..... mil lb..	D	D	N	N
32552005	Glues and adhesives, including synthetic resin adhesives .....	*30.3	39 737	N	N
32591003	Printing ink ..... mil lb..	27.6	57 721	N	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	117 235	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	148 324	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	21 550	X	N
<b>322226, SURFACE-COATED PAPERBOARD MFG</b>					
32210005	Paper and paperboard, except boxes and containers ..... 1,000 s tons..	1 023.7	598 591	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	94 274	X	N
32552003	Glues and adhesives .....	X	17 001	X	N
32591003	Printing ink .....	X	3 470	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	7 678	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	36 970	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	8 977	X	N
<b>322231, DIE-CUT PAPER &amp; PAPERBOARD OFFICE SUPPLIES MFG</b>					
32210005	Paper and paperboard, except boxes and containers ..... 1,000 s tons..	*913.4	638 487	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	16 501	X	N
32552003	Glues and adhesives .....	X	5 943	X	N
32591003	Printing ink .....	X	9 300	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	50 617	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	72 861	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	220 828	X	N
<b>322232, ENVELOPE MFG</b>					
32210005	Paper and paperboard, except boxes and containers ..... 1,000 s tons..	P1 312.3	1 012 504	*1 110.0	787 531
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	95 119	X	N
32552003	Glues and adhesives .....	X	39 940	X	36 545
32591003	Printing ink .....	X	26 294	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	109 551	X	72 049
00970099	All other materials and components, parts, containers, and supplies .....	X	112 206	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	267 673	X	220 061
<b>322233, STATIONERY, TABLET, &amp; RELATED PRODUCT MFG</b>					
00190005	Recovered paper, all types .....	X	D	X	N
32210005	Paper and paperboard, except boxes and containers ..... 1,000 s tons..	840.0	669 517	*594.2	396 382
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	7 809	X	N
31332007	Coated or laminated fabrics, including vinyl coated .....	X	25 235	X	4 618
32552003	Glues and adhesives .....	X	7 987	X	4 688
32591003	Printing ink .....	X	3 342	X	3 953
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	80 506	X	21 729
00970099	All other materials and components, parts, containers, and supplies .....	X	76 756	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	66 037	X	155 240
<b>322291, SANITARY PAPER PRODUCT MFG</b>					
32210027	Woodpulp (air dry basis) ..... 1,000 s tons..	303.6	195 016	N	N
32212007	Paper ..... 1,000 s tons..	P978.8	778 926	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb..	95.2	94 409	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	275 462	X	N
31323001	Nonwoven fabrics ..... mil sq yd..	P5 731.8	471 836	N	N
001900A2	Packaging paper and plastics film, coated, laminated, printed, etc. ....	X	119 935	X	N
32552003	Glues and adhesives ..... mil lb..	180.2	115 351	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	166 655	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	580 862	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	363 324	X	N
<b>322299, ALL OTHER CONVERTED PAPER PRODUCT MFG</b>					
00190005	Recovered paper, all types .....	X	39 522	X	N
32210005	Paper and paperboard, except boxes and containers .....	X	589 513	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	5 135	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	17 985	X	N
31332007	Coated or laminated fabrics, including vinyl coated .....	X	6 363	X	N
32552003	Glues and adhesives .....	X	17 269	X	N
32591003	Printing ink .....	X	5 533	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	39 844	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>322299, ALL OTHER CONVERTED PAPER PRODUCT MFG—Con.</b>				
00970099	All other materials and components, parts, containers, and supplies	X	394 654	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	445 057	X	N
	<b>323110, COMMERCIAL LITHOGRAPHIC PRINTING</b>				
32212203	Newsprint	X	1 218 520	X	N
32212009	Uncoated paper in sheets	X	1 142 820	X	N
32212011	Uncoated paper in rolls	X	2 075 071	X	N
32200011	Coated paper in sheets	X	1 867 288	X	N
32200013	Coated paper in rolls	X	2 247 303	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc.	X	173 999	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers	X	32 135	X	N
32552003	Glues and adhesives	X	40 567	X	N
32591003	Printing ink	X	1 004 209	X	N
32599203	Light sensitive films and papers	X	226 323	X	N
32599201	Unexposed photosensitive printing plates	X	154 106	X	N
32312201	Printing plates, prepared for printing	X	187 253	X	N
32312209	Engraved printing cylinders for gravure printing	X	2 241	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	151 982	X	N
32223200	Purchased envelopes	X	213 641	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 136 750	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	4 786 970	X	N
	<b>323111, COMMERCIAL GRAVURE PRINTING</b>				
32212203	Newsprint	X	D	X	N
32212009	Uncoated paper in sheets	X	36 411	X	N
32212011	Uncoated paper in rolls	X	649 889	X	N
32200011	Coated paper in sheets	X	D	X	N
32200013	Coated paper in rolls	X	228 168	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc.	X	43 830	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers	X	D	X	N
32552003	Glues and adhesives	X	6 112	X	N
32591003	Printing ink	X	447 335	X	N
32599203	Light sensitive films and papers	X	2 163	X	N
32599201	Unexposed photosensitive printing plates	X	1 982	X	N
32312201	Printing plates, prepared for printing	X	3 020	X	N
32312209	Engraved printing cylinders for gravure printing	X	11 082	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	16 636	X	N
32223200	Purchased envelopes	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	152 202	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	170 766	X	N
	<b>323112, COMMERCIAL FLEXOGRAPHIC PRINTING</b>				
32212203	Newsprint	X	D	X	N
32212009	Uncoated paper in sheets	X	14 175	X	N
32212011	Uncoated paper in rolls	X	97 609	X	N
32200011	Coated paper in sheets	X	11 700	X	N
32200013	Coated paper in rolls	X	164 891	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc.	X	624 832	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers	X	D	X	N
32552003	Glues and adhesives	X	16 860	X	N
32591003	Printing ink	X	104 252	X	N
32599203	Light sensitive films and papers	X	6 398	X	N
32599201	Unexposed photosensitive printing plates	X	7 415	X	N
32312201	Printing plates, prepared for printing	X	31 634	X	N
32312209	Engraved printing cylinders for gravure printing	X	3 332	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	19 257	X	N
32223200	Purchased envelopes	X	2 254	X	N
00970099	All other materials and components, parts, containers, and supplies	X	317 464	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	451 914	X	N
	<b>323113, COMMERCIAL SCREEN PRINTING</b>				
32212203	Newsprint	X	1 222	X	N
32212009	Uncoated paper in sheets	X	13 339	X	N
32212011	Uncoated paper in rolls	X	2 684	X	N
32200011	Coated paper in sheets	X	27 323	X	N
32200013	Coated paper in rolls	X	7 130	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc.	X	196 422	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers	X	4 727	X	N
32552003	Glues and adhesives	X	13 800	X	N
32591003	Printing ink	X	81 158	X	N
32599203	Light sensitive films and papers	X	8 009	X	N
32599201	Unexposed photosensitive printing plates	X	655	X	N
32312201	Printing plates, prepared for printing	X	3 043	X	N
32312209	Engraved printing cylinders for gravure printing	X	D	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	13 893	X	N
32223200	Purchased envelopes	X	1 977	X	N
31321003	Cotton broadwoven fabrics (piece goods)	S	33 286	X	N
31321013	Polyester broadwoven fabrics (piece goods)	S	10 520	X	N
31321009	Rayon and acetate broadwoven fabrics (piece goods)	D	D	X	N
31321021	Other broadwoven fabrics (piece goods)	S	5 308	X	N
31322103	Narrow fabrics (12 inches or less in width)	D	D	X	N
31311003	Yarn, all fibers	S	2 497	X	N
31332001	Plastics coated, impregnated, or laminated fabrics	S	S	X	N
31500000	Garments purchased to be printed and resold	X	632 285	X	N
00970099	All other materials and components, parts, containers, and supplies	X	443 522	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	881 941	X	N



**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>323114, QUICK PRINTING</b>					
32212203	Newsprint .....	X	3 150	X	N
32212009	Uncoated paper in sheets .....	X	107 230	X	N
32212011	Uncoated paper in rolls .....	X	10 887	X	N
32200011	Coated paper in sheets .....	X	24 454	X	N
32200013	Coated paper in rolls .....	X	1 951	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc. ....	X	7 439	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers .....	X	—	X	N
32552003	Glues and adhesives .....	X	2 007	X	N
32591003	Printing ink .....	X	6 762	X	N
32599203	Light sensitive films and papers .....	X	3 211	X	N
32599201	Unexposed photosensitive printing plates .....	X	2 734	X	N
32312201	Printing plates, prepared for printing .....	X	3 563	X	N
32312209	Engraved printing cylinders for gravure printing .....	X	158	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	3 484	X	N
32223200	Purchased envelopes .....	X	32 047	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	65 146	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	838 047	X	N
<b>323115, DIGITAL PRINTING</b>					
32212203	Newsprint .....	X	—	X	N
32212009	Uncoated paper in sheets .....	X	5 113	X	N
32212011	Uncoated paper in rolls .....	X	D	X	N
32200011	Coated paper in sheets .....	X	3 996	X	N
32200013	Coated paper in rolls .....	X	635	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc. ....	X	2 228	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers .....	X	—	X	N
32552003	Glues and adhesives .....	X	D	X	N
32591003	Printing ink .....	X	1 151	X	N
32599203	Light sensitive films and papers .....	X	944	X	N
32599201	Unexposed photosensitive printing plates .....	X	D	X	N
32312201	Printing plates, prepared for printing .....	X	D	X	N
32312209	Engraved printing cylinders for gravure printing .....	X	—	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	307	X	N
32223200	Purchased envelopes .....	X	344	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	8 563	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	86 962	X	N
<b>323116, MANIFOLD BUSINESS FORM PRINTING</b>					
32200015	Coated paper .....	X	273 953	X	N
32212019	Uncoated paper .....	X	971 572	X	1 376 095
32212021	Carbonless paper .....	X	527 997	X	N
32212023	Carbonizing tissue stock for conversion into one-time carbon paper .....	X	8 801	X	16 538
33994400	One-time carbon paper .....	X	26 169	X	55 119
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc. ....	X	31 154	X	73 186
32591003	Printing ink .....	X	27 784	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	72 683	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	201 733	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	1 240 326	X	N
<b>323117, BOOK PRINTING</b>					
32212203	Newsprint .....	X	44 107	X	35 739
32212009	Uncoated paper in sheets .....	X	183 667	X	116 646
32212011	Uncoated paper in rolls .....	X	389 580	X	314 599
32200011	Coated paper in sheets .....	X	143 527	X	149 305
32200013	Coated paper in rolls .....	X	280 369	X	194 917
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc. ....	X	20 285	X	14 494
31320001	Cloth and nonwoven fabrics for hardbound book covers .....	X	46 058	X	55 942
32552003	Glues and adhesives .....	X	32 401	X	29 327
32591003	Printing ink .....	X	69 164	X	65 043
32599203	Light sensitive films and papers .....	X	35 815	X	29 861
32599201	Unexposed photosensitive printing plates .....	X	38 342	X	23 592
32312201	Printing plates, prepared for printing .....	X	30 924	X	34 200
32312209	Engraved printing cylinders for gravure printing .....	X	D	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	62 002	X	60 180
32223200	Purchased envelopes .....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	196 645	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	269 118	X	178 212
<b>323118, BLANKBOOK, LOOSELEAF BINDER, &amp; DEVICE MFG</b>					
32200015	Coated paper .....	X	S	X	N
32212011	Uncoated paper in rolls .....	X	30 306	X	N
32212009	Uncoated paper in sheets .....	X	12 941	X	N
32213001	Paperboard (including news, chip, pasted, tablet, check, binders' board), except for shipping .....	X	90 660	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	39 611	X	N
31332005	Coated or impregnated woven and nonwoven fabrics, except rubberized .....	X	16 604	X	N
32311000	Metal and plastic looseleaf components, including ring type .....	X	90 289	X	N
32610001	Plastics film and sheet .....	X	164 288	X	N
001900D4	All other plastics consumed, except looseleaf devices and components .....	X	12 780	X	N
33120095	Steel, strip and wire .....	X	14 633	X	N
32591003	Printing ink .....	X	3 954	X	N
32212021	Carbonless paper .....	X	2 589	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	176 564	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	157 714	X	N
<b>323119, OTHER COMMERCIAL PRINTING</b>					
32212203	Newsprint .....	X	39 589	X	N
32212009	Uncoated paper in sheets .....	X	44 814	X	N
32212011	Uncoated paper in rolls .....	X	69 505	X	N
32200011	Coated paper in sheets .....	X	16 753	X	N
32200013	Coated paper in rolls .....	X	23 218	X	N
32222200	Pressure-sensitive base stock, self-adhesive, including paper, film, foil, etc. ....	X	101 098	X	N
31320001	Cloth and nonwoven fabrics for hardbound book covers .....	X	D	X	N
32552003	Glues and adhesives .....	X	970	X	N
32591003	Printing ink .....	X	14 470	X	N
32599203	Light sensitive films and papers .....	X	4 103	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>323119, OTHER COMMERCIAL PRINTING—Con.</b>					
32599201	Unexposed photosensitive printing plates	X	2 711	X	N
32312201	Printing plates, prepared for printing	X	8 232	X	N
32312209	Engraved printing cylinders for gravure printing	X	D	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	7 340	X	N
32223200	Purchased envelopes	X	11 760	X	N
00970099	All other materials and components, parts, containers, and supplies	X	98 837	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	680 109	X	N
<b>323121, TRADEBINDING &amp; RELATED WORK</b>					
32200015	Coated paper	X	10 201	X	15 356
32212011	Uncoated paper in rolls	X	6 011	X	N
32212009	Uncoated paper in sheets	X	10 576	X	N
32213001	Paperboard (including news, chip, pasted, tablet, check, binders' board), except for shipping	X	19 017	X	13 124
32221001	Paperboard containers, boxes, and corrugated paperboard	X	29 514	X	10 781
31332005	Coated or impregnated woven and nonwoven fabrics, except rubberized	X	13 378	X	10 493
32311000	Metal and plastic looseleaf components, including ring type	X	3 791	X	5 255
32610001	Plastics film and sheet	X	5 149	X	5 344
001900D4	All other plastics consumed, except looseleaf devices and components	X	2 045	X	1 890
33120095	Steel, strip and wire	X	4 250	X	3 648
32212021	Carbonless paper	X	584	X	N
32591003	Printing ink	X	4 037	X	N
00970099	All other materials and components, parts, containers, and supplies	X	136 582	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	121 257	X	78 080
<b>323122, PREPRESS SERVICES</b>					
33100005	Metal for printing plates	X	13 648	X	N
32599201	Unexposed photosensitive printing plates	X	39 087	X	N
32599211	Light sensitive films	X	93 901	X	N
32599213	Light sensitive papers (including photographic paper and diffusion transfer paper)	X	8 442	X	N
33331500	Color proofing materials	X	75 068	X	N
32212001	Paper, all types except light sensitive (including newsprint, book, bond, cover, and coated)	X	35 119	X	N
00970099	All other materials and components, parts, containers, and supplies	X	133 471	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	306 697	X	N
<b>324110, PETROLEUM REFINERIES</b>					
21111103	Domestic crude petroleum, including lease condensate	mil bbl..	2 801.5	2 745.7	51 201 568
00999830	Foreign crude petroleum, including lease condensate	mil bbl..	2 495.9	2 231.8	39 635 397
00999827	Foreign unfinished oils (received from foreign countries for further processing)	mil bbl..	P127.1	81.7	1 477 273
21111205	Ethane (C2), at least 80 percent purity	D	D	D	D
21111207	Propane (C3), at least 80 percent purity	mil bbl..	P18.0	24.2	285 071
21111203	Butane (C4), at least 80 percent purity	mil bbl..	80.1	105.8	1 815 270
21111021	Gas mixtures (C2, C3, C4)	mil bbl..	948.3	41.7	773 212
21111023	Isopentane and natural gasoline	mil bbl..	65.1	63.1	1 212 225
21111209	Other natural gas liquids, including plant condensate	mil bbl..	90.3	30.6	564 336
32411013	Benzol (benzene) (100 percent C6H6)	mil bbl..	4.2	3.8	141 585
32519213	Toluene and xylene (100 percent basis)	mil bbl..	S	3 031.1	312 916
32500017	Antioxidant, antiknock compound, and inhibitor additives	mil bbl..	S	447.4	348 863
32500019	Other additives, including soaps and detergents	mil bbl..	S	P246.0	169 655
31100013	Animal and vegetable oils	mil lb..	D	D	D
32518825	Chemical catalytic preparations	mil bbl..	X	X	543 623
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH)	1,000 s tons..	X	346.5	62 529
32518805	Sulfuric acid (100 percent H2SO4), except spent	1,000 s tons..	S	1 742.2	117 434
33240000	Metal containers	mil lb..	X	X	17 113
32610035	Plastics containers	mil lb..	X	X	35 586
32220015	Paper and paperboard containers	mil lb..	X	X	7 680
32221400	Fiber cans, bodies with combinations of fiber and other materials (foil, plastics, etc.) with metal ends	mil lb..	X	X	D
32410007	Cost of materials received from petroleum refineries and lube manufacturers	mil bbl..	P226.8	264.0	4 712 799
00970099	All other materials and components, parts, containers, and supplies	mil bbl..	X	X	4 480 452
00971000	Materials, ingredients, containers, and supplies, n.s.k.	mil bbl..	X	X	247 238
<b>324121, ASPHALT PAVING MIXTURE &amp; BLOCK MFG</b>					
32212033	Roofing felts, unsaturated	1,000 s tons..	-	N	N
32799203	Roofing granules	1,000 s tons..	S	5 337	N
32721205	Glass fiber, textile type, bonded mat type, etc.	mil lb..	.1	445	N
32411025	Paving grade asphalts	mil bbl..	S	1 282 117	733 043
32411027	Roofing grade asphalts	mil bbl..	.5	9 949	4 013
32411029	Asphalts other than paving and roofing grade	mil bbl..	S	44 326	54 418
21232003	Sand and gravel	1,000 s tons..	S	702 613	68 567.0
00970099	All other materials and components, parts, containers, and supplies	mil bbl..	X	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	mil bbl..	X	X	567 805
<b>324122, ASPHALT SHINGLE &amp; COATING MATERIALS MFG</b>					
32411025	Paving grade asphalts	mil bbl..	94.1	96 053	74 077
32411027	Roofing grade asphalts	mil bbl..	S	718 578	514 586
32411029	Asphalts other than paving and roofing grade	mil bbl..	S	68 713	39 666
32212033	Roofing felts, unsaturated	1,000 s tons..	S	152 890	104 777
32721205	Glass fiber, textile type, bonded mat type, etc.	mil lb..	9614.0	368 335	347 300
32799203	Roofing granules	1,000 s tons..	95 360.3	427 847	358 632
21232003	Sand and gravel	1,000 s tons..	P2 777.9	53 676	48 547
00970099	All other materials and components, parts, containers, and supplies	mil bbl..	X	X	510 021
00971000	Materials, ingredients, containers, and supplies, n.s.k.	mil bbl..	X	X	130 808
<b>324191, PETROLEUM LUBRICATING OIL &amp; GREASE MFG</b>					
00999830	Foreign crude petroleum, including lease condensate	mil bbl..	D	D	N
21111103	Domestic crude petroleum, including lease condensate	mil bbl..	S	143 352	N
21111207	Propane (C3), at least 80 percent purity	mil bbl..	D	D	N
32519213	Toluene and xylene (100 percent basis)	mil bbl..	D	D	N
32500017	Antioxidant, antiknock compound, and inhibitor additives	mil bbl..	S	43 890	170.1
32500019	Other additives, including soaps and detergents	mil bbl..	S	437 372	530.2
31100013	Animal and vegetable oils	mil lb..	214.7	129 591	208.9
32518825	Chemical catalytic preparations	mil lb..	X	-	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>324191, PETROLEUM LUBRICATING OIL &amp; GREASE MFG—Con.</b>					
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	929.6	10 421	16.7	2 916
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	S	4 832	7.7	983
33240000	Metal containers . . . . .	X	76 462	X	96 224
32610035	Plastics containers . . . . .	X	194 292	X	206 436
32220015	Paper and paperboard containers . . . . .	X	58 150	X	54 408
32221400	Fiber cans, bodies with combinations of fiber and other materials (foil, plastics, etc.) with metal ends . . . . .	X	27 947	X	16 212
32410007	Cost of materials received from petroleum refineries and lube manufacturers . . . . . mil bbl..	S	1 362 066	56.4	1 563 991
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	442 119	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	762 221	X	367 063
<b>324199, ALL OTHER PETROLEUM &amp; COAL PRODUCTS MFG</b>					
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	S	1 600	N	N
32410007	Cost of materials received from petroleum refineries and lube manufacturers . . . . . mil bbl..	S	285 156	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	460 837	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	116 187	X	N
<b>325110, PETROCHEMICAL MFG</b>					
32518807	Hydrochloric acid (100 percent HCl) . . . . . 1,000 s tons..	D	D	N	N
32518809	Hydrofluoric acid (100 percent HF) . . . . . 1,000 s tons..	—	—	N	N
32531101	Nitric acid (100 percent HNO3) . . . . . 1,000 s tons..	D	D	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	63.3	4 232	N	N
32531103	Ammonia, synthetic anhydrous (100 percent NH3) . . . . . 1,000 s tons..	D	D	N	N
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	D	D	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	165.8	27 318	N	N
32500071	All other industrial inorganic chemicals . . . . .	X	38 784	X	N
32512001	Acetylene and other industrial gases (compressed and liquified), including argon, carbon dioxide, nitrogen, etc. . . . .	X	35 933	X	N
32519300	Alcohol, ethyl (pure and denatured) . . . . .	X	D	X	N
32510067	Other alcohols, including amyl, butyl, methyl, and propyl . . . . .	X	D	X	N
32519213	Toluene and xylene (100 percent basis) . . . . . mil lb..	1 340.1	145 825	X	N
32519205	Phenol (100 percent basis) . . . . . mil lb..	D	D	N	N
32519231	Ortho and para-xylene (100 percent basis) . . . . . mil lb..	D	D	N	N
32411013	Benzol (benzene) (100 percent C6H6) . . . . . mil lb..	S	480 890	N	N
32519223	Tar, crude . . . . . 1,000 s tons..	—	—	N	N
32519233	Other cyclic crudes and intermediates . . . . . mil lb..	D	D	N	N
32510075	Acetone (natural and synthetic) . . . . . mil lb..	D	D	N	N
325100A5	Other synthetic organic chemicals, n.e.c. . . . .	X	100 179	X	N
21111013	Natural gas used as a raw material . . . . . bil cu ft..	282.4	157 787	N	N
32411031	Ethane used as a raw material or feedstock . . . . . mil lb..	S	946 212	N	N
32411033	Ethylene used as a raw material or feedstock . . . . . mil lb..	908.8	166 353	N	N
32411035	Propane used as a raw material or feedstock . . . . . mil lb..	S	614 222	N	N
32411037	Propylene used as a raw material or feedstock . . . . . mil lb..	S	695 111	N	N
32411039	Butane and iso-butane used as a raw material or feedstock . . . . . mil lb..	P4 212.4	434 005	N	N
32411041	Butylene and iso-butylene used as a raw material or feedstock . . . . . mil lb..	S	77 852	N	N
00190012	Other hydrocarbons used as raw materials or feedstocks . . . . .	X	1 844 138	X	N
21239303	Sulfur . . . . . 1,000 l tons..	D	D	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb..	D	D	N	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc. . . . .	X	D	X	N
33300015	Parts and attachments for machinery and equipment . . . . .	X	48 196	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	D	X	N
33240000	Metal containers . . . . .	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 800 050	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	403 969	X	N
<b>325131, INORGANIC DYE &amp; PIGMENT MFG</b>					
32531201	Phosphoric acid, except spent (100 percent P2O5) . . . . . 1,000 s tons..	3.5	1 326	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	P209.5	11 493	N	N
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	772.0	107 720	N	N
32518105	Sodium carbonate (soda ash) (58 percent Na2O) . . . . . 1,000 s tons..	S	7 986	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	S	29 318	N	N
00190031	Salt in brine . . . . . 1,000 s tons..	D	D	N	N
325000A5	Other industrial inorganic chemicals . . . . .	X	214 660	X	N
32510091	Synthetic organic chemicals . . . . .	X	14 487	X	N
21239303	Sulfur . . . . . 1,000 l tons..	D	D	N	N
21220021	Iron and ferroalloy ores, including tungsten, chromite, manganese, molybdenum, and cobalt . . . . .	X	70 386	X	N
21220023	Nonferrous metal ores, including copper, mercury, vanadium, titanium, platinum, etc. . . . .	X	412 435	X	N
21239001	All other crude chemical nonmetallic minerals, including barite, borate, potash, fluorspar, rock salt, etc. . . . .	X	13 818	X	N
32419903	Coke including breeze, used as a raw material . . . . . 1,000 s tons..	387.5	48 004	N	N
33300015	Parts and attachments for machinery and equipment . . . . .	X	59 521	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	21 090	X	N
33240000	Metal containers . . . . .	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	305 812	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	110 882	X	N
<b>325132, SYNTHETIC ORGANIC DYE &amp; PIGMENT MFG</b>					
32518807	Hydrochloric acid (100 percent HCl) . . . . . 1,000 s tons..	41.2	4 345	N	N
32531101	Nitric acid (100 percent HNO3) . . . . . 1,000 s tons..	D	D	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	13 426.8	4 534	N	N
32531103	Ammonia, synthetic anhydrous (100 percent NH3) . . . . . 1,000 s tons..	D	D	N	N
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	D	D	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	116.8	14 766	N	N
32500071	All other industrial inorganic chemicals . . . . .	X	217 614	X	N
32512001	Acetylene and other industrial gases (compressed and liquified), including argon, carbon dioxide, nitrogen, etc. . . . .	X	678	X	N
32519300	Alcohol, ethyl (pure and denatured) . . . . .	X	1 688	X	N
32510067	Other alcohols, including amyl, butyl, methyl, and propyl . . . . .	X	2 417	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>325132, SYNTHETIC ORGANIC DYE &amp; PIGMENT MFG—Con.</b>					
32519213	Toluene and xylene (100 percent basis) . . . . . mil lb..	4.7	1 195	N	N
32519205	Phenol (100 percent basis) . . . . . mil lb..	1.6	639	N	N
32519231	Ortho and para-xylene (100 percent basis) . . . . . mil lb..	D	D	N	N
32519233	Other cyclic crudes and intermediates . . . . . mil lb..	S	178 903	N	N
32510075	Acetone (natural and synthetic) . . . . . mil lb..	D	D	N	N
325100A5	Other synthetic organic chemicals, n.e.c. . . . . mil lb..	X	302 496	X	N
21111013	Natural gas used as a raw material . . . . . bil cu ft..	D	D	N	N
32411033	Ethylene used as a raw material or feedstock . . . . . mil lb..	D	D	N	N
32411035	Propane used as a raw material or feedstock . . . . . mil lb..	D	D	N	N
32411037	Propylene used as a raw material or feedstock . . . . . mil lb..	D	D	N	N
00190012	Other hydrocarbons used as raw materials or feedstocks . . . . .	X	D	X	N
21239303	Sulfur . . . . . 1,000 l tons..	D	D	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb..	S	7 814	N	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc. . . . .	X	D	X	N
33300015	Parts and attachments for machinery and equipment . . . . .	X	4 889	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	9 727	X	N
33240000	Metal containers . . . . .	X	9 811	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	259 806	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	110 780	X	N
<b>325181, ALKALIES &amp; CHLORINE MFG</b>					
32531201	Phosphoric acid, except spent (100 percent P2O5) . . . . . 1,000 s tons..	D	D	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	P53.5	3 284	P85.3	5 171
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	D	D	N	N
32518837	Phosphorus, elemental (technical) . . . . . 1,000 s tons..	D	D	N	N
32518105	Sodium carbonate (soda ash) (58 percent Na2O) . . . . . 1,000 s tons..	D	D	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	D	D	117.2	1 678
00190031	Salt in brine . . . . . 1,000 s tons..	5 664.3	67 912	P7 039.9	120 961
325000A5	Other industrial inorganic chemicals . . . . .	X	D	X	9 625
32510091	Synthetic organic chemicals . . . . .	X	D	X	D
21229903	Bauxite . . . . . 1,000 s tons..	-	-	N	N
21239200	Phosphate rock . . . . . 1,000 s tons..	-	-	N	N
21239303	Sulfur . . . . . 1,000 l tons..	D	D	D	N
21220021	Iron and ferroalloy ores, including tungsten, chromite, manganese, molybdenum, and cobalt . . . . .	X	-	X	N
21220023	Nonferrous metal ores, including copper, mercury, vanadium, titanium, platinum, etc. . . . .	X	354	X	N
21239001	All other crude chemical nonmetallic minerals, including barite, borate, potash, fluorspar, rock salt, etc. . . . .	X	44 709	X	N
32419903	Coke including breeze, used as a raw material . . . . . 1,000 s tons..	-	-	N	N
33300015	Parts and attachments for machinery and equipment . . . . .	X	22 297	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	D	X	D
33240000	Metal containers . . . . .	X	D	X	5 335
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	98 875	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	56 327	X	D
<b>325182, CARBON BLACK MFG</b>					
32411023	Carbon black feedstock . . . . . mil bbl..	13.9	245 546	13.5	179 783
21111013	Natural gas used as a raw material . . . . . bil cu ft..	P20.0	49 985	16.4	34 190
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	9 070	X	7 316
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	38 545	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	25 449	X	N
<b>325188, ALL OTHER BASIC INORGANIC CHEMICAL MFG</b>					
32531201	Phosphoric acid, except spent (100 percent P2O5) . . . . . 1,000 s tons..	362.7	142 744	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . . 1,000 s tons..	2 117.0	71 700	N	N
32518103	Chlorine (100 percent Cl basis) . . . . . 1,000 s tons..	223.0	42 689	N	N
32518837	Phosphorus, elemental (technical) . . . . . 1,000 s tons..	P102.2	145 962	N	N
32518105	Sodium carbonate (soda ash) (58 percent Na2O) . . . . . 1,000 s tons..	P574.7	85 193	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . . 1,000 s tons..	623.6	116 127	N	N
00190031	Salt in brine . . . . . 1,000 s tons..	D	D	N	N
325000A5	Other industrial inorganic chemicals . . . . .	X	718 628	X	N
32510091	Synthetic organic chemicals . . . . .	X	90 344	X	N
21229903	Bauxite . . . . . 1,000 s tons..	S	32 371	X	N
21239200	Phosphate rock . . . . . 1,000 s tons..	2 415.2	72 510	N	N
21239303	Sulfur . . . . . 1,000 l tons..	1 760.6	66 299	N	N
21220021	Iron and ferroalloy ores, including tungsten, chromite, manganese, molybdenum, and cobalt . . . . .	X	174 755	X	N
21220023	Nonferrous metal ores, including copper, mercury, vanadium, titanium, platinum, etc. . . . .	X	286 260	X	N
21239001	All other crude chemical nonmetallic minerals, including barite, borate, potash, fluorspar, rock salt, etc. . . . .	X	136 543	X	N
32419903	Coke including breeze, used as a raw material . . . . . 1,000 s tons..	D	D	N	N
33300015	Parts and attachments for machinery and equipment . . . . .	X	130 137	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	45 988	X	N
33240000	Metal containers . . . . .	X	26 067	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 495 514	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	801 589	X	N
<b>325191, GUM &amp; WOOD CHEMICAL MFG</b>					
32519103	Tall oil and rosin . . . . .	X	D	X	72 751
32500001	Industrial organic and inorganic chemicals, including acids and alcohols, but excluding fatty acids . . . . .	X	47 913	X	14 466
32100007	Chips, slabs, edgings, shavings, sawdust, and other wood waste . . . . .	X	73 214	X	D
21211100	Lignite, raw or prepared, used as a raw material . . . . .	X	D	X	D
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	23 323	X	10 692
33240000	Metal containers . . . . .	X	3 811	X	4 054
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	96 717	X	111 095
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	9 760	X	34 312

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992		
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)	
<b>325192, CYCLIC CRUDE &amp; INTERMEDIATE MFG</b>						
32518807	Hydrochloric acid (100 percent HCl) . . . . .	1,000 s tons..	D	D	N	N
32518809	Hydrofluoric acid (100 percent HF) . . . . .	1,000 s tons..	D	D	N	N
32531101	Nitric acid (100 percent HNO3) . . . . .	1,000 s tons..	350.6	26 358	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . .	1,000 s tons..	718.0	15 589	N	N
32531103	Ammonia, synthetic anhydrous (100 percent NH3) . . . . .	1,000 s tons..	130.1	24 301	N	N
32518103	Chlorine (100 percent Cl basis) . . . . .	1,000 s tons..	P365.5	80 372	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . .	1,000 s tons..	122.5	27 360	N	N
32500071	All other industrial inorganic chemicals . . . . .		X	30 524	X	N
32512001	Acetylene and other industrial gases (compressed and liquified), including argon, carbon dioxide, nitrogen, etc. . . . .		X	19 100	X	N
32519300	Alcohol, ethyl (pure and denatured) . . . . .		X	D	X	N
32510067	Other alcohols, including amyl, butyl, methyl, and propyl . . . . .		X	892	X	N
32519213	Toluene and xylene (100 percent basis) . . . . .	mil lb..	D	D	N	N
32519205	Phenol (100 percent basis) . . . . .	mil lb..	D	D	N	N
32519231	Ortho and para-xylene (100 percent basis) . . . . .	mil lb..	D	D	N	N
32411013	Benzol (benzene) (100 percent C6H6) . . . . .	mil lb..	1 899.0	310 801	N	N
32519223	Tar, crude . . . . .	1,000 s tons..	S	129 681	N	N
32519233	Other cyclic crudes and intermediates . . . . .	mil lb..	56.7	205 588	N	N
32510075	Acetone (natural and synthetic) . . . . .	mil lb..	D	D	N	N
325100A5	Other synthetic organic chemicals, n.e.c. . . . .		X	223 489	X	N
21111013	Natural gas used as a raw material . . . . .	bil cu ft..	8.3	19 109	N	N
32411033	Ethylene used as a raw material or feedstock . . . . .	mil lb..	747.2	174 649	N	N
32411035	Propane used as a raw material or feedstock . . . . .	mil lb..	D	D	N	N
32411037	Propylene used as a raw material or feedstock . . . . .	mil lb..	D	D	N	N
32411039	Butane and iso-butane used as a raw material or feedstock . . . . .	mil lb..	D	D	N	N
32411041	Butylene and iso-butylene used as a raw material or feedstock . . . . .	mil lb..	D	D	N	N
00190012	Other hydrocarbons used as raw materials or feedstocks . . . . .		X	D	X	N
21239303	Sulfur . . . . .	1,000 l tons..	D	D	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	mil lb..	D	D	N	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc. . . . .		X	D	X	N
33300015	Parts and attachments for machinery and equipment . . . . .		X	18 471	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .		X	648	X	N
33240000	Metal containers . . . . .		X	6 069	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	555 160	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	19 598	X	N
<b>325193, ETHYL ALCOHOL MFG</b>						
32518807	Hydrochloric acid (100 percent HCl) . . . . .	1,000 s tons..	D	D	N	N
32531101	Nitric acid (100 percent HNO3) . . . . .	1,000 s tons..	D	D	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . .	1,000 s tons..	5.2	665	N	N
32531103	Ammonia, synthetic anhydrous (100 percent NH3) . . . . .	1,000 s tons..	3.3	970	N	N
32518103	Chlorine (100 percent Cl basis) . . . . .	1,000 s tons..	D	D	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . .	1,000 s tons..	76.3	5 254	N	N
32500071	All other industrial inorganic chemicals . . . . .		X	D	X	N
32512001	Acetylene and other industrial gases (compressed and liquified), including argon, carbon dioxide, nitrogen, etc. . . . .		X	D	X	N
32519300	Alcohol, ethyl (pure and denatured) . . . . .		X	D	X	N
32510067	Other alcohols, including amyl, butyl, methyl, and propyl . . . . .		X	-	X	N
32411013	Benzol (benzene) (100 percent C6H6) . . . . .	mil lb..	D	D	N	N
32519233	Other cyclic crudes and intermediates . . . . .	mil lb..	-	-	N	N
32510075	Acetone (natural and synthetic) . . . . .	mil lb..	D	D	N	N
325100A5	Other synthetic organic chemicals, n.e.c. . . . .		X	D	X	N
21111013	Natural gas used as a raw material . . . . .	bil cu ft..	P3.1	4 647	N	N
32411033	Ethylene used as a raw material or feedstock . . . . .	mil lb..	D	D	N	N
32411035	Propane used as a raw material or feedstock . . . . .	mil lb..	D	D	N	N
32411039	Butane and iso-butane used as a raw material or feedstock . . . . .	mil lb..	-	-	N	N
00190012	Other hydrocarbons used as raw materials or feedstocks . . . . .		X	D	X	N
21239303	Sulfur . . . . .	1,000 l tons..	D	D	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	mil lb..	D	D	N	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc. . . . .		X	510 476	X	N
33300015	Parts and attachments for machinery and equipment . . . . .		X	6 790	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .		X	D	X	N
33240000	Metal containers . . . . .		X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	85 815	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	21 040	X	N
<b>325199, ALL OTHER BASIC ORGANIC CHEMICAL MFG</b>						
32518807	Hydrochloric acid (100 percent HCl) . . . . .	1,000 s tons..	280.6	28 628	N	N
32518809	Hydrofluoric acid (100 percent HF) . . . . .	1,000 s tons..	D	D	N	N
32531101	Nitric acid (100 percent HNO3) . . . . .	1,000 s tons..	P153.7	23 706	N	N
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . .	1,000 s tons..	3 097.8	64 589	N	N
32531103	Ammonia, synthetic anhydrous (100 percent NH3) . . . . .	1,000 s tons..	1 636.8	256 318	N	N
32518103	Chlorine (100 percent Cl basis) . . . . .	1,000 s tons..	2 562.2	379 162	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . .	1,000 s tons..	P2 727.7	262 487	N	N
32500071	All other industrial inorganic chemicals . . . . .		X	1 163 929	X	N
32512001	Acetylene and other industrial gases (compressed and liquified), including argon, carbon dioxide, nitrogen, etc. . . . .		X	226 637	X	N
32519300	Alcohol, ethyl (pure and denatured) . . . . .		X	296 179	X	N
32510067	Other alcohols, including amyl, butyl, methyl, and propyl . . . . .		X	760 197	X	N
32519213	Toluene and xylene (100 percent basis) . . . . .	mil lb..	P754.0	122 141	N	N
32519205	Phenol (100 percent basis) . . . . .	mil lb..	P2 995.4	186 253	N	N
32519231	Ortho and para-xylene (100 percent basis) . . . . .	mil lb..	862.0	177 886	N	N
32411013	Benzol (benzene) (100 percent C6H6) . . . . .	mil lb..	S	431 116	N	N
32519223	Tar, crude . . . . .	1,000 s tons..	D	D	N	N
32519233	Other cyclic crudes and intermediates . . . . .	mil lb..	2 007.2	552 255	N	N
32510075	Acetone (natural and synthetic) . . . . .	mil lb..	S	155 472	N	N
325100A5	Other synthetic organic chemicals, n.e.c. . . . .		X	3 263 164	X	N
21111013	Natural gas used as a raw material . . . . .	bil cu ft..	P212.7	356 514	N	N
32411031	Ethane used as a raw material or feedstock . . . . .	mil lb..	Q4 746.7	392 517	N	N
32411033	Ethylene used as a raw material or feedstock . . . . .	mil lb..	10 413.2	2 194 693	N	N
32411035	Propane used as a raw material or feedstock . . . . .	mil lb..	5 873.9	511 440	N	N
32411037	Propylene used as a raw material or feedstock . . . . .	mil lb..	Q8 703.7	1 449 924	N	N
32411039	Butane and iso-butane used as a raw material or feedstock . . . . .	mil lb..	3 123.2	316 607	N	N
32411041	Butylene and iso-butylene used as a raw material or feedstock . . . . .	mil lb..	S	138 594	N	N
00190012	Other hydrocarbons used as raw materials or feedstocks . . . . .		X	1 335 023	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>325199, ALL OTHER BASIC ORGANIC CHEMICAL MFG—Con.</b>					
21239303	Sulfur ..... 1,000 1 tons..	91 262.8	31 570	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb..	S	65 268	N	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc. ....	X	71 449	X	N
33300015	Parts and attachments for machinery and equipment .....	X	397 248	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	137 185	X	N
33240000	Metal containers .....	X	104 305	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	6 173 860	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	3 294 892	X	N
<b>325211, PLASTICS MATERIAL &amp; RESIN MFG</b>					
32519207	Styrene (100 percent basis) ..... mil lb..	6 831.6	1 741 936	P6 219.8	1 345 598
32519205	Phenol (100 percent basis) ..... mil lb..	1 608.4	543 411	1 350.4	365 690
32519229	Other cyclic crudes and intermediates (including melamine, phthalic anhydride, and benzene) .....	X	798 689	X	554 269
32519217	Synthetic organic dyes, pigments, lakes, and toners (100 percent basis) .....	P9.0	20 165	911.3	22 844
32510043	Acrylates and methacrylates, monomers (100 percent basis) .....	S	1 343 042	1 388.0	774 801
32510037	Alcohols, except ethyl (100 percent basis) .....	1 945.9	407 457	1 032.9	188 328
32510041	Formaldehyde (100 percent HCHO) .....	P1 365.9	161 629	2 507.9	115 094
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) .....	X	147 833	X	194 461
32510047	Vinyl acetate, monomer (100 percent basis) .....	P1 066.5	290 928	1 170.5	278 839
32510049	Vinyl chloride, monomer (100 percent basis) .....	6 822.4	1 469 781	7 612.3	1 017 639
325100A3	Other synthetic organic chemicals (includes acrylonitrile and cellulose acetate) .....	X	1 444 367	X	1 871 204
32411031	Ethane used as a raw material or feedstock ..... mil lb..	95 983.5	539 850	N	N
32411033	Ethylene used as a raw material or feedstock .....	920 076.7	4 519 540	16 426.7	2 899 102
32411035	Propane used as a raw material or feedstock ..... mil lb..	P4 162.5	516 133	N	N
32411037	Propylene used as a raw material or feedstock .....	9 792.6	1 875 646	P5 263.9	746 126
32411043	Butadiene used as a raw material or feedstock .....	9595.8	126 792	1 406.8	235 646
32411045	Other refined petroleum products used as a raw material or feedstock (butane, isobutane, butylene, isobutylene, etc.) .....	2 057.6	435 440	N	N
00190002	Other hydrocarbons used as raw materials or feedstocks (including crude oil, natural gas and still gas) .....	X	870 548	X	239 477
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb..	S	1 658 653	1 213.0	650 592
325000B7	Inorganic chemicals .....	X	660 285	X	412 619
32518200	Carbon black .....	P30.4	21 493	P31.1	14 451
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	125 204	X	167 366
00970099	All other materials and components, parts, containers, and supplies .....	X	3 251 882	X	3 291 549
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	2 287 562	X	793 335
<b>325212, SYNTHETIC RUBBER MFG</b>					
32519207	Styrene (100 percent basis) ..... mil lb..	788.3	209 507	700.8	174 738
32519205	Phenol (100 percent basis) ..... mil lb..	D	D	D	D
32519229	Other cyclic crudes and intermediates (including melamine, phthalic anhydride, and benzene) .....	X	D	X	D
32519217	Synthetic organic dyes, pigments, lakes, and toners (100 percent basis) .....	D	D	D	D
32510043	Acrylates and methacrylates, monomers (100 percent basis) .....	115.9	57 029	22.5	13 745
32510037	Alcohols, except ethyl (100 percent basis) .....	98.4	1 979	S	555
32510041	Formaldehyde (100 percent HCHO) .....	D	D	D	D
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) .....	X	121 091	X	82 379
32510047	Vinyl acetate, monomer (100 percent basis) .....	D	D	D	D
32510049	Vinyl chloride, monomer (100 percent basis) .....	D	D	N	N
325100A3	Other synthetic organic chemicals (includes acrylonitrile and cellulose acetate) .....	X	198 035	X	134 410
32411031	Ethane used as a raw material or feedstock ..... mil lb..	D	D	N	N
32411033	Ethylene used as a raw material or feedstock .....	P364.0	83 427	321.3	58 769
32411035	Propane used as a raw material or feedstock ..... mil lb..	D	D	N	N
32411037	Propylene used as a raw material or feedstock .....	S	51 878	640.2	93 291
32411043	Butadiene used as a raw material or feedstock .....	P3 128.4	643 084	2 690.0	446 558
32411045	Other refined petroleum products used as a raw material or feedstock (butane, isobutane, butylene, isobutylene, etc.) .....	670.6	237 056	311.7	65 218
00190002	Other hydrocarbons used as raw materials or feedstocks (including crude oil, natural gas and still gas) .....	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb..	228.0	124 349	62.2	26 639
325000B7	Inorganic chemicals .....	X	71 255	X	89 072
32518200	Carbon black .....	S	48 868	179.2	29 386
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	41 577	X	57 957
00970099	All other materials and components, parts, containers, and supplies .....	X	666 741	X	524 382
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	220 880	X	21 204
<b>325221, CELLULOSIC ORGANIC FIBER MFG</b>					
32510039	Acrylonitrile (100 percent basis) ..... mil lb..	—	—	N	N
32510069	Caprolactam (100 percent basis) .....	—	—	N	N
32510071	Glycols (ethylene, propylene, etc.) (100 percent basis) .....	—	—	D	D
32519209	Dimethyl terephthalate (DMT) (100 percent basis) .....	—	—	D	D
32519211	Terephthalic acid (TPA) (100 percent basis) .....	—	—	D	D
32510087	All other synthetic organic chemicals .....	X	—	X	D
32521145	Polypropylene resins (dry basis) .....	—	—	D	D
32521137	Nylon resins (dry basis) .....	—	—	D	D
32521107	All other plastics resins (dry basis) .....	—	—	D	D
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies .....	X	D	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	—	X	N
<b>325222, NONCELLULOSIC ORGANIC FIBER MFG</b>					
32510039	Acrylonitrile (100 percent basis) ..... mil lb..	D	D	D	D
32510069	Caprolactam (100 percent basis) .....	D	D	D	D
32510071	Glycols (ethylene, propylene, etc.) (100 percent basis) .....	1 244.6	396 836	1 845.5	413 439
32519209	Dimethyl terephthalate (DMT) (100 percent basis) .....	742.6	215 335	1 148.9	273 005
32519211	Terephthalic acid (TPA) (100 percent basis) .....	2 760.0	731 624	1 901.9	478 245

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>325222, NONCELLULOSIC ORGANIC FIBER MFG—Con.</b>					
32510087	All other synthetic organic chemicals .....	X	954 882	X	1 300 459
32521145	Polypropylene resins (dry basis) .....	mil lb.. 786.5	367 879	804.9	278 557
32521137	Nylon resins (dry basis) .....	mil lb.. 443.1	322 729	322.9	166 881
32521107	All other plastics resins (dry basis) .....	mil lb.. 928.4	330 843	S	141 174
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	97 521	X	91 968
00970099	All other materials and components, parts, containers, and supplies .....	X	824 542	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	302 120	X	D
<b>325311, NITROGENOUS FERTILIZER MFG</b>					
32531103	Ammonia, synthetic anhydrous (100 percent NH3) .....	1,000 s tons.. S	267 359	2 162.7	248 082
32531113	Ammoniating or nitrogen solutions, including ammonium nitrate solutions, and mixtures containing urea (100 percent N) .....	1,000 s tons.. 644.7	77 741	S	12 163
32531111	Ammonium nitrate (solid only) (100 percent NH4NO3) .....	1,000 s tons.. D	D	D	D
32531107	Ammonium sulfate (100 percent (NH4)2SO4) .....	1,000 s tons.. -	-	D	D
32531115	Urea (solid only) (100 percent CO(NH2)2) .....	1,000 s tons.. 96.7	18 114	171.4	24 038
32531109	Other nitrogenous materials including calcium cyanamide and limestone mixtures .....	1,000 s tons.. D	D	P30.5	2 656
32531203	Superphosphate - total used in mixed goods (100 percent P2O5) .....	1,000 s tons.. D	D	D	D
32531201	Phosphoric acid, except spent (100 percent P2O5) .....	1,000 s tons.. D	D	1.9	425
32531205	Other phosphatic materials, including diammonium phosphate and monoammonium phosphate (100 percent P2O5) .....	1,000 s tons.. -	-	D	D
21239101	Muriate of potash (all grades) (60-62 percent K2O) .....	1,000 s tons.. S	149	D	D
21239103	Other potassic materials, including potassium nitrate and sulfate .....	1,000 s tons.. P1.0	299	2.4	704
00190029	Inert fillers, secondary plant food, soil conditioners, sand, limestone, peat, nut hulls, etc. ....	1,000 s tons.. S	2 426	S	6 519
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	1,000 s tons.. P88.2	2 815	40.6	1 831
21239200	Phosphate rock .....	1,000 s tons.. D	D	D	D
21239303	Sulfur .....	1,000 l tons.. D	D	D	D
21111013	Natural gas used as a raw material .....	bil cu ft.. S	1 008 370	342.7	625 486
32220009	Bags, except textile, including shipping sacks, multiwall bags, and polyethylene liners .....	X	2 818	X	2 875
00970099	All other materials and components, parts, containers, and supplies .....	X	122 826	X	197 657
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	43 974	X	104 948
<b>325312, PHOSPHATIC FERTILIZER MFG</b>					
32531103	Ammonia, synthetic anhydrous (100 percent NH3) .....	1,000 s tons.. 3 276.8	534 759	3 117.2	333 673
32531113	Ammoniating or nitrogen solutions, including ammonium nitrate solutions, and mixtures containing urea (100 percent N) .....	1,000 s tons.. D	D	P38.7	6 072
32531111	Ammonium nitrate (solid only) (100 percent NH4NO3) .....	1,000 s tons.. S	7 192	D	D
32531107	Ammonium sulfate (100 percent (NH4)2SO4) .....	1,000 s tons.. S	4 610	51.4	3 853
32531115	Urea (solid only) (100 percent CO(NH2)2) .....	1,000 s tons.. D	D	74.5	11 325
32531109	Other nitrogenous materials including calcium cyanamide and limestone mixtures .....	1,000 s tons.. D	D	D	D
32531203	Superphosphate - total used in mixed goods (100 percent P2O5) .....	1,000 s tons.. D	D	37.7	6 608
32531201	Phosphoric acid, except spent (100 percent P2O5) .....	1,000 s tons.. 1 047.7	226 821	1 944.5	423 630
32531205	Other phosphatic materials, including diammonium phosphate and monoammonium phosphate (100 percent P2O5) .....	1,000 s tons.. 107.0	19 072	234.5	34 182
21239101	Muriate of potash (all grades) (60-62 percent K2O) .....	1,000 s tons.. P167.2	16 813	142.3	13 982
21239103	Other potassic materials, including potassium nitrate and sulfate .....	1,000 s tons.. 84.7	12 354	48.8	9 984
00190029	Inert fillers, secondary plant food, soil conditioners, sand, limestone, peat, nut hulls, etc. ....	1,000 s tons.. P640.7	28 330	P255.4	6 916
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	1,000 s tons.. 1 998.1	63 434	3 402.1	115 651
21239200	Phosphate rock .....	1,000 s tons.. P40 363.6	1 025 390	33 960.4	753 698
21239303	Sulfur .....	1,000 l tons.. P9 814.1	590 522	8 473.9	709 607
21111013	Natural gas used as a raw material .....	bil cu ft.. S	80 279	D	D
32220009	Bags, except textile, including shipping sacks, multiwall bags, and polyethylene liners .....	X	4 158	X	4 439
00970099	All other materials and components, parts, containers, and supplies .....	X	311 143	X	211 604
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	24 414	X	27 321
<b>325314, FERTILIZER (MIXING ONLY) MFG</b>					
32531103	Ammonia, synthetic anhydrous (100 percent NH3) .....	1,000 s tons.. P471.5	92 216	343.1	40 139
32531113	Ammoniating or nitrogen solutions, including ammonium nitrate solutions, and mixtures containing urea (100 percent N) .....	1,000 s tons.. S	92 536	P574.8	61 510
32531111	Ammonium nitrate (solid only) (100 percent NH4NO3) .....	1,000 s tons.. P228.8	37 732	232.0	29 954
32531107	Ammonium sulfate (100 percent (NH4)2SO4) .....	1,000 s tons.. P831.3	78 117	P334.6	30 444
32531115	Urea (solid only) (100 percent CO(NH2)2) .....	1,000 s tons.. P779.8	129 318	376.4	60 032
32531109	Other nitrogenous materials including calcium cyanamide and limestone mixtures .....	1,000 s tons.. P200.8	59 376	96.0	16 789
32531203	Superphosphate - total used in mixed goods (100 percent P2O5) .....	1,000 s tons.. S	54 758	P171.2	18 886
32531201	Phosphoric acid, except spent (100 percent P2O5) .....	1,000 s tons.. P651.1	141 170	176.0	50 037
32531205	Other phosphatic materials, including diammonium phosphate and monoammonium phosphate (100 percent P2O5) .....	1,000 s tons.. S	119 876	P360.9	61 538
21239101	Muriate of potash (all grades) (60-62 percent K2O) .....	1,000 s tons.. S	81 586	P674.5	73 141
21239103	Other potassic materials, including potassium nitrate and sulfate .....	1,000 s tons.. P259.8	46 778	193.8	34 369
00190029	Inert fillers, secondary plant food, soil conditioners, sand, limestone, peat, nut hulls, etc. ....	1,000 s tons.. S	100 442	S	34 852
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	1,000 s tons.. P110.8	13 773	P150.5	5 917
21239200	Phosphate rock .....	1,000 s tons.. 93.5	1 603	D	D
21239303	Sulfur .....	1,000 l tons.. D	D	D	D
21111013	Natural gas used as a raw material .....	bil cu ft.. D	D	D	D
32220009	Bags, except textile, including shipping sacks, multiwall bags, and polyethylene liners .....	X	75 952	X	23 115
00970099	All other materials and components, parts, containers, and supplies .....	X	405 660	X	302 726
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	354 861	X	255 653
<b>325320, PESTICIDE &amp; OTHER AGRICULTURAL CHEMICAL MFG</b>					
32411007	Petroleum distillates used as solvents .....	mil lb.. S	59 618	286.1	75 241
32510045	Other synthetic organic chemical solvents .....	mil lb.. S	122 626	S	77 962
32510061	Synthetic organic pesticides and related synthetic organic agricultural chemical toxicants .....	mil lb.. P286.6	893 683	P350.9	758 349
32518845	Inorganic chemical toxicants .....	mil lb.. S	123 032	479.9	192 492
32561301	Surfactants .....	mil lb.. X	66 041	X	62 563
32500013	All other organic and inorganic chemicals, n.e.c. ....	X	1 057 339	X	831 639
32610029	Plastics containers .....	X	97 174	X	87 637

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>325320, PESTICIDE &amp; OTHER AGRICULTURAL CHEMICAL MFG—Con.</b>					
32221001	Paperboard containers, boxes, and corrugated paperboard	X	59 354	X	72 356
33240000	Metal containers	X	34 939	X	43 775
00970099	All other materials and components, parts, containers, and supplies	X	723 887	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	241 103	X	D
<b>325411, MEDICINAL &amp; BOTANICAL MFG</b>					
32541113	Antibiotics, in bulk, for human and veterinary use	X	D	X	D
32541115	Antibiotics, in bulk, for animal feeds	X	D	X	D
32541101	Vitamins, natural and synthetic, in bulk, for human and veterinary use	X	224 062	X	52 906
32541103	Vitamins, natural and synthetic, in bulk, for animal feeds	X	36 615	X	84 551
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc.	X	209 274	X	63 586
31100001	Processed food and kindred products including lactose, meat packing plant products, yeast, etc.	X	16 293	X	7 759
32541000	Blood derivatives and extenders	X	D	X	D
32541107	All other bulk medicinal and botanical un compounded drugs, except antibiotics and vitamins	X	386 955	X	661 003
32599807	Gelatin (pharmaceutical grade) and gelatin capsules	X	16 523	X	2 430
325000A7	Industrial inorganic chemicals	X	60 285	X	58 244
32519201	Cyclic crudes and intermediates including organic colors	X	3 871	X	39 694
32510031	Other synthetic organic chemicals including halogenated hydrocarbons	X	157 290	X	223 719
32610015	Fabricated plastics products, including plastics closures, film, and packaging items, except containers	X	48 989	X	1 935
33211500	Metal closures and crowns for containers	X	1 141	X	D
32310003	Labels, coupons, instructions, and other printed material	X	14 315	X	1 213
32610029	Plastics containers	X	19 149	X	5 837
32721301	Glass containers	X	4 047	X	1 861
33240000	Metal containers	X	2 382	X	4 221
32221001	Paperboard containers, boxes, and corrugated paperboard	X	30 157	X	12 408
00970099	All other materials and components, parts, containers, and supplies	X	634 492	X	257 312
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	488 646	X	166 288
<b>325412, PHARMACEUTICAL PREPARATION MFG</b>					
32541113	Antibiotics, in bulk, for human and veterinary use	X	2 855 535	X	N
32541115	Antibiotics, in bulk, for animal feeds	X	96 987	X	N
32541101	Vitamins, natural and synthetic, in bulk, for human and veterinary use	X	1 115 425	X	N
32541103	Vitamins, natural and synthetic, in bulk, for animal feeds	X	D	X	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc.	X	99 093	X	N
31100001	Processed food and kindred products including lactose, meat packing plant products, yeast, etc.	X	95 024	X	N
32541000	Blood derivatives and extenders	X	D	X	N
32541107	All other bulk medicinal and botanical un compounded drugs, except antibiotics and vitamins	X	5 139 065	X	N
32599807	Gelatin (pharmaceutical grade) and gelatin capsules	X	88 846	X	N
325000A7	Industrial inorganic chemicals	X	376 762	X	N
32519201	Cyclic crudes and intermediates including organic colors	X	274 476	X	N
32510031	Other synthetic organic chemicals including halogenated hydrocarbons	X	415 437	X	N
32610015	Fabricated plastics products, including plastics closures, film, and packaging items, except containers	X	307 792	X	N
33211500	Metal closures and crowns for containers	X	46 774	X	N
32310003	Labels, coupons, instructions, and other printed material	X	389 491	X	N
32610029	Plastics containers	X	520 573	X	N
32721301	Glass containers	X	201 919	X	N
33240000	Metal containers	X	52 533	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	618 969	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 649 261	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	756 432	X	N
<b>325413, IN-VITRO DIAGNOSTIC SUBSTANCE MFG</b>					
32541113	Antibiotics, in bulk, for human and veterinary use	X	4 180	X	N
32541115	Antibiotics, in bulk, for animal feeds	X	—	X	N
32541101	Vitamins, natural and synthetic, in bulk, for human and veterinary use	X	D	X	N
32541103	Vitamins, natural and synthetic, in bulk, for animal feeds	X	—	X	N
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc.	X	D	X	N
31100001	Processed food and kindred products including lactose, meat packing plant products, yeast, etc.	X	37 286	X	N
32541000	Blood derivatives and extenders	X	101 058	X	N
32541107	All other bulk medicinal and botanical un compounded drugs, except antibiotics and vitamins	X	110 966	X	N
32599807	Gelatin (pharmaceutical grade) and gelatin capsules	X	D	X	N
325000A7	Industrial inorganic chemicals	X	180 200	X	N
32519201	Cyclic crudes and intermediates including organic colors	X	47 566	X	N
32510031	Other synthetic organic chemicals including halogenated hydrocarbons	X	133 389	X	N
32610015	Fabricated plastics products, including plastics closures, film, and packaging items, except containers	X	617 030	X	N
33211500	Metal closures and crowns for containers	X	16 698	X	N
32310003	Labels, coupons, instructions, and other printed material	X	36 848	X	N
32610029	Plastics containers	X	47 380	X	N
32721301	Glass containers	X	43 205	X	N
33240000	Metal containers	X	1 698	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	66 808	X	N
00970099	All other materials and components, parts, containers, and supplies	X	480 017	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	86 505	X	N
<b>325414, BIOLOGICAL PRODUCT (EXCEPT DIAGNOSTIC) MFG</b>					
32541113	Antibiotics, in bulk, for human and veterinary use	X	D	X	51 066
32541115	Antibiotics, in bulk, for animal feeds	X	—	X	N
32541101	Vitamins, natural and synthetic, in bulk, for human and veterinary use	X	10 948	X	2 016
32541103	Vitamins, natural and synthetic, in bulk, for animal feeds	X	D	X	D
11100033	Agricultural products (crude), including flowers, grains, seeds, herbs, etc.	X	13 284	X	23 031
31100001	Processed food and kindred products including lactose, meat packing plant products, yeast, etc.	X	32 059	X	28 358
32541000	Blood derivatives and extenders	X	497 800	X	486 656
32541107	All other bulk medicinal and botanical un compounded drugs, except antibiotics and vitamins	X	28 657	X	25 670
32599807	Gelatin (pharmaceutical grade) and gelatin capsules	X	D	X	D



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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>325414, BIOLOGICAL PRODUCT (EXCEPT DIAGNOSTIC) MFG—Con.</b>					
325000A7	Industrial inorganic chemicals	X	22 476	X	31 458
32519201	Cyclic crudes and intermediates including organic colors	X	D	X	D
32510031	Other synthetic organic chemicals including halogenated hydrocarbons	X	14 947	X	1 775
32610015	Fabricated plastics products, including plastics closures, film, and packaging items, except containers	X	19 247	X	33 526
33211500	Metal closures and crowns for containers	X	2 858	X	3 260
32310003	Labels, coupons, instructions, and other printed material	X	8 938	X	5 895
32610029	Plastics containers	X	10 991	X	14 184
32721301	Glass containers	X	19 527	X	13 025
33240000	Metal containers	X	D	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard	X	12 467	X	18 444
00970099	All other materials and components, parts, containers, and supplies	X	414 919	X	227 992
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	455 571	X	149 252
<b>325510, PAINT &amp; COATING MFG</b>					
31120013	Vegetable oils	S	83 216	125.4	50 855
32513102	Titanium dioxide pigments, composite	P976.8	820 235	N	N
32513109	Other inorganic pigments, including chrome colors, zinc oxide, and iron oxide	P151.2	203 935	N	N
32519215	Organic color pigments, lakes, and toners	P93.3	504 812	N	333 467
32519225	Hydrocarbon solvents (toluene, xylene, etc.)	Q1 098.4	223 480	P893.0	163 678
32510033	Alcohol solvents (butyl, ethyl, isopropyl, etc.)	Q189.9	77 710	314.7	99 202
32510081	Ester solvents (ethyl acetate, butyl acetate, etc.)	Q200.5	103 401	N	N
32510079	Ketone solvents (acetone, mek, mibk, etc.)	Q242.6	106 616	N	N
32510097	Other solvents	S	134 021	N	N
32510035	Glycol and glycol derivative solvents	Q197.2	107 974	N	N
32521117	Alkyd plastics resins	P464.3	310 878	763.3	414 394
32521119	Acrylic plastics resins	Q37.9	585 172	802.5	495 451
32521121	Vinyl plastics resins	P317.2	166 259	603.7	217 893
32521127	Epoxy plastics resins	Q202.8	231 697	N	N
32521125	Polyester plastics resins	S	211 067	N	N
00190069	Other resins	Q306.7	337 349	N	N
32521129	Urethane/isocyanates plastics resins	136.3	214 259	N	N
32799215	Minerals and earths, ground or otherwise treated	2 269.5	359 882	N	210 360
32500061	All other chemicals not elsewhere classified	P672.0	543 399	N	N
33240000	Metal containers	X	395 559	X	N
32610029	Plastics containers	X	140 897	X	N
00190001	Other containers	X	33 072	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 086 450	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 936 387	X	N
<b>325520, ADHESIVE MFG</b>					
32521135	Polyvinyl acetate resins purchased from other establishments	Q358.5	179 651	360.8	112 071
32521109	All other plastics resins purchased from other establishments	Q350.1	268 424	569.6	251 311
32521205	Synthetic rubber	S	207 343	203.5	171 943
31122115	Starch and dextrin	S	42 953	104.2	23 946
32510095	Industrial organic chemicals, n.e.c., including synthetic organic	X	676 336	X	641 589
325000A3	Industrial inorganic chemicals	X	323 612	X	112 942
32410015	Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc.	X	237 836	X	227 672
21230003	Nonmetallic minerals and earths, ground or otherwise treated, used as extenders and fillers	X	118 229	X	204 794
32610029	Plastics containers	X	113 939	X	60 488
33240000	Metal containers	X	123 882	X	77 599
32220003	Paper and paperboard boxes and fiber cans, tubes and drums	X	196 062	X	86 617
00970099	All other materials and components, parts, containers, and supplies	X	427 744	X	295 592
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	645 002	X	391 125
<b>325611, SOAP &amp; OTHER DETERGENT MFG</b>					
32561303	Bulk surface active intermediates (active wt.)	173.4	80 161	490.7	256 972
32561305	Bulk surface active agents primarily for detergent purposes (active wt.), except intermediates	S	553 477	499.1	266 706
32561307	Other bulk surface active agents (emulsifiers, wetting agents, penetrants, etc.) (active wt.), except intermediates	P64.6	38 581	85.3	42 773
32561100	Glycerin (100 percent)	D	D	N	N
31120013	Vegetable oil	D	D	N	N
32562000	Perfume oil mixtures and blends	42.1	238 746	N	N
32519901	Fatty acids	230.1	123 915	299.9	102 128
31161301	Grease and inedible tallow	785.4	159 066	765.3	130 164
32518103	Chlorine (100 percent Cl basis)	S	5 976	S	9 284
32518105	Sodium carbonate (soda ash) (58 percent Na2O)	Q768.6	99 965	713.3	96 182
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH)	715.0	89 277	470.3	104 158
32518821	Sodium tripolyphosphate (STPP) (100 percent NaPO)	158.3	84 490	259.8	153 680
32518819	All other potassium and sodium compounds	X	227 514	X	281 294
32410013	Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc.	X	74 619	X	32 051
32500005	All other organic and inorganic chemicals	X	1 510 914	X	N
32310003	Labels, coupons, instructions, and other printed material	X	76 955	X	70 180
32221001	Paperboard containers, boxes, and corrugated paperboard	X	542 547	X	563 843
33240000	Metal containers	X	31 870	X	N
32610029	Plastics containers	X	498 494	X	N
32610037	Fabricated plastics products, including dispensing pumps and trigger and mist sprayers; except containers	X	88 312	X	N
00970099	All other materials and components, parts, containers, and supplies	X	474 907	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	944 964	X	N
<b>325612, POLISH &amp; OTHER SANITATION GOOD MFG</b>					
32561303	Bulk surface active intermediates (active wt.)	S	26 955	48.2	23 787
32561305	Bulk surface active agents primarily for detergent purposes (active wt.), except intermediates	S	35 698	P32.8	20 740
32561307	Other bulk surface active agents (emulsifiers, wetting agents, penetrants, etc.) (active wt.), except intermediates	51.7	35 588	39.1	28 728
32561100	Glycerin (100 percent)	S	621	N	N
31120013	Vegetable oil	P5.0	2 036	S	1 062
32562000	Perfume oil mixtures and blends	P13.9	101 664	Q10.4	67 022
32519901	Fatty acids	Q23.6	10 252	Q13.0	5 273
31161301	Grease and inedible tallow	S	9 738	P5.0	3 395

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992		
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)	
<b>325612, POLISH &amp; OTHER SANITATION GOOD MFG—Con.</b>						
32518103	Chlorine (100 percent Cl basis) . . . . .	1,000 s tons..	P138.1	25 028	P129.4	15 501
32518105	Sodium carbonate (soda ash) (58 percent Na2O) . . . . .	1,000 s tons..	64.6	5 146	55.6	8 302
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . .	1,000 s tons..	P123.3	31 396	155.1	31 604
32518821	Sodium tripolyphosphate (STPP) (100 percent NaPO) . . . . .	1,000 s tons..	4.6	3 251	43.5	2 749
32518819	All other potassium and sodium compounds . . . . .		X	21 422	X	22 364
32410013	Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc. . . . .		X	54 463	X	72 127
32500005	All other organic and inorganic chemicals . . . . .		X	368 003	X	N
32310003	Labels, coupons, instructions, and other printed material . . . . .		X	59 245	X	46 145
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .		X	134 815	X	147 039
33240000	Metal containers . . . . .		X	132 489	X	143 813
32610029	Plastics containers . . . . .		X	275 779	X	250 843
32610037	Fabricated plastics products, including dispensing pumps and trigger and mist sprayers; except containers . . . . .		X	108 025	X	99 630
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	283 295	X	302 784
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	677 186	X	462 550
<b>325613, SURFACE ACTIVE AGENT MFG</b>						
32561303	Bulk surface active intermediates (active wt.) . . . . .	mil lb..	117.5	71 675	187.7	58 702
32561305	Bulk surface active agents primarily for detergent purposes (active wt.), except intermediates . . . . .	mil lb..	550.3	110 785	150.7	54 108
32561307	Other bulk surface active agents (emulsifiers, wetting agents, penetrants, etc.) (active wt.), except intermediates . . . . .	mil lb..	53.6	40 792	P29.0	26 813
32561100	Glycerin (100 percent) . . . . .	mil lb..	13.4	7 324	14.8	8 417
31120013	Vegetable oil . . . . .	mil lb..	176.6	56 709	235.9	65 919
32562000	Perfume oil mixtures and blends . . . . .		D	D	S	236
32519901	Fatty acids . . . . .	mil lb..	S	125 771	224.6	109 681
31161301	Grease and inedible tallow . . . . .	mil lb..	170.3	42 607	88.2	30 569
32518103	Chlorine (100 percent Cl basis) . . . . .	1,000 s tons..	D	D	N	N
32518105	Sodium carbonate (soda ash) (58 percent Na2O) . . . . .	1,000 s tons..	6.4	1 258	45.1	705
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) . . . . .	1,000 s tons..	65.7	11 414	20.0	3 485
32518821	Sodium tripolyphosphate (STPP) (100 percent NaPO) . . . . .	1,000 s tons..	D	D	4.2	78
32518819	All other potassium and sodium compounds . . . . .		X	13 643	X	4 179
32410013	Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc. . . . .		X	192 989	X	93 027
32500005	All other organic and inorganic chemicals . . . . .		X	502 294	X	N
32310003	Labels, coupons, instructions, and other printed material . . . . .		X	1 530	X	550
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .		X	9 784	X	13 340
33240000	Metal containers . . . . .		X	13 955	X	24 887
32610029	Plastics containers . . . . .		X	15 144	X	6 718
32610037	Fabricated plastics products, including dispensing pumps and trigger and mist sprayers; except containers . . . . .		X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	382 980	X	370 311
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	727 170	X	234 866
<b>325620, TOILET PREPARATION MFG</b>						
32562000	Perfume oil mixtures and blends . . . . .		X	389 491	X	N
32510051	Perfume materials (synthetic organic) . . . . .		X	66 473	X	N
32599809	Essential oils, natural . . . . .		X	173 540	X	N
32561309	Bulk surface active agents other than sulfonated oils and fats . . . . .		X	329 676	X	N
31100027	Fats, oils, greases, and tallow . . . . .		X	154 341	X	N
32410015	Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc. . . . .		X	105 035	X	N
32510065	Alcohols . . . . .		X	85 213	X	N
32510031	Other synthetic organic chemicals including halogenated hydrocarbons . . . . .		X	243 387	X	N
32518817	Silicates . . . . .		X	96 909	X	N
32610037	Fabricated plastics products, including dispensing pumps and trigger and mist sprayers; except containers . . . . .		X	243 213	X	N
32610029	Plastics containers . . . . .		X	1 096 646	X	N
32721301	Glass containers . . . . .		X	193 103	X	N
32220013	Paper and paperboard containers including shipping containers, setup and folding cartons, etc. . . . .		X	440 854	X	N
33240000	Metal containers . . . . .		X	200 393	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	1 427 604	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	1 278 798	X	N
<b>325910, PRINTING INK MFG</b>						
32513001	Pigments, organic and inorganic . . . . .	mil lb..	213.6	514 649	310.6	563 660
32518200	Carbon black . . . . .	mil lb..	D	D	193.9	60 967
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	mil lb..	P140.4	190 791	135.8	119 414
32551003	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	mil lb..	386.8	384 435	530.8	318 179
32519105	Wood rosin, turpentine, and other wood chemicals . . . . .	mil lb..	30.1	19 018	38.7	28 096
32410011	Hydrocarbon oils and solvents . . . . .	mil gal..	58.9	137 024	P102.4	102 152
32510029	Oxygenated solvents . . . . .	mil gal..	D	D	43.4	58 537
33240000	Metal containers . . . . .		X	22 077	X	27 430
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	252 565	X	168 207
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	569 386	X	454 282
<b>325920, EXPLOSIVES MFG</b>						
32531103	Ammonia, synthetic anhydrous (100 percent NH3) . . . . .	1,000 s tons..	D	D	D	D
32531105	Ammonium nitrate (100 percent NH4NO3) . . . . .	1,000 s tons..	710.5	89 507	394.1	43 938
32531101	Nitric acid (100 percent HNO3) . . . . .	1,000 s tons..	D	D	36.2	5 421
32518805	Sulfuric acid (100 percent H2SO4), except spent . . . . .	1,000 s tons..	D	D	P48.5	3 372
32592009	High explosives, including PETN, TNT, azides, and fulminates . . . . .		X	62 368	X	13 996
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .		X	17 653	X	13 482
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	153 021	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	180 874	X	D
<b>325991, CUSTOM COMPOUNDING OF PURCHASED RESIN</b>						
325000A3	Industrial inorganic chemicals . . . . .		X	153 588	X	96 464
32513107	Inorganic pigments . . . . .		X	214 260	X	188 191
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .		X	1 803 788	X	1 037 761

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>325991, CUSTOM COMPOUNDING OF PURCHASED RESIN—Con.</b>					
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners) .....	X	294 203	X	189 430
32513200	Synthetic dyes, pigments, lakes, and toners .....	X	124 148	X	144 501
32500043	All other chemical and allied products .....	X	266 405	X	150 651
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	40 499	X	12 245
32599100	Custom compounded plastics resins (purchased) .....	X	210 524	X	84 809
32721209	Textile-type glass fiber .....	X	37 131	X	18 392
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	49 472	X	36 326
00999803	Spent or post-consumer plastics (purchased) .....	X	98 868	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	510 412	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	664 052	X	337 392
<b>325992, PHOTOGRAPHIC FILM, PAPER, PLATE, &amp; CHEMICAL MFG</b>					
32210007	Paper and paperboard products (except paperboard boxes, containers, corrugated paperboard, and photographic base papers) .....	X	198 240	X	N
32212025	Photographic base papers .....	X	720 801	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	148 598	X	N
325000B1	Inorganic chemicals, n.e.c., except silver nitrate and prepared photographic chemicals .....	X	D	X	N
32518839	Silver nitrate .....	X	266 245	X	N
325100A7	Synthetic organic chemicals, except prepared photographic chemicals .....	X	D	X	N
32599215	Prepared photographic chemicals .....	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	71 759	X	N
32611303	Unsupported plastics film and sheet for photographic, mimeographic, X-ray, etc. ....	X	153 630	X	N
32610011	Fabricated plastics products (except gaskets) .....	X	27 185	X	N
32599203	Light sensitive films and papers .....	X	164 486	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	884 636	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	83 784	X	N
<b>325998, ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT &amp; PREPARATION MFG</b>					
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	132 049	X	N
33240000	Metal containers .....	X	64 768	X	N
21230009	Crude nonmetallic minerals, including limestone, clay, gypsum, talc, etc. ....	X	119 739	X	N
31100027	Fats, oils, greases, and tallow .....	X	171 451	X	N
32518101	Alkalies and chlorine .....	X	187 400	X	N
325000A7	Industrial inorganic chemicals .....	X	620 403	X	N
32519101	Wood rosin, turpentine, and other wood chemicals, including tall oil .....	X	59 791	X	N
32510099	Synthetic organic chemicals, not elsewhere classified .....	X	829 641	X	N
32410001	Refined petroleum products, including naphtha solvents, petrolatum, waxes, etc. ....	X	298 981	X	N
32521103	Plastics and resin materials (synthetic) .....	X	199 600	X	N
32610029	Plastics containers .....	X	117 397	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	1 786 260	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	-	558 429	X	N
<b>326111, UNSUPPORTED PLASTICS BAG MFG</b>					
32212007	Paper .....	S	34 362	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb. ....	S	2 064 711	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	367 439	X	N
33131509	Aluminum foil, plain .....	D	D	X	N
32552003	Glues and adhesives .....	101.0	D	X	N
32591003	Printing ink .....	S	82 815	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	244 564	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	332 753	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	446 572	X	N
<b>326112, UNSUPPORTED PLASTICS PACKAGING FILM &amp; SHEET MFG</b>					
32212007	Paper .....	S	81 969	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. .... mil lb. ....	S	709 914	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	641 457	X	N
33131509	Aluminum foil, plain .....	S	18 599	N	N
32552003	Glues and adhesives .....	X	46 440	X	N
32591003	Printing ink .....	S	121 114	N	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	34 590	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	105 488	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	167 025	X	N
<b>326113, UNSUPPORTED PLASTICS FILM &amp; SHEET (EXCEPT PACKAGING) MFG</b>					
325000A3	Industrial inorganic chemicals .....	X	133 428	X	160 082
32513107	Inorganic pigments .....	X	73 379	X	49 798
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	3 435 989	X	2 468 044
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners) .....	X	503 381	X	377 964
32513200	Synthetic dyes, pigments, lakes, and toners .....	X	77 930	X	46 074
32500043	All other chemical and allied products .....	X	126 063	X	113 262
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	401 720	X	323 811
32599100	Custom compounded plastics resins (purchased) .....	X	261 105	X	44 283
32721209	Textile-type glass fiber .....	X	408	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	116 608	X	149 565
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	148 856	X	107 341
33322000	Parts and attachments specially designed for plastics working machinery .....	X	11 072	X	24 593
00970099	All other materials and components, parts, containers, and supplies .....	X	309 508	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	780 026	X	475 248

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>326121, UNSUPPORTED PLASTICS PROFILE SHAPE MFG</b>					
325000A3	Industrial inorganic chemicals	X	83 594	X	N
32513107	Inorganic pigments	X	41 959	X	33 307
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	1 003 490	X	771 953
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners)	X	77 466	X	57 997
32513200	Synthetic dyes, pigments, lakes, and toners	X	13 679	X	15 583
32500043	All other chemical and allied products	X	56 535	X	20 402
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	125 355	X	53 783
32599100	Custom compounded plastics resins (purchased)	X	43 882	X	23 605
32721209	Textile-type glass fiber	X	D	X	1 559
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard	X	20 050	X	12 713
32221001	Paperboard containers, boxes, and corrugated paperboard	X	71 259	X	40 705
33322000	Parts and attachments specially designed for plastics working machinery	X	D	X	7 173
00970099	All other materials and components, parts, containers, and supplies	X	168 318	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	192 873	X	165 641
<b>326122, PLASTICS PIPE &amp; PIPE FITTING MFG</b>					
32121909	Hardboard	X	4 386	X	N
325000A3	Industrial inorganic chemicals	X	1 647	X	N
32513107	Inorganic pigments	X	3 223	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	2 012 352	X	N
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners)	X	25 504	X	N
32513200	Synthetic dyes, pigments, lakes, and toners	X	18 212	X	N
32500043	All other chemical and allied products	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	47 109	X	N
32599100	Custom compounded plastics resins (purchased)	X	119 582	X	N
32721209	Textile-type glass fiber	X	11 667	X	N
31321017	Broadwoven fabrics	X	3 025	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard	X	951	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	10 036	X	N
33322000	Parts and attachments specially designed for plastics working machinery	X	D	X	N
00999803	Spent or post-consumer plastics (purchased)	X	17 090	X	N
00970099	All other materials and components, parts, containers, and supplies	X	184 459	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	264 525	X	N
<b>326130, LAMINATED PLASTICS PLATE, SHEET, &amp; SHAPE MFG</b>					
325000A3	Industrial inorganic chemicals	X	10 514	X	6 784
32513107	Inorganic pigments	X	4 905	X	4 952
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	288 300	X	131 320
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners)	X	18 108	X	23 433
32513200	Synthetic dyes, pigments, lakes, and toners	X	852	X	1 873
32500043	All other chemical and allied products	X	23 492	X	9 840
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	193 099	X	136 676
32599100	Custom compounded plastics resins (purchased)	X	15 946	X	13 835
32721209	Textile-type glass fiber	X	107 360	X	59 679
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard	X	334 522	X	233 406
32221001	Paperboard containers, boxes, and corrugated paperboard	X	D	X	11 151
33322000	Parts and attachments specially designed for plastics working machinery	X	D	X	1 438
00970099	All other materials and components, parts, containers, and supplies	X	242 641	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	172 669	X	172 494
<b>326140, POLYSTYRENE FOAM PRODUCT MFG</b>					
325000A3	Industrial inorganic chemicals	X	38 059	X	N
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners)	X	73 433	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	701 771	X	N
32599100	Custom compounded plastics resins (purchased)	X	16 866	X	N
325000A1	All other chemicals and allied products	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	52 256	X	N
32721209	Textile-type glass fiber	X	D	X	N
31321017	Broadwoven fabrics	X	D	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard	X	47 698	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	66 798	X	N
00970099	All other materials and components, parts, containers, and supplies	X	294 384	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	496 787	X	N
<b>326150, URETHANE &amp; OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MFG</b>					
325000A3	Industrial inorganic chemicals	X	48 760	X	N
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners)	X	645 739	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	517 072	X	N
32599100	Custom compounded plastics resins (purchased)	X	43 471	X	N
325000A1	All other chemicals and allied products	X	251 184	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	270 219	X	N
32721209	Textile-type glass fiber	X	26 046	X	N
31321017	Broadwoven fabrics	X	29 565	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard	X	23 144	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	30 991	X	N
00970099	All other materials and components, parts, containers, and supplies	X	886 132	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>326150, URETHANE &amp; OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MFG—Con.</b>					
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	820 279	X	N
<b>326160, PLASTICS BOTTLE MFG</b>					
325000A3	Industrial inorganic chemicals .....	X	238	X	D
32513107	Inorganic pigments .....	X	D	X	3 431
32513200	Synthetic dyes, pigments, lakes, and toners .....	X	15 827	X	11 161
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners) .....	X	4 111	X	D
32500043	All other chemical and allied products .....	X	2 479	X	276
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	1 791 901	X	1 361 002
32599100	Custom compounded plastics resins (purchased) .....	X	18 789	X	28 958
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	373 502	X	158 069
00999803	Spent or post-consumer plastics (purchased) .....	X	D	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	26 299	X	13 655
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	211 451	X	176 463
32121909	Hardboard .....	X	2 633	X	D
33322000	Parts and attachments specially designed for plastics working machinery .....	X	10 850	X	23 672
00970099	All other materials and components, parts, containers, and supplies .....	X	215 163	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	241 810	X	136 123
<b>326191, PLASTICS PLUMBING FIXTURE MFG</b>					
32121909	Hardboard .....	X	15 212	X	6 222
325000A3	Industrial inorganic chemicals .....	X	7 524	X	8 279
32513107	Inorganic pigments .....	X	2 389	X	1 203
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	140 090	X	91 332
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners) .....	X	15 693	X	1 510
32513200	Synthetic dyes, pigments, lakes, and toners .....	X	973	X	855
32500043	All other chemical and allied products .....	X	17 261	X	12 404
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	108 529	X	50 341
32599100	Custom compounded plastics resins (purchased) .....	X	7 263	X	1 233
32721209	Textile-type glass fiber .....	X	34 601	X	14 351
31321017	Broadwoven fabrics .....	X	D	X	D
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	2 547	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	25 032	X	15 007
33322000	Parts and attachments specially designed for plastics working machinery .....	X	D	X	D
00999803	Spent or post-consumer plastics (purchased) .....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	172 362	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	278 385	X	62 078
<b>326192, RESILIENT FLOOR COVERING MFG</b>					
32510059	Plasticizers .....	X	71 164	X	N
32513001	Pigments, organic and inorganic .....	X	26 195	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	244 560	X	N
32521205	Synthetic rubber .....	X	D	X	N
32500041	Other chemicals and allied products .....	X	50 510	X	N
32212037	Floor covering felts .....	X	66 780	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	115 845	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	93 446	X	N
<b>326199, ALL OTHER PLASTICS PRODUCT MFG</b>					
32121909	Hardboard .....	X	63 635	X	N
325000A3	Industrial inorganic chemicals .....	X	84 615	X	N
32513107	Inorganic pigments .....	X	167 762	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	9 402 922	X	N
325100A1	Industrial organic and synthetic organic chemicals, including plasticizers (except synthetic dyes, pigments, and toners) .....	X	332 522	X	N
32513200	Synthetic dyes, pigments, lakes, and toners .....	X	246 293	X	N
32500043	All other chemical and allied products .....	X	340 458	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	2 473 860	X	N
32599100	Custom compounded plastics resins (purchased) .....	X	469 302	X	N
32721209	Textile-type glass fiber .....	X	443 864	X	N
31321017	Broadwoven fabrics .....	X	116 155	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	204 477	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	764 200	X	N
33322000	Parts and attachments specially designed for plastics working machinery .....	X	295 697	X	N
00999803	Spent or post-consumer plastics (purchased) .....	X	142 698	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	5 143 639	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	5 646 544	X	N
<b>326211, TIRE MFG (EXCEPT RETREADING)</b>					
11321005	Natural latex rubber (dry solids content) .....	mil lb..	879.3	317.4	166 381
11321003	Natural dry rubber .....	mil lb..	893.8	1 395.6	494 177
32513107	Inorganic pigments .....	S	118 222	172.1	80 010
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	mil lb..	S	63.5	31 828
32521201	Synthetic rubber, including vulcanizable elastomers .....	X	1 480 386	X	1 142 771
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) .....	X	418 640	X	319 359
32510059	Plasticizers .....	mil lb..	9133.2	111.3	28 101
32518200	Carbon black .....	mil lb..	P2 110.8	1 765.2	401 671
32500063	All other chemical and allied products .....	X	166 319	X	272 898
32629901	Reclaimed rubber, excluding "mud" and crumb or ground scrap .....	mil lb..	S	P36.3	12 373

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>326211, TIRE MFG (EXCEPT RETREADING)—Con.</b>					
32629905	Rubber compounds and mixtures purchased (dry rubber solids content) . . . . . mil lb. .	535.8	349 603	P133.7	90 264
32600019	All other fabricated rubber products . . . . .	X	91 996	X	18 656
31499201	Nylon tire cord . . . . . mil lb. .	85.6	221 137	87.8	203 418
31499203	Polyester tire cord . . . . . mil lb. .	189.0	392 228	149.0	322 253
31499205	Metallic tire cord . . . . . mil lb. .	389.8	424 381	570.4	620 986
31499207	All tire fabrics, and rayon, fiberglass, chafer, and other tire cord . . . . .	X	193 309	X	121 701
33200081	Fabricated metal products (except forgings) . . . . .	X	69 841	X	36 770
33120011	Steel wire . . . . . 1,000 s tons. .	354.4	399 657	P71.7	63 846
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	15 499	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	390 276	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	86 569	X	80 826
<b>326212, TIRE RETREADING</b>					
32621107	Tread rubber (camelback) . . . . .	X	180 550	X	N
32621109	Tire repair materials (rubber) . . . . .	X	43 338	X	N
00999805	Pneumatic casings from used tires . . . . .	X	71 380	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	25 941	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	95 565	X	N
<b>326220, RUBBER &amp; PLASTICS HOSES &amp; BELTING MFG</b>					
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	195 340	X	87 220
32521201	Synthetic rubber, including vulcanizable elastomers . . . . .	X	210 728	X	155 495
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) . . . . .	X	57 240	X	17 271
32510059	Plasticizers . . . . .	X	23 890	X	21 895
32500037	All other chemicals and allied products . . . . .	X	39 977	X	N
32518200	Carbon black . . . . .	X	41 923	X	35 678
32629905	Rubber compounds and mixtures purchased (dry rubber solids content) . . . . .	X	279 713	X	143 184
33251019	Metal hose fittings and couplings . . . . .	X	124 816	X	55 067
33120011	Steel wire . . . . .	X	95 695	X	70 015
31320003	Textile fabrics . . . . .	X	263 850	X	256 732
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	38 431	X	43 891
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	194 813	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	148 068	X	82 964
<b>326291, RUBBER PRODUCT MFG FOR MECHANICAL USE</b>					
11321005	Natural latex rubber (dry solids content) . . . . .	X	35 679	X	11 119
11321003	Natural dry rubber . . . . .	X	66 026	X	23 134
32521115	Plastics resins (except vinyl) consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	27 731	X	N
32521139	Vinyl and vinyl copolymer resins, all forms . . . . .	X	16 625	X	N
32521111	Polyurethane elastomers and plastics (except thermoplastics) . . . . .	X	31 779	X	4 391
32521207	Thermoplastic polyurethane elastomers . . . . .	X	4 705	X	13 587
32521203	SBR-type synthetic rubber . . . . .	X	122 195	X	48 696
32521209	Polychloroprene-type synthetic rubber . . . . .	X	36 822	X	12 294
32521211	Nitrile type (butadiene-acrylonitrile) synthetic rubber . . . . .	X	22 696	X	11 374
32521213	Ethylene-propylene type plastics and synthetic rubber . . . . .	X	63 603	X	25 087
32520007	Other plastics materials and synthetic resins, synthetic rubber, cellulosic and other manmade fibers, except glass . . . . .	X	98 946	X	75 645
32629901	Reclaimed rubber, excluding "mud" and crumb or ground scrap . . . . .	X	3 928	X	4 278
32629905	Rubber compounds and mixtures purchased (dry rubber solids content) . . . . .	X	462 245	X	240 163
32600019	All other fabricated rubber products . . . . .	X	19 688	X	80 463
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) . . . . .	X	75 019	X	45 796
32510059	Plasticizers . . . . .	X	13 317	X	6 135
32510085	All other industrial organic chemicals . . . . .	X	26 616	X	13 447
32518200	Carbon black . . . . .	X	48 586	X	33 987
32513107	Inorganic pigments . . . . .	X	12 462	X	3 034
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	34 659	X	56 171
33200081	Fabricated metal products (except forgings) . . . . .	X	328 293	X	177 888
33120011	Steel wire . . . . .	X	42 253	X	23 217
33120003	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	111 072	X	67 208
31320013	Cotton fabrics . . . . .	X	6 113	X	N
31320015	Manmade fiber fabrics, including glass . . . . .	X	24 943	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	36 960	X	22 560
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	380 400	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	378 216	X	324 135
<b>326299, ALL OTHER RUBBER PRODUCT MFG</b>					
11321005	Natural latex rubber (dry solids content) . . . . .	X	156 449	X	N
11321003	Natural dry rubber . . . . .	X	170 218	X	N
32521139	Vinyl and vinyl copolymer resins, all forms . . . . .	X	21 552	X	N
32521115	Plastics resins (except vinyl) consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	58 487	X	N
32521111	Polyurethane elastomers and plastics (except thermoplastics) . . . . .	X	111 264	X	N
32521207	Thermoplastic polyurethane elastomers . . . . .	X	11 091	X	N
32521203	SBR-type synthetic rubber . . . . .	X	213 726	X	N
32521209	Polychloroprene-type synthetic rubber . . . . .	X	21 841	X	N
32521211	Nitrile type (butadiene-acrylonitrile) synthetic rubber . . . . .	X	48 850	X	N
32521213	Ethylene-propylene type plastics and synthetic rubber . . . . .	X	137 350	X	N
32520007	Other plastics materials and synthetic resins, synthetic rubber, cellulosic and other manmade fibers, except glass . . . . .	X	172 116	X	N
32629901	Reclaimed rubber, excluding "mud" and crumb or ground scrap . . . . .	X	6 343	X	N
32629905	Rubber compounds and mixtures purchased (dry rubber solids content) . . . . .	X	252 878	X	N
32600019	All other fabricated rubber products . . . . .	X	154 137	X	N
32510055	Rubber processing chemicals (accelerators, antioxidants, blowing agents, inhibitors, peptizers, etc.) . . . . .	X	317 888	X	N
32510059	Plasticizers . . . . .	X	52 551	X	N
32510085	All other industrial organic chemicals . . . . .	X	69 182	X	N
32518200	Carbon black . . . . .	X	119 503	X	N
32513107	Inorganic pigments . . . . .	X	29 125	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>326299, ALL OTHER RUBBER PRODUCT MFG—Con.</b>					
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	34 464	X	N
33200081	Fabricated metal products (except forgings)	X	28 521	X	N
33120011	Steel wire	X	23 398	X	N
33120003	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	20 899	X	N
31320013	Cotton fabrics	X	29 556	X	N
31320015	Manmade fiber fabrics, including glass	X	136 928	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	67 863	X	N
00970099	All other materials and components, parts, containers, and supplies	X	335 141	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	756 259	X	N
<b>327111, VITREOUS CHINA PLUMBING FIXTURE &amp; BATHROOM ACCESSORIES MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	85 146	X	58 191
32221001	Paperboard containers, boxes, and corrugated paperboard	X	36 531	X	23 356
332000AC	Metal stampings	X	5 714	X	N
00970099	All other materials and components, parts, containers, and supplies	X	80 469	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	12 832	X	3 549
<b>327112, VITREOUS CHINA, FINE EARTHENWARE, &amp; OTHER POTTERY PRODUCT MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	150 399	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	38 771	X	N
332000AC	Metal stampings	X	2 431	X	N
00970099	All other materials and components, parts, containers, and supplies	X	158 745	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	40 770	X	N
<b>327113, PORCELAIN ELECTRICAL SUPPLY MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	137 741	X	84 077
32221001	Paperboard containers, boxes, and corrugated paperboard	X	16 745	X	10 221
332000AC	Metal stampings	X	31 045	X	30 399
00970099	All other materials and components, parts, containers, and supplies	X	96 590	X	68 021
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	6 070	X	22 914
<b>327121, BRICK &amp; STRUCTURAL CLAY TILE MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	89 293	X	57 101
32500003	Industrial chemicals	X	24 136	X	6 334
00970099	All other materials and components, parts, containers, and supplies	X	80 632	X	96 443
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	19 124	X	29 369
<b>327122, CERAMIC WALL &amp; FLOOR TILE MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	106 860	X	78 036
32500003	Industrial chemicals	X	20 422	X	5 358
00970099	All other materials and components, parts, containers, and supplies	X	47 890	X	54 517
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	38 996	X	25 949
<b>327123, OTHER STRUCTURAL CLAY PRODUCT MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	5 835	X	5 358
32500003	Industrial chemicals	X	1 360	X	934
00970099	All other materials and components, parts, containers, and supplies	X	8 862	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	6 918	X	D
<b>327124, CLAY REFRACTORY MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	274 465	X	192 467
32799205	Dead-burned magnesia or magnesite	X	6 875	X	7 726
32710000	Refractories, clay or nonclay	X	90 098	X	73 275
32700005	Other stone, clay, glass, and concrete products	X	4 418	X	4 765
32500003	Industrial chemicals	X	6 241	X	1 995
00970099	All other materials and components, parts, containers, and supplies	X	60 828	X	70 691
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	38 737	X	24 605
<b>327125, NONCLAY REFRACTORY MFG</b>					
21232011	Clay, ceramic, and refractory minerals	X	233 653	X	143 930
32799205	Dead-burned magnesia or magnesite	X	45 104	X	54 376
32710000	Refractories, clay or nonclay	X	D	X	60 386
32700005	Other stone, clay, glass, and concrete products	X	D	X	N
32500003	Industrial chemicals	X	21 626	X	19 409
00970099	All other materials and components, parts, containers, and supplies	X	93 882	X	69 445
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	59 415	X	60 150
<b>327211, FLAT GLASS MFG</b>					
21232200	Glass sand, all types	X	78 506	X	61 579
32518105	Sodium carbonate (soda ash) (58 percent Na2O)	X	134 649	X	112 192
325000A9	Industrial inorganic chemicals, except sodium carbonate	X	42 386	X	35 828
32500055	Other chemicals and allied products	X	12 985	X	9 525
32721103	Glass (float, sheet and plate)	X	23 284	X	D
32721201	Other glass products (including glass tumblers, stemware, and tableware, excluding scrap)	X	—	X	N
32799215	Minerals and earths, ground or otherwise treated	X	D	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard	X	15 471	X	22 839
32192001	Wood boxes, pallets, skids, and containers	X	67 629	X	35 974
32611301	Plastics film and sheet, unsupported	X	D	X	D
00190028	Cullet (glass scrap)	X	36 755	X	32 336
00970099	All other materials and components, parts, containers, and supplies	X	102 575	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	26 114	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>327212, OTHER PRESSED &amp; BLOWN GLASS &amp; GLASSWARE MFG</b>					
21232200	Glass sand, all types	X	215 909	X	123 781
32518105	Sodium carbonate (soda ash) (58 percent Na2O)	X	47 751	X	31 443
325000A9	Industrial inorganic chemicals, except sodium carbonate	X	165 951	X	147 045
32500055	Other chemicals and allied products	X	121 277	X	97 659
32721103	Glass (float, sheet and plate)	X	D	X	D
32721201	Other glass products (including glass tumblers, stemware, and tableware, excluding scrap)	X	33 413	X	14 762
32799215	Minerals and earths, ground or otherwise treated	X	47 495	X	22 282
32221001	Paperboard containers, boxes, and corrugated paperboard	X	122 355	X	86 874
32192001	Wood boxes, pallets, skids, and containers	X	32 682	X	19 739
32611301	Plastics film and sheet, unsupported	X	D	X	3 802
00190028	Cullet (glass scrap)	X	26 705	X	14 150
00970099	All other materials and components, parts, containers, and supplies	X	323 427	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	60 095	X	54 340
<b>327213, GLASS CONTAINER MFG</b>					
32518105	Sodium carbonate (soda ash) (58 percent Na2O)	1 663.4	186 436	1 821.9	214 176
21232200	Glass sand, all types	5 108.4	117 320	5 521.3	126 324
32741005	Lime (including quicklime and dead-burned dolomite)	1 237.4	30 407	1 560.7	36 403
32799219	Nonmetallic minerals and earths, ground or otherwise treated	518.5	26 663	P678.6	30 705
32221001	Paperboard containers, boxes, and corrugated paperboard	X	362 561	X	551 488
00190028	Cullet (glass scrap)	2 415.6	112 149	S	152 839
32611301	Plastics film and sheet, unsupported	X	12 471	X	82 642
33350003	Industrial dies, molds, jigs, and fixtures	X	55 841	X	66 911
00970099	All other materials and components, parts, containers, and supplies	X	266 588	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	47 399	X	39 900
<b>327215, GLASS PRODUCT MFG MADE OF PURCHASED GLASS</b>					
21232200	Glass sand, all types	X	4 774	X	D
32518105	Sodium carbonate (soda ash) (58 percent Na2O)	X	93	X	Z
325000A9	Industrial inorganic chemicals, except sodium carbonate	X	27 633	X	15 888
32500055	Other chemicals and allied products	X	66 150	X	47 291
32721103	Glass (float, sheet and plate)	X	1 546 730	X	1 117 573
32721201	Other glass products (including glass tumblers, stemware, and tableware, excluding scrap)	X	603 335	X	486 351
32799215	Minerals and earths, ground or otherwise treated	X	5 681	X	191
32221001	Paperboard containers, boxes, and corrugated paperboard	X	63 017	X	75 366
32192001	Wood boxes, pallets, skids, and containers	X	32 500	X	19 923
32611301	Plastics film and sheet, unsupported	X	170 229	X	96 060
00190028	Cullet (glass scrap)	X	2 827	X	12 309
00970099	All other materials and components, parts, containers, and supplies	X	931 087	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	519 133	X	327 384
<b>327310, CEMENT MFG</b>					
32213003	Paperboard liners	X	D	X	772
32222403	Paper shipping sacks and multiwall bags	X	D	X	35 599
32200007	Other paper and paperboard products	X	7 795	X	939
32710000	Refractories, clay or nonclay	X	61 433	X	43 269
32731007	Cement clinker	X	218 967	X	160 536
32799215	Minerals and earths, ground or otherwise treated	X	152 661	X	128 037
32700007	Other stone, clay, glass, and concrete products	X	34 058	X	34 211
21231003	Crushed and broken stone (including cement rock, limestone, etc.)	X	134 062	X	72 305
00970099	All other materials and components, parts, containers, and supplies	X	409 611	X	369 290
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	143 931	X	22 636
<b>327320, READY-MIX CONCRETE MFG</b>					
21232003	Sand and gravel	X	1 472 455	X	974 624
21231200	Mining and quarrying of crushed and broken limestone (including dolomite, cement rock, marl, etc.)	X	459 692	X	225 453
21231300	Mining and quarrying of crushed and broken granite (including gneiss, syenite, and diorite)	X	44 441	X	47 413
21231900	Mining and quarrying of other crushed and broken stone (riprap, slate, marble, trap rock, sandstone, quartz, etc.)	X	156 857	X	74 164
21230005	Mining and quarrying of other nonmetallic minerals, except fuels	X	23 570	X	4 135
32510003	Ready-mixed concrete chemical processing preparations and materials	X	344 474	X	230 175
32731005	Portland and blended cements	X	2 601 914	X	1 576 530
32700015	Other stone, clay, and concrete products	X	128 150	X	N
00970099	All other materials and components, parts, containers, and supplies	X	396 688	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	2 948 576	X	2 366 190
<b>327331, CONCRETE BLOCK &amp; BRICK MFG</b>					
32731003	Portland cement	X	206 835	X	137 341
32732000	Ready-mixed concrete	X	26 116	X	5 105
32700011	Other stone, clay, glass, and concrete products	X	46 636	X	36 139
21231003	Crushed and broken stone (including cement rock, limestone, etc.)	X	57 410	X	34 578
21232003	Sand and gravel	X	114 137	X	78 114
21230007	Other mining and quarrying of nonmetallic minerals, except fuels	X	25 219	X	20 102
33120053	Steel wire strand and bars or rods, high strength, stress relieved	X	2 342	X	843
33120093	Welded steel wire concrete reinforcing mesh	X	1 565	X	1 034
33120009	Steel concrete reinforcing bars	X	763	X	1 566
33120055	Other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	2 722	X	649
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	1 262	X	1 274
00970099	All other materials and components, parts, containers, and supplies	X	165 836	X	78 947
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	299 240	X	215 632
<b>327332, CONCRETE PIPE MFG</b>					
32731003	Portland cement	X	153 286	X	N
32732000	Ready-mixed concrete	X	10 978	X	N
32700011	Other stone, clay, glass, and concrete products	X	30 267	X	N
21231003	Crushed and broken stone (including cement rock, limestone, etc.)	X	14 791	X	N
21232003	Sand and gravel	X	69 696	X	N
21230007	Other mining and quarrying of nonmetallic minerals, except fuels	X	5 474	X	N
33120053	Steel wire strand and bars or rods, high strength, stress relieved	X	40 507	X	N



**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>327332, CONCRETE PIPE MFG—Con.</b>					
33120093	Welded steel wire concrete reinforcing mesh	X	86 722	X	N
33120009	Steel concrete reinforcing bars	X	26 935	X	N
33120055	Other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	21 230	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	19 624	X	N
00970099	All other materials and components, parts, containers, and supplies	X	89 168	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	89 380	X	N
<b>327390, OTHER CONCRETE PRODUCT MFG</b>					
32731003	Portland cement	X	253 357	X	N
32732000	Ready-mixed concrete	X	80 022	X	N
32700011	Other stone, clay, glass, and concrete products	X	42 820	X	N
21231003	Crushed and broken stone (including cement rock, limestone, etc.)	X	26 993	X	N
21232003	Sand and gravel	X	129 405	X	N
21230007	Other mining and quarrying of nonmetallic minerals, except fuels	X	21 906	X	N
33120053	Steel wire strand and bars or rods, high strength, stress relieved	X	120 370	X	N
33120093	Welded steel wire concrete reinforcing mesh	X	43 482	X	N
33120009	Steel concrete reinforcing bars	X	83 595	X	N
33120055	Other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	47 745	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	16 975	X	N
00970099	All other materials and components, parts, containers, and supplies	X	460 304	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	714 320	X	N
<b>327410, LIME MFG</b>					
32213003	Paperboard liners	X	D	X	D
32222403	Paper shipping sacks and multiwall bags	X	20 956	X	8 369
32200007	Other paper and paperboard products	X	D	X	750
32710000	Refractories, clay or nonclay	X	16 631	X	20 610
32731007	Cement clinker	X	D	X	N
32799215	Minerals and earths, ground or otherwise treated	X	2 763	X	1 975
32700007	Other stone, clay, glass, and concrete products	X	1 315	X	D
21231003	Crushed and broken stone (including cement rock, limestone, etc.)	X	145 428	X	62 674
00970099	All other materials and components, parts, containers, and supplies	X	55 171	X	82 216
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	7 745	X	4 423
<b>327420, GYPSUM PRODUCT MFG</b>					
32213003	Paperboard liners	X	377 002	X	108 162
32222403	Paper shipping sacks and multiwall bags	X	D	X	N
32200007	Other paper and paperboard products	X	233 438	X	N
32710000	Refractories, clay or nonclay	X	D	X	584
32731007	Cement clinker	X	D	X	D
32799215	Minerals and earths, ground or otherwise treated	X	200 242	X	93 331
32700007	Other stone, clay, glass, and concrete products	X	39 728	X	29 830
21231003	Crushed and broken stone (including cement rock, limestone, etc.)	X	266 924	X	122 223
00970099	All other materials and components, parts, containers, and supplies	X	501 353	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	37 181	X	N
<b>327910, ABRASIVE PRODUCT MFG</b>					
21239017	Natural abrasive materials, except diamonds	X	286 311	X	N
00190039	Diamonds	X	94 322	X	N
31320005	Cotton and manmade fiber fabrics, broadwoven and narrow woven	X	148 490	X	N
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard	X	134 268	X	N
325000A3	Industrial inorganic chemicals	X	71 877	X	N
32552003	Glues and adhesives	X	56 929	X	N
32500035	Other chemicals and allied products	X	43 152	X	N
00970099	All other materials and components, parts, containers, and supplies	X	492 051	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	146 289	X	N
<b>327991, CUT STONE &amp; STONE PRODUCT MFG</b>					
21231100	Rough blocks used to produce dressed stone	X	139 332	X	82 641
32791003	Abrasives and abrasive products	X	8 958	X	4 753
33221200	Stonecutting tools and accessories (including blades)	X	19 353	X	12 423
00970099	All other materials and components, parts, containers, and supplies	X	45 533	X	29 475
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	99 082	X	132 954
<b>327993, MINERAL WOOL MFG</b>					
21232400	Kaolin and ball clay	X	29 776	X	9 255
21239301	Mining and quarrying of chemical and fertilizer minerals (including barite, borate, potash, fluorspar, and rocksalt)	X	69 679	X	44 202
21230001	Mining and quarrying of other nonmetallic minerals, except fuels	X	174 061	X	111 832
31320005	Cotton and manmade fiber fabrics, broadwoven and narrow woven	X	20 995	X	21 350
32222403	Paper shipping sacks and multiwall bags	X	49 636	X	13 016
32220011	Other converted paper and paperboard products	X	45 091	X	37 001
32200007	Other paper and paperboard products	X	49 265	X	51 604
325000A3	Industrial inorganic chemicals	X	74 948	X	33 648
32521101	Plastics materials and resins	X	69 790	X	81 157
32552003	Glues and adhesives	X	34 630	X	24 545
32500047	Other chemical and allied products	X	24 966	X	35 814
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	47 464	X	48 650
32721205	Glass fiber, textile type, bonded mat type, etc.	X	110 318	X	84 724
33111103	Crude blast furnace slag	X	22 366	X	30 306
33131511	Aluminum sheet, plate, foil, and welded tubings	X	63 062	X	9 903
32222501	Converted aluminum foil	X	9 561	X	11 025
00970099	All other materials and components, parts, containers, and supplies	X	346 257	X	259 805
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	125 481	X	85 090

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>327999, ALL OTHER MISCELLANEOUS NONMETALLIC MINERAL PRODUCT MFG</b>					
32731003	Portland cement .....	X	101 736	X	N
32732000	Ready-mixed concrete .....	X	1 501	X	N
21232003	Sand and gravel .....	X	88 492	X	N
32521101	Plastics materials and resins .....	X	18 193	X	N
32552003	Glues and adhesives .....	X	2 904	X	N
32500047	Other chemical and allied products .....	X	7 092	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	3 746	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	345 839	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	157 972	X	N
<b>331111, IRON &amp; STEEL MILLS</b>					
33120081	Steel rod for wiredrawing .....	D	D	N	N
33120067	Steel wire for redrawing .....	D	D	N	N
33120075	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	3 654 876	X	N
33111203	Ferromanganese, silicomanganese, and manganese shapes and forms (exc. castings, forgings, and fabricated metal products) .....	654.7	404 289	N	N
33111205	Ferrochromium shapes and forms (except castings, forgings, and fabricated metal products) .....	217.5	162 456	N	N
33111207	Ferrosilicon (more than 8 percent silicon) shapes and forms (except castings, forgings, and fabricated metal products) .....	155.5	120 807	N	N
33111209	Ferrovandium .....	5.9	78 248	N	N
33111201	Other ferroalloy shapes and forms (including silvery iron, ferrotungsten, ferromolybdenum, ferronickel, etc.) .....	222.7	258 808	N	N
331000AE	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	P76.1	124 642	N	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	217 999	X	N
33141933	Nickel (except ferronickel) shapes and forms (except castings, forgings, and fabricated metal products) .....	37.8	231 389	N	N
33141939	Tin shapes and forms (except castings, forgings, and fabricated metal products) .....	8.1	45 873	N	N
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	P208.1	262 653	N	N
33141913	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	181 754	X	N
33151103	Gray iron ingot molds and stools .....	X	29 352	X	N
33151007	All other iron and steel castings .....	X	149 742	X	N
32712400	Clay refractories .....	X	243 958	X	N
32712500	Nonclay refractories .....	X	223 997	X	N
32799207	Limestone fluxes .....	X	381 668	X	N
32741007	Lime fluxes, including quicklime .....	X	311 765	X	N
32741009	Dead-burned dolomite fluxes .....	X	89 844	X	N
32799209	Fluorspar fluxes .....	X	10 120	X	N
32799211	Other fluxes .....	X	132 486	X	N
32700013	All other stone, clay, glass, and concrete products .....	X	14 029	X	N
32500011	Industrial chemicals (except sulfuric acid and oxygen) .....	X	87 206	X	N
32512003	Oxygen (including high and low purity) (liquid oxygen should be converted to its gaseous equivalent) .....	X	425 858	X	N
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	X	13 653	X	N
32500039	All other chemicals and allied products .....	X	31 965	X	N
21221011	Mining crude iron ore and iron ore concentrates, including pelletized and manganiferous (gross weight) .....	32 342.2	1 351 456	N	N
21221009	Mining iron ore agglomerates, including pelletized and manganiferous (gross weight) .....	52 003.3	1 893 821	N	N
21229901	Mining manganese ore (including 10 percent manganese) and ferroalloy ore .....	X	23 056	X	N
21220013	All other metal mining .....	X	—	X	N
21211001	Coal used in the production of coke .....	28 355.4	1 379 566	N	N
00190023	Iron and steel scrap, excluding home scrap .....	48 134.3	6 160 824	N	N
00190053	Direct-reduced iron (DRI) .....	929.2	116 007	N	N
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) .....	2 568.8	692 283	N	N
32410017	Lubricating oils and greases and other petroleum products .....	X	165 672	X	N
33350003	Industrial dies, molds, jigs, and fixtures .....	X	69 374	X	N
33599103	Carbon and graphite electrodes .....	X	916 599	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	5 004 948	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	874 082	X	N
<b>331112, ELECTROMETALLURGICAL FERROALLOY PRODUCT MFG</b>					
33120075	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33111203	Ferromanganese, silicomanganese, and manganese shapes and forms (exc. castings, forgings, and fabricated metal products) .....	D	D	N	N
33111205	Ferrochromium shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	N	N
33111207	Ferrosilicon (more than 8 percent silicon) shapes and forms (except castings, forgings, and fabricated metal products) .....	7.3	4 050	N	N
33111209	Ferrovandium .....	D	D	N	N
33111201	Other ferroalloy shapes and forms (including silvery iron, ferrotungsten, ferromolybdenum, ferronickel, etc.) .....	D	D	N	N
331000AE	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	—	—	N	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	10 619	X	N
33141933	Nickel (except ferronickel) shapes and forms (except castings, forgings, and fabricated metal products) .....	1.7	11 442	N	N
33141913	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	92 785	X	N
33151103	Gray iron ingot molds and stools .....	X	84	X	N
33151007	All other iron and steel castings .....	X	1 557	X	N
32712400	Clay refractories .....	X	1 316	X	N
32712500	Nonclay refractories .....	X	11 517	X	N
32799207	Limestone fluxes .....	X	D	X	N
32741007	Lime fluxes, including quicklime .....	X	D	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331112, ELECTROMETALLURGICAL FERROALLOY PRODUCT MFG—Con.</b>					
32741009	Dead-burned dolomite fluxes .....	X	D	X	N
32799209	Fluorspar fluxes .....	X	D	X	N
32799211	Other fluxes .....	X	D	X	N
32700013	All other stone, clay, glass, and concrete products .....	X	6 196	X	N
32500011	Industrial chemicals (except sulfuric acid and oxygen) .....	X	4 563	X	N
32512003	Oxygen (including high and low purity) (liquid oxygen should be converted to its gaseous equivalent) .....	X	1 134	X	N
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	X	D	X	N
32500039	All other chemicals and allied products .....	X	1 593	X	N
21221011	Mining crude iron ore and iron ore concentrates, including pelletized and manganese (gross weight) .....	—	—	N	N
21229901	Mining manganese ore (including 10 percent manganese) and ferroalloy ore .....	X	D	X	N
21220013	All other metal mining .....	X	—	X	N
21211001	Coal used in the production of coke .....	D	D	N	N
00190023	Iron and steel scrap, excluding home scrap .....	S	46 057	N	N
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) .....	D	D	N	N
32410017	Lubricating oils and greases and other petroleum products .....	X	890	X	N
33350003	Industrial dies, molds, jigs, and fixtures .....	X	249	X	N
33599103	Carbon and graphite electrodes .....	X	32 231	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	246 783	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	8 586	X	N
<b>331210, IRON &amp; STEEL PIPES &amp; TUBES MFG FROM PURCHASED STEEL</b>					
33120075	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	3 114 161	X	2 126 410
33111203	Ferromanganese, silicomanganese, and manganese shapes and forms (exc. castings, forgings, and fabricated metal products) .....	—	—	D	D
33111205	Ferrochromium shapes and forms (except castings, forgings, and fabricated metal products) .....	—	—	D	D
33111207	Ferrosilicon (more than 8 percent silicon) shapes and forms (except castings, forgings, and fabricated metal products) .....	—	—	D	D
331000AE	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	S	41 877
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	226	X	D
33141933	Nickel (except ferronickel) shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	D	D
33141939	Tin shapes and forms (except castings, forgings, and fabricated metal products) .....	—	—	D	D
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	16.5	20 247	D	D
33141913	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	97 963	X	32 245
33151103	Gray iron ingot molds and stools .....	X	—	X	D
33151007	All other iron and steel castings .....	X	—	X	D
32712400	Clay refractories .....	X	—	X	D
32712500	Nonclay refractories .....	X	—	X	D
32741007	Lime fluxes, including quicklime .....	X	34	X	D
32799211	Other fluxes .....	X	1 294	X	Z
32700013	All other stone, clay, glass, and concrete products .....	X	—	X	D
32500011	Industrial chemicals (except sulfuric acid and oxygen) .....	X	11 006	X	5 604
32512003	Oxygen (including high and low purity) (liquid oxygen should be converted to its gaseous equivalent) .....	X	887	X	92
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	X	502	X	931
32500039	All other chemicals and allied products .....	X	275	X	D
21221011	Mining crude iron ore and iron ore concentrates, including pelletized and manganese (gross weight) .....	—	—	D	D
00190023	Iron and steel scrap, excluding home scrap .....	—	—	D	D
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) .....	—	—	D	D
32410017	Lubricating oils and greases and other petroleum products .....	X	15 968	X	5 076
33350003	Industrial dies, molds, jigs, and fixtures .....	X	10 427	X	6 122
33599103	Carbon and graphite electrodes .....	X	—	X	D
00970099	All other materials and components, parts, containers, and supplies .....	X	517 436	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	435 407	X	483 783
<b>331221, COLD-ROLLED STEEL SHAPE MFG</b>					
33120081	Steel rod for wiredrawing .....	156.8	89 015	P164.1	76 789
33120067	Steel wire for redrawing .....	S	168 133	D	D
33120075	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	2 473 838	X	2 415 777
33111201	Other ferroalloy shapes and forms (including silvery iron, ferrotungsten, ferromolybdenum, ferronickel, etc.) .....	D	D	D	D
331000AE	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	—	—	D	D
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33141933	Nickel (except ferronickel) shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	D	D
33141939	Tin shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	D	D
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	D	D
33141913	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33151007	All other iron and steel castings .....	X	D	X	3 492
32712400	Clay refractories .....	X	D	X	D
32741007	Lime fluxes, including quicklime .....	X	D	X	D
32500011	Industrial chemicals (except sulfuric acid and oxygen) .....	X	12 322	X	10 534
32512003	Oxygen (including high and low purity) (liquid oxygen should be converted to its gaseous equivalent) .....	X	D	X	D
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	X	2 063	X	184
32500039	All other chemicals and allied products .....	X	3 132	X	1 667
00190023	Iron and steel scrap, excluding home scrap .....	—	—	D	D

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331221, COLD-ROLLED STEEL SHAPE MFG—Con.</b>					
32410017	Lubricating oils and greases and other petroleum products .....	X	10 307	X	11 802
33350003	Industrial dies, molds, jigs, and fixtures .....	X	1 081	X	1 219
00970099	All other materials and components, parts, containers, and supplies .....	X	904 815	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	213 147	X	83 208
<b>331222, STEEL WIRE DRAWING</b>					
33120081	Steel rod for wiredrawing ..... 1,000 s tons..	P3 815.4	1 568 597	N	N
33120067	Steel wire for redrawing..... 1,000 s tons..	546.5	253 232	N	N
33120075	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	176 620	X	N
33111203	Ferromanganese, silicomanganese, and manganese shapes and forms (exc. castings, forgings, and fabricated metal products) ..... 1,000 s tons..	D	D	N	N
33111205	Ferrochromium shapes and forms (except castings, forgings, and fabricated metal products) ..... 1,000 s tons..	D	D	N	N
33111209	Ferrovandium .....	D	D	N	N
33111201	Other ferroalloy shapes and forms (including silvery iron, ferrotungsten, ferromolybdenum, ferronickel, etc.)..... 1,000 s tons..	-	-	N	N
331000AE	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) ..... 1,000 s tons..	D	D	N	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	4 263	X	N
33141933	Nickel (except ferronickel) shapes and forms (except castings, forgings, and fabricated metal products) ..... 1,000 s tons..	.1	1 498	N	N
33141939	Tin shapes and forms (except castings, forgings, and fabricated metal products) ..... 1,000 s tons..	D	D	N	N
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) ..... 1,000 s tons..	27.1	33 127	N	N
33141913	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	13 339	X	N
33151007	All other iron and steel castings .....	X	D	X	N
32712400	Clay refractories .....	X	-	X	N
32741007	Lime fluxes, including quicklime .....	X	D	X	N
32799211	Other fluxes .....	X	D	X	N
32500011	Industrial chemicals (except sulfuric acid and oxygen) .....	X	6 875	X	N
32512003	Oxygen (including high and low purity) (liquid oxygen should be converted to its gaseous equivalent) .....	X	D	X	N
32518803	Sulfuric acid (new and spent) (100 percent H2SO4) .....	X	752	X	N
32500039	All other chemicals and allied products .....	X	11 110	X	N
00190023	Iron and steel scrap, excluding home scrap ..... 1,000 s tons..	-	-	N	N
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) ..... 1,000 s tons..	D	D	N	N
32410017	Lubricating oils and greases and other petroleum products .....	X	7 870	X	N
33350003	Industrial dies, molds, jigs, and fixtures .....	X	11 291	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	365 504	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	138 410	X	N
<b>331311, ALUMINA REFINING</b>					
32518805	Sulfuric acid (100 percent H2SO4), except spent..... 1,000 s tons..	D	D	N	N
32518105	Sodium carbonate (soda ash) (58 percent Na2O) ..... 1,000 s tons..	D	D	N	N
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH) ..... 1,000 s tons..	9172.4	22 149	X	N
325000A5	Other industrial inorganic chemicals .....	X	34 394	X	N
32510091	Synthetic organic chemicals .....	X	D	X	N
21229903	Bauxite ..... 1,000 s tons..	11 709.8	361 988	N	N
21239001	All other crude chemical nonmetallic minerals, including barite, borate, potash, fluorspar, rock salt, etc. ....	X	D	X	N
33300015	Parts and attachments for machinery and equipment .....	X	63 571	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	-	X	N
33240000	Metal containers .....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	111 978	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	-	X	N
<b>331312, PRIMARY ALUMINUM PRODUCTION</b>					
33131209	Aluminum and aluminum-base alloy ingot ..... 1,000 s tons..	162.4	246 505	98.5	42 826
33100009	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	183 113	X	40 347
33141103	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper ..... 1,000 s tons..	D	D	D	D
33100015	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	2 797	X	797
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) ..... 1,000 s tons..	.5	520	N	N
33141937	Magnesium and magnesium-base alloy ingot .....	X	52 638	X	19 869
33141907	All other magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabr. metal products) .....	X	15 246	X	2 226
33141927	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	47 331	X	25 129
00190040	Aluminum and aluminum-base alloy scrap (except home scrap)..... 1,000 s tons..	D	D	N	N
00190024	Copper and copper-base alloy scrap (except home scrap)..... 1,000 s tons..	.4	841	D	D
00190025	Lead and lead-base alloy scrap .....	X	-	X	D
00190026	Zinc and zinc-base alloy scrap (including drosses and skimmings) .....	X	-	X	D
00190052	All other nonferrous metal and metal-base alloy scrap .....	X	-	X	D
33131100	Alumina (gross weight) ..... 1,000 s tons..	6 209.6	1 266 680	11 048.3	1 401 473
00970099	All other materials and components, parts, containers, and supplies .....	X	631 398	X	936 855
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	-	X	1 592
<b>331314, SECONDARY SMELTING &amp; ALLOYING OF ALUMINUM</b>					
33131209	Aluminum and aluminum-base alloy ingot ..... 1,000 s tons..	61 590.0	284 026	N	N
33100009	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	166 064	X	N
33141103	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper ..... 1,000 s tons..	-	-	N	N
33100015	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33141929	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
21220015	Mining and all other nonferrous metal ores and concentrates .....	X	-	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331314, SECONDARY SMELTING &amp; ALLOYING OF ALUMINUM—Con.</b>					
00190020	Aluminum and aluminum-base alloy scrap (excluding home scrap) . . . . . 1,000 s tons..	1 290.7	1 678 866	N	N
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . .	X	D	X	N
00190025	Lead and lead-base alloy scrap . . . . .	X	D	X	N
00190026	Zinc and zinc-base alloy scrap (including drosses and skimmings) . . . . .	X	D	X	N
00190052	All other nonferrous metal and metal-base alloy scrap . . . . .	X	261 695	X	N
33131100	Alumina (gross weight) . . . . . 1,000 s tons..	—	—	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	184 098	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	703	X	N
<b>331315, ALUMINUM SHEET, PLATE, &amp; FOIL MFG</b>					
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . . 1,000 s tons..	2 026.8	2 840 312	N	N
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . . 1,000 s tons..	1 489.7	1 566 026	N	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . . mil lb..	2 152.1	1 587 266	N	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . . mil lb..	D	D	N	N
33100011	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	190 651	X	N
33141113	Copper and copper-base alloy ingot, ingot bar, and wire bar . . . . . 1,000 s tons..	1.9	4 234	N	N
33141111	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	.4	681	N	N
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	47.8	142 273	N	N
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	5.5	6 985	N	N
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	1.2	4 167	N	N
33141921	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	37 015	X	N
00190021	Aluminum and aluminum-base alloy scrap (except home scrap) from other establishments of your company . . . . . 1,000 s tons..	1 353.7	920 059	N	N
00190022	Aluminum and aluminum-base alloy scrap (except home scrap) from all other sources . . . . . 1,000 s tons..	629.3	661 748	N	N
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . . 1,000 s tons..	D	D	N	N
00190080	Other nonferrous metal scrap (except home scrap) . . . . . 1,000 s tons..	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 065 680	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	—	X	N
<b>331316, ALUMINUM EXTRUDED PRODUCT MFG</b>					
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . . 1,000 s tons..	558.1	820 314	313.0	389 399
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . . 1,000 s tons..	908.8	1 276 928	P503.8	471 622
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . . mil lb..	.8	4 260	.8	5 978
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . . mil lb..	222.9	217 119	393.0	271 143
33100011	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	406 558	X	307 199
33141101	Copper and copper-base alloy cathodes . . . . . 1,000 s tons..	D	D	N	N
33141113	Copper and copper-base alloy ingot, ingot bar, and wire bar . . . . . 1,000 s tons..	D	D	N	N
33141111	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	2.9	4 826	.5	897
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	7.8	22 938	3.8	8 841
33141925	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	D	D	D	D
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	D	D	D	D
33141945	Molybdenum and molybdenum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . mil lb..	—	—	N	N
33141949	Tin and tin-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . mil lb..	D	D	D	D
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	.8	2 584	.7	2 338
33141903	Precious metals and precious metal alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 troy ounces..	—	—	N	N
33142101	Brass shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	D	D	N	N
33141921	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	10 847	X	5 006
00190021	Aluminum and aluminum-base alloy scrap (except home scrap) from other establishments of your company . . . . . 1,000 s tons..	111.5	149 921	57.0	66 926
00190022	Aluminum and aluminum-base alloy scrap (except home scrap) from all other sources . . . . . 1,000 s tons..	226.1	232 486	P157.4	165 943
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . . 1,000 s tons..	1.9	8 413	D	D
00190080	Other nonferrous metal scrap (except home scrap) . . . . . 1,000 s tons..	D	D	D	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	275 064	X	289 734
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	—	X	135 741
<b>331319, OTHER ALUMINUM ROLLING &amp; DRAWING</b>					
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . . 1,000 s tons..	139.3	217 042	D	D
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . . 1,000 s tons..	32.7	68 978	7.5	9 445
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . . mil lb..	D	D	D	D
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . . mil lb..	P193.3	166 644	D	D
33100011	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	242 366	X	D
33141101	Copper and copper-base alloy cathodes . . . . . 1,000 s tons..	D	D	N	X
33141113	Copper and copper-base alloy ingot, ingot bar, and wire bar . . . . . 1,000 s tons..	D	D	N	X
33141111	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	P1.2	2 454	D	D
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	1.3	3 878	1.2	3 213
33141925	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	D	D	D	D
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	D	D	D	D
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	D	D	D	D

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331319, OTHER ALUMINUM ROLLING &amp; DRAWING—Con.</b>					
33141921	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	9 047	X	7 710
00190021	Aluminum and aluminum-base alloy scrap (except home scrap) from other establishments of your company .....	D	D	23.0	23 139
00190022	Aluminum and aluminum-base alloy scrap (except home scrap) from all other sources .....	D	D	D	D
00190080	Other nonferrous metal scrap (except home scrap) .....	—	—	D	D
00970099	All other materials and components, parts, containers, and supplies .....	X	70 661	X	11
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	3 352	X	N
<b>331411, PRIMARY SMELTING &amp; REFINING OF COPPER</b>					
33131209	Aluminum and aluminum-base alloy ingot .....	D	D	N	N
33100009	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	—	X	D
33141103	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper .....	1 729.3	3 411 290	2 331.8	1 764 585
33100015	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33141903	Precious metals and precious metal alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33141907	All other magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabr. metal products) .....	X	—	X	D
33141927	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
21223400	Mining copper ores, concentrates and precipitates (gross weight) .....	X	922 003	4 228.7	2 148 819
21220009	Mining precious metal ores and concentrates .....	X	D	X	D
21220015	Mining and all other nonferrous metal ores and concentrates .....	X	D	X	N
00190024	Copper and copper-base alloy scrap (except home scrap) .....	D	D	D	D
00190052	All other nonferrous metal and metal-base alloy scrap .....	X	—	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	83 181	X	127 726
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	165 562	X	2 030
<b>331419, OTHER NONFERROUS METAL PRIMARY SMELTING &amp; REFINING</b>					
33131209	Aluminum and aluminum-base alloy ingot .....	D	D	D	D
33100009	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33141103	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper .....	D	D	D	D
33100015	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33141923	Lead-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	6 742	X	N
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	92.8	79 715	N	N
33141939	Tin shapes and forms (except castings, forgings, and fabricated metal products) .....	X	35 220	X	N
33141903	Precious metals and precious metal alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	60 126	X	N
33141907	All other magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabr. metal products) .....	X	D	X	D
33141927	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	100 935	X	D
21223400	Mining copper ores, concentrates and precipitates (gross weight) .....	D	D	D	D
21220015	Mining and all other nonferrous metal ores and concentrates .....	X	588 130	X	N
21220009	Mining precious metal ores and concentrates .....	X	D	X	D
00190040	Aluminum and aluminum-base alloy scrap (except home scrap) .....	D	D	N	N
00190024	Copper and copper-base alloy scrap (except home scrap) .....	D	D	D	D
00190025	Lead and lead-base alloy scrap .....	X	D	D	D
00190026	Zinc and zinc-base alloy scrap (including drosses and skimmings) .....	X	D	X	D
00190027	Tinplate scrap (including shredded steel can scrap) .....	X	D	X	D
00190051	Precious metal and precious metal alloy scrap .....	X	61 535	X	D
00190052	All other nonferrous metal and metal-base alloy scrap .....	X	159 711	X	D
33131100	Alumina (gross weight) .....	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies .....	X	324 204	X	361 662
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	44 832	X	108 124
<b>331421, COPPER ROLLING, DRAWING, &amp; EXTRUDING</b>					
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot .....	D	D	D	D
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot .....	D	D	D	D
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing .....	D	D	D	D
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. ....	9.1	10 073	1.3	1 653
33100011	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	—	X	D
33141101	Copper and copper-base alloy cathodes .....	2 517.7	1 133 891	1 167.3	957 116
33141113	Copper and copper-base alloy ingot, ingot bar, and wire bar .....	81.4	251 682	N	N
33141111	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	439.5	1 157 066	577.8	969 751
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	D	D
33141925	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	1.4	38 044	1.6	12 922
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	55.7	83 559	51.9	70 537
33141949	Tin and tin-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	4.8	12 897	1.5	4 439
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	—	—	D	D
33141903	Precious metals and precious metal alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	66.6	26 222	D	D
33142101	Brass shapes and forms (except castings, forgings, and fabricated metal products) .....	D	D	131.6	340 510
33141921	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	37 475
00190021	Aluminum and aluminum-base alloy scrap (except home scrap) from other establishments of your company .....	D	D	D	D
00190022	Aluminum and aluminum-base alloy scrap (except home scrap) from all other sources .....	—	—	D	D

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992		
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)	
<b>331421, COPPER ROLLING, DRAWING, &amp; EXTRUDING—Con.</b>						
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . .	1,000 s tons . .	564.3	1 286 890	679.9	1 372 146
00190080	Other nonferrous metal scrap (except home scrap) . . . . .	1,000 s tons . .	D	D	<sup>a</sup> 17.1	20 137
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	192 007	X	224 631
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	67 555	X	131 927
<b>331422, COPPER WIRE (EXCEPT MECHANICAL) DRAWING</b>						
33122200	Bare steel wire . . . . .	1,000 s tons . .	D	D	N	N
33142127	Unalloyed copper and copper-base alloy rods . . . . .	mil lb . .	<sup>p</sup> 210.1	234 660	N	N
33142129	Alloyed copper and copper-base alloy rods . . . . .	mil lb . .	D	D	N	N
33142119	Copper and copper-base alloy wire for redrawing . . . . .	mil lb . .	34.0	39 897	N	N
33100091	Bare copper and copper-base alloy wire, electrical (except wire for redrawing) . . . . .	mil lb . .	8.0	12 248	N	N
331000A5	Insulated copper wire and cable . . . . .		X	56 280	X	N
33142147	All other copper and copper-base alloy shapes and forms including wire bar . . . . .	mil lb . .	47.2	70 559	N	N
33100079	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	103 026	X	N
32500029	All other chemicals and allied products . . . . .	mil lb . .	<sup>p</sup> 43.6	43 314	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	58 882	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	—	X	N
<b>331423, SECONDARY SMELTING, REFINING, &amp; ALLOYING OF COPPER</b>						
33100009	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	1 104	X	N
33141103	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper . . . . .	1,000 s tons . .	2.4	4 933	N	N
33100015	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	154 110	X	N
33141929	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	2 258	X	N
00190020	Aluminum and aluminum-base alloy scrap (excluding home scrap) . . . . .	1,000 s tons . .	9	957	N	N
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . .		X	578 538	X	N
00190025	Lead and lead-base alloy scrap . . . . .		X	952	X	N
00190026	Zinc and zinc-base alloy scrap (including drosses and skimmings) . . . . .		X	1 717	X	N
00190052	All other nonferrous metal and metal-base alloy scrap . . . . .		X	26 157	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	12 779	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	8 133	X	N
<b>331491, OTHER NONFERROUS METAL ROLLING, DRAWING, &amp; EXTRUDING</b>						
33122200	Bare steel wire . . . . .	1,000 s tons . .	S	38 483	N	N
33120003	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 s tons . .	D	D	N	N
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . .	1,000 s tons . .	2.4	18 081	D	D
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot . . . . .	1,000 s tons . .	D	D	D	D
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	mil lb . .	D	D	S	156
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	mil lb . .	61.9	53 608	D	D
33131900	Aluminum and aluminum-base alloy wire for redrawing . . . . .	mil lb . .	22.9	37 096	N	N
33100089	Bare aluminum and aluminum-base alloy wire, except for redrawing . . . . .	mil lb . .	D	D	N	N
33100011	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	13 868	X	4 435
33141101	Copper and copper-base alloy cathodes . . . . .	1,000 s tons . .	.5	3 112	N	N
33141113	Copper and copper-base alloy ingot, ingot bar, and wire bar . . . . .	1,000 s tons . .	D	D	N	N
33142127	Unalloyed copper and copper-base alloy rods . . . . .	mil lb . .	520.0	495 198	N	N
33142129	Alloyed copper and copper-base alloy rods . . . . .	mil lb . .	129.0	145 710	N	N
33142119	Copper and copper-base alloy wire for redrawing . . . . .	mil lb . .	<sup>p</sup> 88.2	76 825	N	N
33100091	Bare copper and copper-base alloy wire, electrical (except wire for redrawing) . . . . .	mil lb . .	57.9	89 929	N	N
331000A5	Insulated copper wire and cable . . . . .		X	64 068	X	N
33141111	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	39 195	X	11 631
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 s tons . .	11.3	47 902	21.2	57 806
33141925	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 s tons . .	9.6	279 131	S	147 547
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 s tons . .	32.6	50 907	33.2	38 085
33141945	Molybdenum and molybdenum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	mil lb . .	4.4	30 540	2.8	15 770
33141949	Tin and tin-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	9 605	X	23 123
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 s tons . .	66.5	411 321	<sup>p</sup> 18.8	101 470
33141903	Precious metals and precious metal alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 troy ounces . .	2 760.5	255 291	838.4	248 842
33142101	Brass shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	1,000 s tons . .	D	D	D	D
33141921	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .		X	102 411	X	168 466
00190021	Aluminum and aluminum-base alloy scrap (except home scrap) from other establishments of your company . . . . .	1,000 s tons . .	—	—	N	N
00190022	Aluminum and aluminum-base alloy scrap (except home scrap) from all other sources . . . . .	1,000 s tons . .	D	D	N	N
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . .	1,000 s tons . .	D	D	D	D
00190080	Other nonferrous metal scrap (except home scrap) . . . . .	1,000 s tons . .	D	D	9.9	16 429
32521205	Synthetic rubber . . . . .	mil lb . .	D	D	N	N
32500029	All other chemicals and allied products . . . . .	mil lb . .	<sup>q</sup> 15.0	25 449	N	N
32721501	Optical fiber, data and nondata transmission . . . . .	mil lb . .	X	—	X	N
32799305	Fiberglass insulating materials . . . . .		X	6 149	X	N
32700003	All other stone, clay, glass, and concrete products . . . . .		X	—	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .		X	D	X	N
31311103	Cotton yarns . . . . .	mil lb . .	D	D	N	N
33593105	Connectors . . . . .		X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .		X	645 122	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .		X	616 985	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331492, OTHER NONFERROUS METAL SECONDARY SMELTING, REFINING, &amp; ALLOYING</b>					
33131209	Aluminum and aluminum-base alloy ingot . . . . . 1,000 s tons..	D	D	N	N
33100009	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	2 561	X	N
33141103	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper . . . . . 1,000 s tons..	S	38	N	N
33100015	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33141923	Lead-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	3 765	X	N
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . . 1,000 s tons..	79.5	117 992	N	N
33141939	Tin shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	17 895	X	N
33141903	Precious metals and precious metal alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	104 585	X	N
33141929	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	62 253	X	N
21223400	Mining copper ores, concentrates and precipitates (gross weight) . . . . . 1,000 s tons..	-	-	N	N
21220009	Mining precious metal ores and concentrates . . . . .	X	D	X	N
21220015	Mining and all other nonferrous metal ores and concentrates . . . . .	X	16 858	X	N
00190020	Aluminum and aluminum-base alloy scrap (excluding home scrap) . . . . . 1,000 s tons..	D	D	N	N
00190024	Copper and copper-base alloy scrap (except home scrap) . . . . .	X	499	X	N
00190025	Lead and lead-base alloy scrap . . . . .	X	285 554	X	N
00190026	Zinc and zinc-base alloy scrap (including drosses and skimmings) . . . . .	X	42 908	X	N
00190027	Tinplate scrap (including shredded steel can scrap) . . . . .	X	D	X	N
00190051	Precious metal and precious metal alloy scrap . . . . .	X	S	X	N
00190052	All other nonferrous metal and metal-base alloy scrap . . . . .	X	166 503	X	N
33131100	Alumina (gross weight) . . . . . 1,000 s tons..	D	D	N	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	434 124	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	272 546	X	N
<b>331511, IRON FOUNDRIES</b>					
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) . . . . .	X	210 162	X	N
33111205	Ferromanganese, silicomanganese, and manganese shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	35 163	X	N
33111203	Ferrosilicon (more than 8 percent silicon) shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	57 280	X	N
33111207	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	205 450	X	N
33100013	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	289 588	X	N
33141925	Cobalt-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	36 751	X	N
33141905	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
00190023	Iron and steel scrap, excluding home scrap . . . . .	X	1 090 865	X	N
00190082	All other purchased scrap, excluding home scrap . . . . .	X	135 050	X	N
32712400	Clay refractories . . . . .	X	41 386	X	N
32791001	Grinding wheels and other abrasive products, except industrial diamonds . . . . .	X	43 967	X	N
32712500	Nonclay refractories . . . . .	X	36 763	X	N
32700009	All other stone, clay, glass, and concrete products . . . . .	X	14 618	X	N
33299700	Industrial patterns . . . . .	X	48 998	X	N
33350003	Industrial dies, molds, jigs, and fixtures . . . . .	X	20 207	X	N
001900A5	All other industrial and commercial machinery and computer equipment . . . . .	X	39 103	X	N
21232005	Sand . . . . .	X	213 801	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 409 366	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	63 916	X	N
<b>331512, STEEL INVESTMENT FOUNDRIES</b>					
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) . . . . .	X	1 220	X	3 803
33111205	Ferromanganese, silicomanganese, and manganese shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 801	X	2 363
33111203	Ferrosilicon (more than 8 percent silicon) shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 055	X	807
33111207	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	717	X	1 322
33100013	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	29 489	X	17 472
33141925	Cobalt-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	100 126	X	85 450
33141905	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	36 769	X	24 167
00190023	Iron and steel scrap, excluding home scrap . . . . .	X	32 879	X	25 123
00190082	All other purchased scrap, excluding home scrap . . . . .	X	49 374	X	16 752
		X	2 990	X	1 857
32712400	Clay refractories . . . . .	X	3 243	X	2 438
32791001	Grinding wheels and other abrasive products, except industrial diamonds . . . . .	X	19 670	X	15 634
32712500	Nonclay refractories . . . . .	X	26 592	X	12 258
32700009	All other stone, clay, glass, and concrete products . . . . .	X	3 337	X	1 452
33299700	Industrial patterns . . . . .	X	3 450	X	6 928
33350003	Industrial dies, molds, jigs, and fixtures . . . . .	X	18 001	X	10 002
001900A5	All other industrial and commercial machinery and computer equipment . . . . .	X	3 628	X	532
21232005	Sand . . . . .	X	12 298	X	11 937
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	175 218	X	168 244
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	7 698	X	36 467
<b>331513, STEEL FOUNDRIES (EXCEPT INVESTMENT)</b>					
33120045	Pig iron shapes and forms (except silvery iron, castings, forgings, and fabricated metal products) . . . . .	X	2 492	X	2 413
33111205	Ferromanganese, silicomanganese, and manganese shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	27 371	X	23 647



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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331513, STEEL FOUNDRIES (EXCEPT INVESTMENT)—Con.</b>					
33111203	Ferromanganese, silicomanganese, and manganese shapes and forms (exc. castings, forgings, and fabricated metal products)	X	13 901	X	11 287
33111207	Ferrosilicon (more than 8 percent silicon) shapes and forms (except castings, forgings, and fabricated metal products)	X	9 375	X	6 690
33100013	All other ferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	68 729	X	11 422
33141925	Nickel and nickel-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	43 117	X	28 712
33141947	Cobalt-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	4 095	X	1 281
33141905	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	20 234	X	10 095
00190023	Iron and steel scrap, excluding home scrap	X	105 754	X	104 387
00190082	All other purchased scrap, excluding home scrap	X	69 667	X	13 899
32712400	Clay refractories	X	9 609	X	9 460
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	20 664	X	12 363
32712500	Nonclay refractories	X	14 923	X	12 573
32700009	All other stone, clay, glass, and concrete products	X	4 539	X	4 703
33299700	Industrial patterns	X	15 234	X	11 647
33350003	Industrial dies, molds, jigs, and fixtures	X	4 828	X	3 341
001900A5	All other industrial and commercial machinery and computer equipment	X	6 029	X	5 121
21232005	Sand	X	33 532	X	22 407
00970099	All other materials and components, parts, containers, and supplies	X	294 066	X	243 481
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	45 206	X	63 329
<b>331521, ALUMINUM DIE-CASTING FOUNDRIES</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	37 191
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	588 501	X	486 714
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	22 208	X	32 335
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
331000AG	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	1 525	X	D
00190024	Copper and copper-base alloy scrap (except home scrap)	X	245	X	D
00190040	Aluminum and aluminum-base alloy scrap (except home scrap)	X	195 316	X	134 041
00190080	Other nonferrous metal scrap (except home scrap)	X	D	X	D
33299700	Industrial patterns	X	745	X	1 964
33350003	Industrial dies, molds, jigs, and fixtures	X	51 227	X	25 977
001900A4	All other industrial and commercial machinery and computer equipment	X	4 567	X	4 526
21232005	Sand	X	1 948	X	651
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	2 522	X	1 410
00970099	All other materials and components, parts, containers, and supplies	X	263 825	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	157 317	X	96 762
<b>331522, NONFERROUS (EXCEPT ALUMINUM) DIE-CASTING FOUNDRIES</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	26 603	X	25 268
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	47 887	X	13 290
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	151 947	X	103 983
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	135 713	X	24 840
331000AG	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	28 120	X	7 612
00190024	Copper and copper-base alloy scrap (except home scrap)	X	1 722	X	D
00190040	Aluminum and aluminum-base alloy scrap (except home scrap)	X	746	X	D
00190080	Other nonferrous metal scrap (except home scrap)	X	2 114	X	D
33299700	Industrial patterns	X	259	X	D
33350003	Industrial dies, molds, jigs, and fixtures	X	10 792	X	3 393
001900A4	All other industrial and commercial machinery and computer equipment	X	934	X	2 710
21232005	Sand	X	2 531	X	D
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	5 560	X	708
00970099	All other materials and components, parts, containers, and supplies	X	145 411	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	114 591	X	57 818
<b>331524, ALUMINUM FOUNDRIES (EXCEPT DIE-CASTING)</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	7 082	X	40 454
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	632 676	X	290 292
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	11 872	X	3 088
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	19 134	X	4 064
331000AG	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
00190024	Copper and copper-base alloy scrap (except home scrap)	X	D	X	D
00190040	Aluminum and aluminum-base alloy scrap (except home scrap)	X	234 473	X	34 068
00190080	Other nonferrous metal scrap (except home scrap)	X	511	X	1 156
33299700	Industrial patterns	X	21 279	X	17 400
33350003	Industrial dies, molds, jigs, and fixtures	X	87 442	X	7 153
001900A4	All other industrial and commercial machinery and computer equipment	X	3 186	X	11 280
21232005	Sand	X	20 797	X	15 432
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	8 823	X	5 428
00970099	All other materials and components, parts, containers, and supplies	X	250 864	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	113 077	X	62 444

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>331525, COPPER FOUNDRIES (EXCEPT DIE-CASTING)</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	109 461	X	92 233
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	10 818	X	8 809
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	721	X	224
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	883	X	D
331000AG	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	561	X	3 520
00190024	Copper and copper-base alloy scrap (except home scrap)	X	18 342	X	28 537
00190040	Aluminum and aluminum-base alloy scrap (except home scrap)	X	169	X	124
00190080	Other nonferrous metal scrap (except home scrap)	X	209	X	701
33299700	Industrial patterns	X	2 882	X	1 979
33350003	Industrial dies, molds, jigs, and fixtures	X	757	X	4 383
001900A4	All other industrial and commercial machinery and computer equipment	X	1 772	X	559
21232005	Sand	X	4 626	X	2 890
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	2 796	X	1 935
00970099	All other materials and components, parts, containers, and supplies	X	57 338	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	62 577	X	81 698
<b>331528, OTHER NONFERROUS FOUNDRIES (EXCEPT DIE-CASTING)</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	1 405	X	D
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	914	X	1 104
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	10 879	X	4 250
33141935	Magnesium and magnesium-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	1 751	X	4 353
331000AG	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	72 443	X	31 944
00190024	Copper and copper-base alloy scrap (except home scrap)	X	D	X	D
00190040	Aluminum and aluminum-base alloy scrap (except home scrap)	X	D	X	N
00190080	Other nonferrous metal scrap (except home scrap)	X	D	X	D
33299700	Industrial patterns	X	D	X	D
33350003	Industrial dies, molds, jigs, and fixtures	X	D	X	D
001900A4	All other industrial and commercial machinery and computer equipment	X	D	X	D
21232005	Sand	X	3 861	X	4 150
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	4 608	X	2 003
00970099	All other materials and components, parts, containers, and supplies	X	188 681	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	17 487	X	12 692
<b>332111, IRON &amp; STEEL FORGING</b>					
33200081	Fabricated metal products (except forgings)	X	11 375	X	17 541
33210001	Forgings, 1,000 s tons..	P175.8	342 212	P46.3	81 747
33100035	Castings (rough and semifinished)	X	D	X	10 819
33120005	Steel ingot and semifinished shapes (blooms, billets, and slabs) (except castings, forgings, and fabr. metal products), 1,000 s tons..	273.4	187 190	Q275.5	259 641
33120065	Steel bars, bar shapes, and other shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	1 196.8	721 156	P803.5	475 247
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	3.0	79 706	2.0	32 648
33100074	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	D	D	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	8.4	24 788	Q3.0	8 290
33149103	Nickel and nickel-base alloy, including nickel-copper alloys (except castings, forgings, and fabricated metal products), 1,000 s tons..	41.3	112 308	4.5	38 200
33351400	Forging dies, 1,000 s tons..	S	54 168	S	17 785
00970099	All other materials and components, parts, containers, and supplies	X	218 151	X	136 158
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	292 800	X	187 348
<b>332112, NONFERROUS FORGING</b>					
33200081	Fabricated metal products (except forgings)	X	D	X	N
33210001	Forgings, 1,000 s tons..	7.3	73 941	D	D
33100035	Castings (rough and semifinished)	X	D	X	N
33120005	Steel ingot and semifinished shapes (blooms, billets, and slabs) (except castings, forgings, and fabr. metal products), 1,000 s tons..	D	D	3.9	11 119
33120065	Steel bars, bar shapes, and other shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	D	D	S	2 347
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	138.8	67 498	230.3	62 846
33100074	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	D	D	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products), 1,000 s tons..	161.4	200 790	118.3	171 913
33149103	Nickel and nickel-base alloy, including nickel-copper alloys (except castings, forgings, and fabricated metal products), 1,000 s tons..	.4	3 464	D	D
33351400	Forging dies, 1,000 s tons..	2.1	8 223	S	11 739
00970099	All other materials and components, parts, containers, and supplies	X	72 558	X	57 158
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	9 673	X	34 067
<b>332114, CUSTOM ROLL FORMING</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	20 013	X	N
33200095	Other fabricated metal products (except forgings)	X	34 684	X	N
33100035	Castings (rough and semifinished)	X	9 611	X	N
33210001	Forgings	X	3 273	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	191 886	X	N
33120009	Steel concrete reinforcing bars	X	D	X	N
33120017	Steel sheet and strip, including tin plate	X	352 661	X	N
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	60 697	X	N
33120037	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	528 519	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332114, CUSTOM ROLL FORMING—Con.</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	3 769	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	70 382	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	5 934	X	N
33100007	All other aluminum and aluminum-base alloy shapes and forms, including refinery shapes (except castings and forgings)	X	74 447	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	32 854	X	N
00190023	Iron and steel scrap, excluding home scrap	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	5 930	X	N
00970099	All other materials and components, parts, containers, and supplies	X	205 406	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	182 924	X	N
<b>332115, CROWN &amp; CLOSURE MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	1 431	X	797
33200095	Other fabricated metal products (except forgings)	X	12 838	X	D
33151001	Iron and steel castings (rough and semifinished)	X	874	X	D
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	D	X	D
33210001	Forgings	X	D	X	N
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	2 938	X	D
33120017	Steel sheet and strip, including tin plate, 1,000 s tons..	S	41 274	S	1 904
33120079	Steel plate	X	D	X	N
33120025	Steel wire and wire products	X	D	X	N
33120013	Steel tinplate, tin free steel, terneplate, and blackplate, 1,000 s tons..	S	167 252	S	209 628
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	21 081	X	47 114
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	39	X	D
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	22 069	X	13 966
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	23 917	X	23 121
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	28 793	X	28 175
32500051	All other chemicals and allied products	X	D	X	14 732
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	997	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard	X	9 720	X	9 964
32200007	Other paper and paperboard products	X	6 353	X	4 681
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	1 623	X	D
00970099	All other materials and components, parts, containers, and supplies	X	15 561	X	31 852
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	72 243	X	10 135
<b>332116, METAL STAMPING</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	155 837	X	N
33200095	Other fabricated metal products (except forgings)	X	461 069	X	N
33151001	Iron and steel castings (rough and semifinished)	X	40 449	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	10 080	X	N
33210001	Forgings	X	3 403	X	N
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	91 297	X	N
33120017	Steel sheet and strip, including tin plate, 1,000 s tons..	S	1 268 314	X	N
33120079	Steel plate	X	57 670	X	N
33120025	Steel wire and wire products	X	30 069	X	N
33120013	Steel tinplate, tin free steel, terneplate, and blackplate, 1,000 s tons..	S	36 028	X	N
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	275 537	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	122 710	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	187 764	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	22 671	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	73 974	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	59 246	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	32 218	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	48 340	X	N
32500051	All other chemicals and allied products	X	12 533	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	17 780	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	88 559	X	N
32200007	Other paper and paperboard products	X	20 720	X	N
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	68 038	X	N
00970099	All other materials and components, parts, containers, and supplies	X	603 548	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	950 512	X	N
<b>332117, POWDER METALLURGY PART MFG</b>					
33200097	Other fabricated metal products (except forgings)	X	4 321	X	N
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120029	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	11 092	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332117, POWDER METALLURGY PART MFG—Con.</b>					
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
331000AA	Metal powders .....	X	206 645	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	92 659	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	97 801	X	N
<b>332211, CUTLERY &amp; FLATWARE (EXCEPT PRECIOUS) MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	10 382	X	8 486
33200095	Other fabricated metal products (except forgings) .....	X	21 898	X	13 284
33151001	Iron and steel castings (rough and semifinished) .....	X	12 723	X	22 388
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....	X	1 654	X	3 474
33152003	Other nonferrous castings (rough and semifinished) .....	X	D	X	D
33211101	Iron and steel forgings .....	X	22 626	X	12 965
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	4 040	X	2 597
33120073	Steel sheet, strip, and tin mill products .....	X	55 874	X	22 694
33120025	Steel wire and wire products .....	X	1 469	X	790
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	2 678	X	16 167
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	1 259	X	101
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	3 751	X	1 370
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
32100047	Wood parts, including handles .....	X	7 243	X	7 141
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	30 493	X	28 072
32610003	Plastics products (film, sheet, rod, tube, and fabricated shapes, including parts, handles, grips, etc.) .....	X	49 016	X	29 635
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	49 132	X	43 522
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc. ....	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	77 537	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	39 336	X	N
<b>332212, HAND &amp; EDGE TOOL MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	56 347	X	N
33200095	Other fabricated metal products (except forgings) .....	X	117 374	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	90 283	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....	X	19 152	X	N
33152003	Other nonferrous castings (rough and semifinished) .....	X	10 616	X	N
33211101	Iron and steel forgings .....	X	64 723	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	306 051	X	N
33120073	Steel sheet, strip, and tin mill products .....	X	159 230	X	N
33120025	Steel wire and wire products .....	X	25 434	X	N
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	31 586	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	3 845	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	20 233	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	2 282	X	N
32100047	Wood parts, including handles .....	X	45 006	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	36 150	X	N
32610003	Plastics products (film, sheet, rod, tube, and fabricated shapes, including parts, handles, grips, etc.) .....	X	90 562	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	73 737	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	417 397	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	287 305	X	N
<b>332213, SAW BLADE &amp; HANDSAW MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	1 551	X	1 551
33200095	Other fabricated metal products (except forgings) .....	X	22 103	X	9 468
33151001	Iron and steel castings (rough and semifinished) .....	X	13 037	X	3 787
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....	X	2 832	X	D
33152003	Other nonferrous castings (rough and semifinished) .....	X	1 922	X	7 405
33211101	Iron and steel forgings .....	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	41 122	X	10 336
33120073	Steel sheet, strip, and tin mill products .....	X	105 004	X	75 154
33120025	Steel wire and wire products .....	X	16 553	X	5 279
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	51 132	X	10 116
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	D
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	1 381	X	D
32100047	Wood parts, including handles .....	X	2 122	X	2 193
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	210	X	1 891
32610003	Plastics products (film, sheet, rod, tube, and fabricated shapes, including parts, handles, grips, etc.) .....	X	3 789	X	5 323

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332213, SAW BLADE &amp; HANDSAW MFG—Con.</b>					
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	16 118	X	16 371
00970099	All other materials and components, parts, containers, and supplies	X	80 316	X	82 224
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	20 104	X	18 646
<b>332214, KITCHEN UTENSIL, POT, &amp; PAN MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	7 002	X	N
33200095	Other fabricated metal products (except forgings)	X	44 104	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	3 404	X	N
33210001	Forgings	X	D	X	N
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	111	X	N
33120017	Steel sheet and strip, including tin plate, 1,000 s tons	S	54 482	X	N
33120079	Steel plate	X	7 560	X	N
33120025	Steel wire and wire products	X	2 206	X	N
33120013	Steel tinplate, tin free steel, terneplate, and blackplate, 1,000 s tons	D	D	X	N
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	19 279	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	88 457	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	D	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	56 716	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	2 734	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	1 321	X	N
32500051	All other chemicals and allied products	X	10 113	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	7 114	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	21 270	X	N
32200007	Other paper and paperboard products	X	5 846	X	N
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	400	X	N
00970099	All other materials and components, parts, containers, and supplies	X	101 646	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	S	15 809	X	N
<b>332311, PREFABRICATED METAL BUILDING &amp; COMPONENT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	110 751	X	42 376
33200095	Other fabricated metal products (except forgings)	X	129 483	X	58 236
33100035	Castings (rough and semifinished)	X	18 438	X	956
33210001	Forgings	X	D	X	D
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	217 350	X	134 941
33120009	Steel concrete reinforcing bars	X	7 360	X	D
33120017	Steel sheet and strip, including tin plate	X	810 246	X	479 105
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	237 191	X	51 552
33120037	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	303 265	X	172 898
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	58 447	X	58 440
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	40 565	X	20 531
33100007	All other aluminum and aluminum-base alloy shapes and forms, including refinery shapes (except castings and forgings)	X	25 476	X	29 779
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	20 901	X	2 000
00190023	Iron and steel scrap, excluding home scrap	X	1 182	X	D
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	57 277	X	16 988
00970099	All other materials and components, parts, containers, and supplies	X	153 012	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	164 113	X	D
<b>332312, FABRICATED STRUCTURAL METAL MFG</b>					
33290005	Fabricated metal pipe (except castings and forgings)	X	112 724	X	N
33291905	Fabricated metal valves and pipe fittings	X	26 242	X	N
332000A3	Fabricated metal parts specially designed for steel power boilers, n.e.c. (except castings and forgings)	X	D	X	N
33200039	All other fabricated metal products (except castings and forgings)	X	650 309	X	N
33151001	Iron and steel castings (rough and semifinished)	X	67 326	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	8 181	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33210001	Forgings	X	5 968	X	N
33120057	Steel bars and bar shapes (except concrete reinforcing bars, castings, forgings, and fabricated metal products)	X	292 534	X	N
33120009	Steel concrete reinforcing bars	X	430 569	X	N
33120017	Steel sheet and strip, including tin plate	X	582 282	X	N
33120079	Steel plate	X	487 601	X	N
33120041	Wide flange steel structural beams	X	763 503	X	N
33120047	All other steel structural shapes (except sheet piling, castings, forgings, and fabricated steel products)	X	652 672	X	N
33120039	All other steel shapes and forms (including sheet piling, excluding castings, forgings, and fabricated metal products)	X	275 221	X	N
33140003	Nonferrous refinery shapes (except castings, forgings, and fabricated metal products)	X	1 189	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	16 386	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332312, FABRICATED STRUCTURAL METAL MFG—Con.</b>					
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	7 364	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	71 389	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	16 389	X	N
33100067	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	38 275	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	153 302	X	N
33399203	Welding electrodes	X	59 103	X	N
00970099	All other materials and components, parts, containers, and supplies	X	760 499	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 128 007	X	N
<b>332313, PLATE WORK MFG</b>					
33290005	Fabricated metal pipe (except castings and forgings)	X	11 712	X	N
33291905	Fabricated metal valves and pipe fittings	X	6 133	X	N
332000A3	Fabricated metal parts specially designed for steel power boilers, n.e.c. (except castings and forgings)	X	D	X	N
33200039	All other fabricated metal products (except castings and forgings)	X	99 311	X	N
33151001	Iron and steel castings (rough and semifinished)	X	13 558	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	240	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	4 930	X	N
33210001	Forgings	X	7 938	X	N
33120057	Steel bars and bar shapes (except concrete reinforcing bars, castings, forgings, and fabricated metal products)	X	80 796	X	N
33120009	Steel concrete reinforcing bars	X	1 498	X	N
33120017	Steel sheet and strip, including tin plate	X	132 347	X	N
33120079	Steel plate	X	148 190	X	N
33120041	Wide flange steel structural beams	X	11 654	X	N
33120047	All other steel structural shapes (except sheet piling, castings, forgings, and fabricated steel products)	X	35 370	X	N
33120039	All other steel shapes and forms (including sheet piling, excluding castings, forgings, and fabricated metal products)	X	58 806	X	N
33140003	Nonferrous refinery shapes (except castings, forgings, and fabricated metal products)	X	D	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	D	X	N
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	509	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	26 462	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	3 311	X	N
33100067	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	9 642	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	19 037	X	N
33399203	Welding electrodes	X	10 411	X	N
00970099	All other materials and components, parts, containers, and supplies	X	127 042	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	244 823	X	N
<b>332321, METAL WINDOW &amp; DOOR MFG</b>					
32721101	Flat glass (plate, float, and sheet)	X	165 862	X	291 115
33251009	Builders' hardware (including door locks, locksets, lock trim, screen hardware, etc.)	X	241 328	X	207 527
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	97 114	X	N
33200045	Other fabricated metal products (except castings and forgings)	X	292 815	X	117 932
33151001	Iron and steel castings (rough and semifinished)	X	16 713	X	9 635
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	31 611	X	N
33210001	Forgings	X	119	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	82 962	X	N
33120017	Steel sheet and strip, including tin plate	X	720 928	X	N
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	51 359	X	N
33120025	Steel wire and wire products	X	32 501	X	13 700
33120087	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	291 688	X	112 627
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	2 516	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	232 275	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	662 955	X	N
33100007	All other aluminum and aluminum-base alloy shapes and forms, including refinery shapes (except castings and forgings)	X	331 384	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	263 118	X	N
00190020	Aluminum and aluminum-base alloy scrap (excluding home scrap)	X	81 884	X	88 185
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	75 682	X	109 325
00970099	All other materials and components, parts, containers, and supplies	X	742 300	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	543 789	X	N
<b>332322, SHEET METAL WORK MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	178 273	X	N
33200095	Other fabricated metal products (except forgings)	X	456 514	X	N
33151001	Iron and steel castings (rough and semifinished)	X	33 953	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	41 342	X	N
33210001	Forgings	X	6 306	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	88 424	X	N
33120009	Steel concrete reinforcing bars	X	2 861	X	N
33120017	Steel sheet and strip, including tin plate	X	1 635 851	X	N
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	113 874	X	N
33120037	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	139 128	X	N

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332322, SHEET METAL WORK MFG—Con.</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	18 517	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	585 467	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	28 214	X	N
33100007	All other aluminum and aluminum-base alloy shapes and forms, including refinery shapes (except castings and forgings)	X	151 023	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	28 807	X	N
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	39 712	X	N
32721101	Flat glass (plate, float, and sheet)	X	16 787	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	90 285	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	111 637	X	N
00970099	All other materials and components, parts, containers, and supplies	X	877 172	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 222 666	X	N
<b>332323, ORNAMENTAL &amp; ARCHITECTURAL METAL WORK MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	39 868	X	N
33200095	Other fabricated metal products (except forgings)	X	109 500	X	N
33100035	Castings (rough and semifinished)	X	29 628	X	N
33210001	Forgings	X	492	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	127 666	X	N
33120009	Steel concrete reinforcing bars	X	9 827	X	N
33120017	Steel sheet and strip, including tin plate	X	227 385	X	N
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	132 961	X	N
33120037	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	240 881	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	44 926	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	74 850	X	N
33100007	All other aluminum and aluminum-base alloy shapes and forms, including refinery shapes (except castings and forgings)	X	12 644	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	25 315	X	N
00190023	Iron and steel scrap, excluding home scrap	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	29 594	X	N
00970099	All other materials and components, parts, containers, and supplies	X	179 713	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	393 634	X	N
<b>332410, POWER BOILER &amp; HEAT EXCHANGER MFG</b>					
33290005	Fabricated metal pipe (except castings and forgings)	X	94 267	X	N
33291905	Fabricated metal valves and pipe fittings	X	24 901	X	N
332000A3	Fabricated metal parts specially designed for steel power boilers, n.e.c. (except castings and forgings)	X	31 113	X	N
33200039	All other fabricated metal products (except castings and forgings)	X	169 173	X	N
33151001	Iron and steel castings (rough and semifinished)	X	35 138	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	—	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	18 146	X	N
33210001	Forgings	X	19 299	X	N
33120057	Steel bars and bar shapes (except concrete reinforcing bars, castings, forgings, and fabricated metal products)	X	31 076	X	N
33120009	Steel concrete reinforcing bars	X	D	X	N
33120017	Steel sheet and strip, including tin plate	X	117 087	X	N
33120079	Steel plate	X	114 581	X	N
33120041	Wide flange steel structural beams	X	16 205	X	N
33120047	All other steel structural shapes (except sheet piling, castings, forgings, and fabricated steel products)	X	20 335	X	N
33120039	All other steel shapes and forms (including sheet piling, excluding castings, forgings, and fabricated metal products)	X	30 653	X	N
33140003	Nonferrous refinery shapes (except castings, forgings, and fabricated metal products)	X	D	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	63 896	X	N
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	14 860	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	59 040	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	39 488	X	N
33100067	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	12 971	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	32 167	X	N
33399203	Welding electrodes	X	41 477	X	N
00970099	All other materials and components, parts, containers, and supplies	X	203 088	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	369 291	X	N
<b>332420, METAL TANK (HEAVY GAUGE) MFG</b>					
33290005	Fabricated metal pipe (except castings and forgings)	X	107 354	X	N
33291905	Fabricated metal valves and pipe fittings	X	145 405	X	N
332000A3	Fabricated metal parts specially designed for steel power boilers, n.e.c. (except castings and forgings)	X	16 867	X	N
33200039	All other fabricated metal products (except castings and forgings)	X	164 273	X	N
33151001	Iron and steel castings (rough and semifinished)	X	17 777	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	—	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	2 097	X	N
33210001	Forgings	X	51 682	X	N
33120057	Steel bars and bar shapes (except concrete reinforcing bars, castings, forgings, and fabricated metal products)	X	53 227	X	N
33120009	Steel concrete reinforcing bars	X	798	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332420, METAL TANK (HEAVY GAUGE) MFG—Con.</b>					
33120017	Steel sheet and strip, including tin plate	X	340 318	X	N
33120079	Steel plate	—	259 989	X	N
33120041	Wide flange steel structural beams	X	15 050	X	N
33120047	All other steel structural shapes (except sheet piling, castings, forgings, and fabricated steel products)	X	45 540	X	N
33120039	All other steel shapes and forms (including sheet piling, excluding castings, forgings, and fabricated metal products)	X	203 193	X	N
33140003	Nonferrous refinery shapes (except castings, forgings, and fabricated metal products)	X	D	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	D	X	N
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	1 693	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	28 812	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	36 021	X	N
33100067	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	13 626	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	58 571	X	N
33399203	Welding electrodes	X	27 505	X	N
00970099	All other materials and components, parts, containers, and supplies	X	308 574	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	135 583	X	N
<b>332431, METAL CAN MFG</b>					
33243105	Lids, ends, and parts for metal cans	X	1 118 150	X	631 927
33200035	All other fabricated metal products (except castings and forgings)	X	D	X	D
33210001	Forgings	X	D	X	N
33120073	Steel sheet, strip, and tin mill products	X	1 592 997	X	2 025 207
33120025	Steel wire and wire products	X	2 760	X	232
33120099	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	3 118 392	X	2 567 830
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	2 019 382
33142109	Copper mechanical wire (including extruded and/or drawn shapes)	X	11 201	X	24 587
33142125	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	889
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	1 034
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	222 389	X	301 371
32552001	Adhesives and sealants	X	34 714	X	31 260
32591003	Printing ink	X	49 364	X	43 007
32500049	All other chemicals and allied products	X	31 501	X	35 294
32221001	Paperboard containers, boxes, and corrugated paperboard	X	45 868	X	24 169
00970099	All other materials and components, parts, containers, and supplies	X	396 298	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	137 993	X	303 571
<b>332439, OTHER METAL CONTAINER MFG</b>					
33243105	Lids, ends, and parts for metal cans	X	49 563	X	30 800
33200035	All other fabricated metal products (except castings and forgings)	X	66 653	X	21 724
33210001	Forgings	X	13 240	X	N
33120073	Steel sheet, strip, and tin mill products	X	371 968	X	N
33120025	Steel wire and wire products	X	1 631	X	N
33120099	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	87 250	X	32 770
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	23 465	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	15 478	X	N
33142109	Copper mechanical wire (including extruded and/or drawn shapes)	X	170	X	N
33142125	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	298	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	7 233	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	38 871	X	N
32552001	Adhesives and sealants	X	1 957	X	868
32591003	Printing ink	X	1 660	X	232
32500049	All other chemicals and allied products	X	6 709	X	4 965
32221001	Paperboard containers, boxes, and corrugated paperboard	X	23 676	X	N
00970099	All other materials and components, parts, containers, and supplies	X	154 756	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	251 978	X	N
<b>332510, HARDWARE MFG</b>					
33251005	Metal hardware, including hinges, handles, locks, casters, etc.	X	217 713	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	157 397	X	N
332000AC	Metal stampings	X	267 118	X	N
33290009	Fabricated metal wire products (including wire rope, cable, springs, etc.)	X	25 028	X	N
33200013	All other fabricated metal products (except forgings)	X	135 691	X	N
33151001	Iron and steel castings (rough and semifinished)	X	99 542	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	39 124	X	N
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	21 373	X	N
33152800	Zinc and zinc-base alloy castings (rough and semifinished)	X	92 403	X	N
33152007	All other nonferrous castings (rough and semifinished)	X	6 792	X	N
33210001	Forgings	X	35 229	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	108 421	X	N
33120073	Steel sheet, strip, and tin mill products	X	517 887	X	N
33120025	Steel wire and wire products	X	102 904	X	N
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	197 827	X	N
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes	X	46 750	X	N
33142133	Copper and copper-base alloy sheet, strip, and plate	X	69 899	X	N
33142113	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	25 455	X	N



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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332510, HARDWARE MFG—Con.</b>					
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	40 843	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	47 828	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	33 585	X	N
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	53 447	X	N
33100069	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	61 085	X	N
331000AA	Metal powders	X	29 166	X	N
32600015	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	39 290	X	N
32610003	Plastics products (film, sheet, rod, tube, and fabricated shapes, including parts, handles, grips, etc.)	X	132 057	X	N
32600003	All other rubber and miscellaneous plastics products	X	35 105	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	96 553	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	42 170	X	N
32720001	Glass and glass products	X	4 535	X	N
33531207	Electric motors, generators, and parts	X	344 726	X	N
00970099	All other materials and components, parts, containers, and supplies	X	595 277	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	631 646	X	N
<b>332611, SPRING (HEAVY GAUGE) MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	10 762	X	7 327
33200095	Other fabricated metal products (except forgings)	X	3 788	X	1 360
33100035	Castings (rough and semifinished)	X	1 245	X	D
33210001	Forgings	X	2 197	X	D
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	106 784	X	69 716
33120017	Steel sheet and strip, including tin plate	X	63 461	X	13 731
33120025	Steel wire and wire products	X	54 842	X	30 862
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	25 079	X	D
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	1 289	X	586
00970099	All other materials and components, parts, containers, and supplies	X	—	X	14 561
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	58 434	X	16 620
<b>332612, SPRING (LIGHT GAUGE) MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	37 381	X	N
33200095	Other fabricated metal products (except forgings)	X	18 657	X	N
33100035	Castings (rough and semifinished)	X	3 991	X	N
33210001	Forgings	X	18 708	X	N
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	36 320	X	N
33120017	Steel sheet and strip, including tin plate	X	54 876	X	N
33120025	Steel wire and wire products	X	534 801	X	N
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	117 258	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	15 029	X	N
00970099	All other materials and components, parts, containers, and supplies	X	243	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	—	X	N
<b>332618, OTHER FABRICATED WIRE PRODUCT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	21 847	X	13 777
33200095	Other fabricated metal products (except forgings)	X	58 220	X	44 587
33210001	Forgings	X	7 840	X	5 930
33100035	Castings (rough and semifinished)	X	10 190	X	5 367
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	50 269	X	39 269
33120017	Steel sheet and strip, including tin plate	X	62 923	X	60 659
33120025	Steel wire and wire products	X	794 997	X	688 409
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	140 631	X	110 710
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	24 033	X	19 931
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	33 093	X	22 295
00970099	All other materials and components, parts, containers, and supplies	X	512 669	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	398 366	X	N
<b>332710, MACHINE SHOPS</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	217 120	X	N
33200097	Other fabricated metal products (except forgings)	X	435 690	X	N
33210001	Forgings	X	124 506	X	N
33151001	Iron and steel castings (rough and semifinished)	X	603 266	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	198 144	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	55 420	X	N
33120071	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	632 608	X	N
33120017	Steel sheet and strip, including tin plate	X	126 886	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	39 402	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	99 635	X	N
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes	X	47 727	X	N
33142137	All other copper and copper-based alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	26 484	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	212 057	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	133 330	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>332710, MACHINE SHOPS—Con.</b>				
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	66 910	X	N
33351503	Cutting tools for machine tools . . . . .	X	301 761	X	N
00190090	Fluid power products . . . . .	X	124 217	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	715 769	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	2 104 556	X	N
	<b>332721, PRECISION TURNED PRODUCT MFG</b>				
33200005	Fabricated metal products, including forgings . . . . .	X	50 051	X	42 540
33100035	Castings (rough and semifinished) . . . . .	X	19 874	X	15 311
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products) . . . . .	X	435 578	X	344 298
33120017	Steel sheet and strip, including tin plate . . . . .	X	23 623	X	18 292
33120025	Steel wire and wire products . . . . .	X	21 586	X	37 628
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	23 006	X	10 117
33142107	Copper and copper-base alloy rod, bar, and bar shapes (except castings, forgings, and fabricated metal products) . . . . .	X	177 516	X	136 616
33142131	Copper and copper-base alloy plate, sheet, and strip, including military cups and discs . . . . .	X	463	X	603
33142117	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	3 587	X	3 927
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	101 970	X	41 495
33100059	All other aluminum and aluminum-base alloy shapes and forms (wire, rolled rod and bar, powder, welded tubing, etc.) . . . . .	X	24 395	X	23 766
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	35 894	X	17 315
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	10 372	X	9 760
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools . . . . .	X	38 792	X	25 851
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	8 029	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	757 169	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	367 803	X	207 427
	<b>332722, BOLT, NUT, SCREW, RIVET, &amp; WASHER MFG</b>				
33200005	Fabricated metal products, including forgings . . . . .	X	158 418	X	96 053
33100035	Castings (rough and semifinished) . . . . .	X	5 874	X	10 308
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products) . . . . .	X	215 552	X	207 881
33120017	Steel sheet and strip, including tin plate . . . . .	X	122 627	X	121 468
33120025	Steel wire and wire products . . . . .	X	854 999	X	518 655
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	67 178	X	67 324
33142107	Copper and copper-base alloy rod, bar, and bar shapes (except castings, forgings, and fabricated metal products) . . . . .	X	24 676	X	16 000
33142131	Copper and copper-base alloy plate, sheet, and strip, including military cups and discs . . . . .	X	1 014	X	13 448
33142117	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	17 900	X	12 193
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	9 993	X	5 766
33100059	All other aluminum and aluminum-base alloy shapes and forms (wire, rolled rod and bar, powder, welded tubing, etc.) . . . . .	X	54 785	X	29 175
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	100 265	X	66 404
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	33 327	X	21 546
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools . . . . .	X	172 960	X	112 924
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	233 125	X	239 181
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	487 223	X	181 136
	<b>332812, METAL COATING/ENGRAVING (EXC JEWELRY/SILVERWARE)/ALLIED SERVICES</b>				
33200005	Fabricated metal products, including forgings . . . . .	X	374 503	X	N
33100035	Castings (rough and semifinished) . . . . .	X	19 943	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 512 224	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	50 857	X	N
32521101	Plastics materials and resins . . . . .	X	78 941	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	425 979	X	N
32599801	Foundry chemicals, metal treating compounds, and plating compounds . . . . .	X	259 463	X	N
32500067	Other chemicals and allied products . . . . .	X	45 313	X	N
32791001	Grinding wheels and other abrasive products, except industrial diamonds . . . . .	X	2 901	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	619 949	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	532 420	X	N
	<b>332813, ELECTROPLATING, PLATING, POLISHING, ANODIZING, &amp; COLORING</b>				
33200005	Fabricated metal products, including forgings . . . . .	X	151 866	X	105 154
33100035	Castings (rough and semifinished) . . . . .	X	18 632	X	12 533
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	152 249	X	111 266
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	14 106	X	9 763
32521101	Plastics materials and resins . . . . .	X	38 733	X	26 743
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	24 596	X	16 681
32599801	Foundry chemicals, metal treating compounds, and plating compounds . . . . .	X	281 251	X	195 861
32500067	Other chemicals and allied products . . . . .	X	111 904	X	73 074
32791001	Grinding wheels and other abrasive products, except industrial diamonds . . . . .	X	19 785	X	11 036
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	204 259	X	155 685
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	386 260	X	357 916

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332911, INDUSTRIAL VALVE MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	172 688	X	112 278
332000AC	Metal stampings	X	58 343	X	45 557
33290003	Valves, fittings, and couplings purchased for further assembly (except forgings)	X	257 919	X	178 564
33200029	Other fabricated metal products (except forgings)	X	209 557	X	115 057
33151101	Iron castings (rough and semifinished)	X	250 560	X	174 369
33151009	Steel castings (rough and semifinished)	X	332 100	X	252 848
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	62 072	X	52 978
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	116 472	X	79 063
33152009	Other nonferrous castings (rough and semifinished)	X	53 048	X	49 163
33211101	Iron and steel forgings	X	92 008	X	84 523
33211201	Nonferrous forgings	X	59 620	X	50 594
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	136 736	X	114 143
33120017	Steel sheet and strip, including tin plate	X	39 910	X	29 542
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	55 869	X	51 764
33141105	Copper and copper-base alloy refinery shapes (except castings, forgings, and fabricated metal products)	X	56 305	X	48 051
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes	X	108 143	X	87 608
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	18 039	X	14 640
33142145	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	16 662	X	2 375
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	41 280	X	20 047
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	14 891	X	9 423
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	37 207	X	38 953
33531227	Electric motors and generators less than 1 horsepower (less than 746 watts)	X	18 319	X	9 409
32221001	Paperboard containers, boxes, and corrugated paperboard	X	24 439	X	25 039
32622003	Hydraulic and pneumatic hose (without fittings), rubber and plastics inner tube type, wire or textile reinforced	X	6 405	X	1 107
32622005	Other rubber and plastics hose and belting	X	9 055	X	6 190
33999103	Gaskets (all types), and packing and sealing devices	X	64 656	X	44 535
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	38 841	X	28 813
32610011	Fabricated plastics products (except gaskets)	X	47 541	X	42 628
00970099	All other materials and components, parts, containers, and supplies	X	508 006	X	402 107
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	322 029	X	111 184
<b>332912, FLUID POWER VALVE &amp; HOSE FITTING MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	280 670	X	N
332000AC	Metal stampings	X	15 436	X	8 133
33290003	Valves, fittings, and couplings purchased for further assembly (except forgings)	X	224 707	X	113 314
33200029	Other fabricated metal products (except forgings)	X	144 355	X	56 546
33151101	Iron castings (rough and semifinished)	X	76 725	X	27 428
33151009	Steel castings (rough and semifinished)	X	11 845	X	15 957
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	56 154	X	N
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	4 667	X	4 619
33152009	Other nonferrous castings (rough and semifinished)	X	31 809	X	29 852
33211101	Iron and steel forgings	X	43 418	X	N
33211201	Nonferrous forgings	X	41 982	X	16 367
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	253 348	X	N
33120017	Steel sheet and strip, including tin plate	X	51 585	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	40 213	X	N
33141105	Copper and copper-base alloy refinery shapes (except castings, forgings, and fabricated metal products)	X	D	X	D
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes	X	D	X	65 617
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	10 795	X	5 219
33142145	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	33 286	X	D
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	98 173	X	28 173
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	15 415	X	8 278
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	15 662	X	2 600
33531227	Electric motors and generators less than 1 horsepower (less than 746 watts)	X	3 634	X	9 005
32221001	Paperboard containers, boxes, and corrugated paperboard	X	19 955	X	21 800
32622003	Hydraulic and pneumatic hose (without fittings), rubber and plastics inner tube type, wire or textile reinforced	X	81 518	X	104 825
32622005	Other rubber and plastics hose and belting	X	718	X	626
33999103	Gaskets (all types), and packing and sealing devices	X	14 731	X	10 597
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	9 491	X	5 403
32610011	Fabricated plastics products (except gaskets)	X	20 473	X	8 254
00970099	All other materials and components, parts, containers, and supplies	X	350 929	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	127 947	X	N
<b>332913, PLUMBING FIXTURE FITTING &amp; TRIM MFG</b>					
332000AC	Metal stampings	X	123 663	X	N
33200073	All other fabricated metal products (except forgings)	X	115 768	X	N
33151001	Iron and steel castings (rough and semifinished)	X	14 166	X	N
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	91 803	X	N
33152013	Other nonferrous castings (rough and semifinished)	X	133 321	X	N
33210001	Forgings	X	74 136	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	58 516	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332913, PLUMBING FIXTURE FITTING &amp; TRIM MFG—Con.</b>					
33141105	Copper and copper-base alloy refinery shapes (except castings, forgings, and fabricated metal products)	X	13 730	X	N
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes	X	230 669	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	69 818	X	N
33142145	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	31 231	X	N
33100075	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	59 546	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	39 676	X	N
32610011	Fabricated plastics products (except gaskets)	X	206 852	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	75 160	X	N
00970099	All other materials and components, parts, containers, and supplies	X	205 934	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	45 872	X	N
<b>332919, OTHER METAL VALVE &amp; PIPE FITTING MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	23 900	X	N
332000AC	Metal stampings	X	4 811	X	N
33290003	Valves, fittings, and couplings purchased for further assembly (except forgings)	X	94 558	X	N
33200029	Other fabricated metal products (except forgings)	X	23 775	X	N
33151101	Iron castings (rough and semifinished)	X	34 779	X	N
33151009	Steel castings (rough and semifinished)	X	38 886	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	7 261	X	N
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	37 229	X	N
33152009	Other nonferrous castings (rough and semifinished)	X	3 956	X	N
33211101	Iron and steel forgings	X	58 917	X	N
33211201	Nonferrous forgings	X	10 332	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	34 398	X	N
33120017	Steel sheet and strip, including tin plate	X	37 462	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	18 100	X	N
33141105	Copper and copper-base alloy refinery shapes (except castings, forgings, and fabricated metal products)	X	D	X	N
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes	X	46 745	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	27 797	X	N
33142145	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	17 371	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	5 034	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	5 591	X	N
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	D	X	N
33531227	Electric motors and generators less than 1 horsepower (less than 746 watts)	X	6 569	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	10 116	X	N
32622003	Hydraulic and pneumatic hose (without fittings), rubber and plastics inner tube type, wire or textile reinforced	X	D	X	N
32622005	Other rubber and plastics hose and belting	X	D	X	N
3399103	Gaskets (all types), and packing and sealing devices	X	16 493	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	6 043	X	N
32610011	Fabricated plastics products (except gaskets)	X	1 772	X	N
00970099	All other materials and components, parts, containers, and supplies	X	162 880	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	215 110	X	N
<b>332991, BALL &amp; ROLLER BEARING MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	18 477	X	27 023
33200095	Other fabricated metal products (except forgings)	X	4 630	X	18 045
33211103	Cold iron and steel forgings	X	25 677	X	26 546
33211111	Other iron and steel forgings	X	239 026	X	150 848
33211201	Nonferrous forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	42 399	X	44 247
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	3 149	X	6 470
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	186 836	X	184 153
33120017	Steel sheet and strip, including tin plate	X	88 235	X	59 184
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	190 096	X	128 032
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	684	X	N
33100075	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	26 479	X	7 687
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	D	X	N
33299105	Ball bearings (mounted or unmounted)	X	51 947	X	15 964
33299103	Roller bearings (mounted or unmounted)	X	D	X	17 577
33299107	Balls, rollers, cages, collars, races, and other antifriction bearing components and parts	X	601 417	X	375 954
33361305	Clutches, couplings, shafts, sprockets, and other mechanical power transmission equipment	X	2 761	X	4 546
33531207	Electric motors, generators, and parts	X	15 085	X	5 714
32221001	Paperboard containers, boxes, and corrugated paperboard	X	19 834	X	12 615
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	38 049	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	4 093	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor)	X	D	X	N
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	37 681	X	N
00970099	All other materials and components, parts, containers, and supplies	X	425 937	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	70 546	X	50 727

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332992, SMALL ARMS AMMUNITION MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	D	X	80
33200095	Other fabricated metal products (except forgings)	X	D	X	64 139
33151001	Iron and steel castings (rough and semifinished)	X	D	X	D
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	1 705	X	D
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	2 578
33211101	Iron and steel forgings	X	-	X	D
33211203	Aluminum and aluminum-base alloy forgings	X	D	X	N
33211207	Other nonferrous forgings	X	-	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	18 621	X	7 809
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	57 250	X	80 341
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	4 558	X	D
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
32592011	Smokeless powder	X	55 551	X	57 126
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	7 844	X	5 484
32500065	Other chemicals and allied products	X	D	X	D
32100019	Rough and dressed lumber	X	D	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	21 128	X	22 341
32610011	Fabricated plastics products (except gaskets)	X	11 831	X	7 846
33351501	Machine tool accessories, including cutting tools	X	D	X	D
00190055	Electronic, hydraulic, and mechanical subassemblies	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	24 428	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	11 442	X	14 469
<b>332993, AMMUNITION (EXCEPT SMALL ARMS) MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	13 108	X	21 415
33200095	Other fabricated metal products (except forgings)	X	92 059	X	59 831
33151001	Iron and steel castings (rough and semifinished)	X	3 520	X	41 500
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	2 792	X	20 676
33152003	Other nonferrous castings (rough and semifinished)	X	4 070	X	4 508
33211101	Iron and steel forgings	X	3 131	X	7 689
33211203	Aluminum and aluminum-base alloy forgings	X	2 851	X	6 848
33211207	Other nonferrous forgings	X	D	X	2 202
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	12 971	X	53 885
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	4 270	X	13 830
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	9 124	X	49 726
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	6 977
32592011	Smokeless powder	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	2 648	X	2 622
32500065	Other chemicals and allied products	X	2 554	X	44 442
32100019	Rough and dressed lumber	X	1 149	X	6 132
32221001	Paperboard containers, boxes, and corrugated paperboard	X	2 291	X	6 683
32610011	Fabricated plastics products (except gaskets)	X	6 043	X	20 448
33351501	Machine tool accessories, including cutting tools	X	2 802	X	7 365
00190055	Electronic, hydraulic, and mechanical subassemblies	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	239 899	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	38 634	X	9 178
<b>332994, SMALL ARMS MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	19 125	X	18 816
33200095	Other fabricated metal products (except forgings)	X	64 100	X	93 601
33151001	Iron and steel castings (rough and semifinished)	X	18 709	X	15 534
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	6 135	X	14 884
33152003	Other nonferrous castings (rough and semifinished)	X	5 602	X	D
33211101	Iron and steel forgings	X	9 045	X	9 936
33211203	Aluminum and aluminum-base alloy forgings	X	3 373	X	D
33211207	Other nonferrous forgings	X	D	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	51 590	X	17 185
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	394
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	2 492	X	2 135
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	4 163	X	5 723
32592011	Smokeless powder	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	838	X	D
32500065	Other chemicals and allied products	X	1 148	X	918
32100019	Rough and dressed lumber	X	7 752	X	5 616
32221001	Paperboard containers, boxes, and corrugated paperboard	X	9 158	X	7 273
32610011	Fabricated plastics products (except gaskets)	X	13 290	X	5 452
33351501	Machine tool accessories, including cutting tools	X	6 420	X	10 489
00190055	Electronic, hydraulic, and mechanical subassemblies	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	40 279	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	32 662	X	20 078
<b>332995, OTHER ORDNANCE &amp; ACCESSORIES MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	7 459	X	6 741
33200095	Other fabricated metal products (except forgings)	X	90 881	X	13 551
33151001	Iron and steel castings (rough and semifinished)	X	4 475	X	1 060
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	1 332	X	2 177
33152003	Other nonferrous castings (rough and semifinished)	X	1 431	X	D
33211101	Iron and steel forgings	X	D	X	D
33211203	Aluminum and aluminum-base alloy forgings	X	D	X	D

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332995, OTHER ORDNANCE &amp; ACCESSORIES MFG—Con.</b>					
33211207	Other nonferrous forgings . . . . .	X	D	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 048	X	22 912
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	2 101	X	1 642
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
32592011	Smokeless powder . . . . .	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	D	X	D
32500065	Other chemicals and allied products . . . . .	X	839	X	1 116
32100019	Rough and dressed lumber . . . . .	X	D	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	514	X	593
32610011	Fabricated plastics products (except gaskets) . . . . .	X	2 726	X	1 241
33351501	Machine tool accessories, including cutting tools . . . . .	X	2 053	X	1 282
00190055	Electronic, hydraulic, and mechanical subassemblies . . . . .	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	36 506	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	5 551	X	3 277
<b>332996, FABRICATED PIPE &amp; PIPE FITTING MFG</b>					
33291907	Metal fittings, flanges, and unions for piping systems (except forgings) . . . . .	X	155 537	X	93 666
332000AC	Metal stampings . . . . .	X	3 916	X	5 277
33200097	Other fabricated metal products (except forgings) . . . . .	X	44 905	X	43 324
33210001	Forgings . . . . .	X	36 850	X	3 734
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	45 206	X	39 870
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	3 351	X	1 147
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	5 763	X	3 559
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products) . . . . .	X	21 736	X	25 065
33120017	Steel sheet and strip, including tin plate . . . . .	X	68 790	X	18 208
33120079	Steel plate . . . . .	X	46 026	X	15 916
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	25 517
33120021	Steel pipes (except castings, forgings, and fabricated metal products) . . . . .	X	560 103	X	396 062
33120029	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	76 830	X	74 443
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products) . . . . .	X	56 162	X	41 977
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	6 919	X	6 180
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	8 594	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	13 449	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 087	X	6 625
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	12 780	X	11 389
331000AA	Metal powders . . . . .	X	D	X	851
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	15 081	X	12 048
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	269 027	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	275 373	X	N
<b>332997, INDUSTRIAL PATTERN MFG</b>					
33200081	Fabricated metal products (except forgings) . . . . .	X	5 918	X	2 441
33210001	Forgings . . . . .	X	D	X	Z
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	10 641	X	8 865
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	8 058	X	4 365
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	1 088
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 294	X	791
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	6 244	X	1 144
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	764	X	142
32100019	Rough and dressed lumber . . . . .	X	7 654	X	3 000
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	1 934	X	1 091
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	30 727	X	12 507
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	29 481	X	50 513
<b>332998, ENAMELED IRON &amp; METAL SANITARY WARE MFG</b>					
332000AC	Metal stampings . . . . .	X	19 774	X	12 789
33200073	All other fabricated metal products (except forgings) . . . . .	X	9 754	X	9 382
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	20 644	X	D
33152500	Copper and copper-base alloy castings (rough and semifinished) . . . . .	X	D	X	D
33152013	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	D
33210001	Forgings . . . . .	X	8 062	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	80 172	X	54 816
33141105	Copper and copper-base alloy refinery shapes (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes . . . . .	X	D	X	D
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products) . . . . .	X	3 177	X	812
33142145	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	971	X	D
33100075	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	43 649	X	1 089
32610011	Fabricated plastics products (except gaskets) . . . . .	X	10 893	X	6 472
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	47 912	X	19 969
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	185 805	X	83 643
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	48 829	X	29 834

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>332999, ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	20 274	X	N
33291907	Metal fittings, flanges, and unions for piping systems (except forgings)	X	23 758	X	N
332000AC	Metal stampings	X	66 247	X	N
33200097	Other fabricated metal products (except forgings)	X	222 095	X	N
33210001	Forgings	X	10 761	X	N
33151001	Iron and steel castings (rough and semifinished)	X	62 893	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	21 458	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	12 013	X	N
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	63 305	X	N
33120017	Steel sheet and strip, including tin plate	X	431 084	X	N
33120079	Steel plate	X	79 049	X	N
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	26 990	X	N
33120021	Steel pipes (except castings, forgings, and fabricated metal products)	X	42 121	X	N
33120029	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	131 339	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	14 729	X	N
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	43 704	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	116 713	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	36 156	X	N
33131507	Aluminum and aluminum-base alloy plain foil	X	227 964	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	34 165	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	51 365	X	N
331000AA	Metal powders	X	18 013	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	27 509	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	29 156	X	N
21239017	Natural abrasive materials, except diamonds	X	34 929	X	N
32552003	Glues and adhesives	X	16 437	X	N
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard	X	201 108	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 160 343	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	850 165	X	N
<b>333111, FARM MACHINERY &amp; EQUIPMENT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	412 901	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	128 953	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	16 916	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	92 240	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	134 915	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	172 389	X	N
332000AC	Metal stampings	X	206 096	X	N
33200041	All other fabricated metal products (except forgings)	X	371 899	X	N
33211101	Iron and steel forgings	X	111 386	X	N
33211201	Nonferrous forgings	X	3 579	X	N
33151001	Iron and steel castings (rough and semifinished)	X	583 264	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	50 190	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	4 941	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	507 763	X	N
33120017	Steel sheet and strip, including tin plate	X	839 901	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	125 770	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	131 471	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	18 882	X	N
331000AA	Metal powders	X	4 685	X	N
33361811	Diesel and semidiesel engines	X	590 295	X	N
33361805	Gasoline and other carburetor engines	X	91 187	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	164 887	X	N
33531201	Electric motors and generators	X	82 558	X	N
33299105	Ball bearings (mounted or unmounted)	X	76 395	X	N
33299103	Roller bearings (mounted or unmounted)	X	62 793	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	331 118	X	N
32621001	Tires and inner tubes	X	508 418	X	N
32622001	Rubber and plastics hose and belting	X	114 305	X	N
32610011	Fabricated plastics products (except gaskets)	X	133 451	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	137 476	X	N
33311100	Cabs purchased for installation on farm machinery	X	24 217	X	N
00970099	All other materials and components, parts, containers, and supplies	X	840 227	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	685 313	X	N
<b>333112, LAWN &amp; GARDEN TRACTOR &amp; HOME LAWN &amp; GARDEN EQUIPMENT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	158 005	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	41 474	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	20 580	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	21 269	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	159 490	X	N
332000AC	Metal stampings	X	115 934	X	N
33200041	All other fabricated metal products (except forgings)	X	137 602	X	N

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<b>333112, LAWN &amp; GARDEN TRACTOR &amp; HOME LAWN &amp; GARDEN EQUIPMENT MFG—Con.</b>					
33211101	Iron and steel forgings	X	69 154	X	N
33211201	Nonferrous forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	62 865	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	99 366	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	47 962	X	N
33120017	Steel sheet and strip, including tin plate	X	588 307	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	32 799	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	29 266	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
331000AA	Metal powders	X	37 832	X	N
33361811	Diesel and semidiesel engines	X	38 464	X	N
33361805	Gasoline and other carburetor engines	X	1 223 073	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	67 762	X	N
33531201	Electric motors and generators	X	16 259	X	N
33299105	Ball bearings (mounted or unmounted)	X	25 571	X	N
33299103	Roller bearings (mounted or unmounted)	X	13 611	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	165 742	X	N
32621001	Tires and inner tubes	X	208 651	X	N
32622001	Rubber and plastics hose and belting	X	57 616	X	N
32610011	Fabricated plastics products (except gaskets)	X	240 409	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	28 289	X	N
33311100	Cabs purchased for installation on farm machinery	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	336 238	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	136 836	X	N
<b>333120, CONSTRUCTION MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	724 526	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	267 012	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	189 571	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	277 006	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	173 649	X	N
33200099	Fabricated structural metal products (except forgings)	X	700 075	X	N
33290009	Fabricated metal wire products (including wire rope, cable, springs, etc.)	X	47 841	X	N
33200065	All other fabricated metal products (except forgings)	X	224 020	X	N
332000AC	Metal stampings	X	148 829	X	N
33210001	Forgings	X	187 462	X	N
33151001	Iron and steel castings (rough and semifinished)	X	678 708	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	19 965	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	697 563	X	N
33120017	Steel sheet and strip, including tin plate	X	346 687	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	165 503	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	138 306	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	8 892	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor)	X	914 670	X	N
33531201	Electric motors and generators	X	194 378	X	N
33299105	Ball bearings (mounted or unmounted)	X	85 445	X	N
33299103	Roller bearings (mounted or unmounted)	X	74 703	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	261 268	X	N
32621001	Tires and inner tubes	X	249 875	X	N
32622001	Rubber and plastics hose and belting	X	96 770	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	56 612	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	91 043	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	336 997	X	N
00970099	All other materials and components, parts, containers, and supplies	X	3 386 550	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	524 161	X	N
<b>333131, MINING MACHINERY &amp; EQUIPMENT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	15 605	X	10 971
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	43 889	X	14 462
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	5 272	X	6 087
33291207	Fluid power valves (hydraulic and pneumatic)	X	18 028	X	9 070
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	16 374	X	7 129
33200099	Fabricated structural metal products (except forgings)	X	109 488	X	27 655
33290009	Fabricated metal wire products (including wire rope, cable, springs, etc.)	X	19 092	X	8 598
332000AC	Metal stampings	X	844	X	N
33200065	All other fabricated metal products (except forgings)	X	15 426	X	N
33210001	Forgings	X	70 537	X	N
33151001	Iron and steel castings (rough and semifinished)	X	109 237	X	53 842
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	93 798	X	52 287
33120017	Steel sheet and strip, including tin plate	X	30 193	X	7 749
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	22 808	X	4 887
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	7 234
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	1 133	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor)	X	25 308	X	N
33531201	Electric motors and generators	X	59 084	X	N
33299105	Ball bearings (mounted or unmounted)	X	5 879	X	6 991



**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333131, MINING MACHINERY &amp; EQUIPMENT MFG—Con.</b>					
33299103	Roller bearings (mounted or unmounted) .....	X	17 997	X	12 523
33361200	Mechanical speed changers, gears, and industrial high-speed drives .....	X	46 969	X	27 963
32621001	Tires and inner tubes .....	X	3 688	X	N
32622001	Rubber and plastics hose and belting .....	X	6 598	X	5 636
32610007	Fabricated plastics products (except gaskets, hoses, and belting) .....	X	10 101	X	2 589
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products .....	X	7 438	X	2 067
001900B1	Electrical transmission, distribution, and control equipment .....	X	18 796	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	160 360	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	172 079	X	116 165
<b>333132, OIL &amp; GAS FIELD MACHINERY &amp; EQUIPMENT MFG</b>					
33291205	Fluid power (hydraulic and pneumatic) valves .....	X	12 620	X	15 847
33291903	All other valves .....	X	72 342	X	12 278
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) .....	X	17 171	X	17 794
33391103	All other pumps .....	X	32 773	X	10 030
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) .....	X	6 860	X	12 876
33399901	Fluid power filters (hydraulic and pneumatic) .....	X	1 536	X	3 243
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) .....	X	12 331	X	11 404
33200057	Fabricated metal products, except forgings .....	X	121 863	X	99 434
33210001	Forgings .....	X	97 017	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	132 874	X	38 411
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....	X	5 521	X	14 387
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	225 453	X	165 952
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products) .....	X	24 365	X	27 264
33120089	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	48 724	X	55 276
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	26 751	X	11 486
331000AA	Metal powders .....	X	31 655	X	13 300
33361811	Diesel and semidiesel engines .....	X	22 748	X	20 974
33531221	Integral horsepower electric motors and generators (1 hp or more) .....	X	1 254	X	5 243
33299101	Ball and roller bearings (mounted or unmounted) .....	X	8 795	X	13 041
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets .....	X	44 711	X	36 280
32610011	Fabricated plastics products (except gaskets) .....	X	7 885	X	7 993
32799903	Industrial diamonds .....	X	48 088	X	5 628
33351503	Cutting tools for machine tools .....	X	26 364	X	19 624
00970099	All other materials and components, parts, containers, and supplies .....	X	637 479	X	332 044
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	502 609	X	381 901
<b>333210, SAWMILL &amp; WOODWORKING MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) .....	X	16 019	X	5 799
33391103	All other pumps .....	X	335	X	231
33291207	Fluid power valves (hydraulic and pneumatic) .....	X	5 525	X	3 063
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) .....	X	3 715	X	1 357
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) .....	X	8 200	X	4 530
33399901	Fluid power filters (hydraulic and pneumatic) .....	X	4 448	X	1 006
00190089	Other fluid power products (hydraulic and pneumatic) .....	X	1 037	X	1 423
33200057	Fabricated metal products, except forgings .....	X	28 585	X	14 592
33210001	Forgings .....	X	1 789	X	452
33151001	Iron and steel castings (rough and semifinished) .....	X	29 440	X	23 505
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....	X	6 685	X	6 912
33152003	Other nonferrous castings (rough and semifinished) .....	X	1 925	X	D
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	55 454	X	33 496
33120017	Steel sheet and strip, including tin plate .....	X	20 964	X	9 531
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	3 021	X	4 874
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	718	X	2 329
33531217	Other fractional horsepower electric motors (under 1 hp) .....	X	12 804	X	14 199
33531221	Integral horsepower electric motors and generators (1 hp or more) .....	X	23 990	X	33 479
33299105	Ball bearings (mounted or unmounted) .....	X	8 902	X	7 155
33299103	Roller bearings (mounted or unmounted) .....	X	4 920	X	2 294
32610011	Fabricated plastics products (except gaskets) .....	X	7 172	X	4 866
33410003	Electronic computing equipment and parts .....	X	26 241	X	6 207
001900B1	Electrical transmission, distribution, and control equipment .....	X	15 781	X	11 626
33531413	Numerical controls for woodworking machinery and equipment .....	X	5 436	X	2 202
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	5 636	X	5 886
00970099	All other materials and components, parts, containers, and supplies .....	X	124 141	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	69 547	X	82 960
<b>333220, PLASTICS &amp; RUBBER INDUSTRY MACHINERY MFG</b>					
001900B1	Electrical transmission, distribution, and control equipment .....	X	107 001	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) .....	X	40 804	X	N
33391103	Other pumps and pump parts, except fluid power (complete assemblies) .....	X	9 559	X	N
33291207	Fluid power valves (hydraulic and pneumatic) .....	X	21 707	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) .....	X	21 591	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) .....	X	12 687	X	N
33399901	Fluid power filters (hydraulic and pneumatic) .....	X	4 600	X	N
00190089	Other fluid power products (hydraulic and pneumatic) .....	X	7 732	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	13 554	X	N
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products, fabricated steel plate, and weldments .....	X	35 473	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) .....	X	10 383	X	N
33200051	Other fabricated metal products (except fluid power products and forgings) .....	X	50 027	X	N
33210001	Forgings .....	X	8 144	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	93 429	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....	X	10 161	X	N
33152003	Other nonferrous castings (rough and semifinished) .....	X	3 590	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333220, PLASTICS &amp; RUBBER INDUSTRY MACHINERY MFG—Con.</b>					
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	68 383	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	18 671	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	16 658	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	25 740	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	8 765	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	2 207	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 453	X	N
33531217	Other fractional horsepower electric motors (under 1 hp) . . . . .	X	13 754	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	42 032	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	26 453	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	41 226	X	N
33391200	Air and gas compressors except refrigeration compressors . . . . .	X	2 609	X	N
32212031	Filter paper . . . . .	X	1 645	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	492 675	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	153 907	X	N
<b>333291, PAPER INDUSTRY MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	10 466	X	8 040
33391103	All other pumps . . . . .	X	325	X	353
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	20 698	X	9 540
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	19 437	X	7 619
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	17 248	X	9 606
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	2 251	X	546
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	7 098	X	4 568
33200057	Fabricated metal products, except forgings . . . . .	X	73 655	X	46 924
33210001	Forgings . . . . .	X	11 403	X	7 253
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	73 337	X	35 247
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	13 697	X	15 268
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	144 131	X	65 766
33120017	Steel sheet and strip, including tin plate . . . . .	X	26 374	X	19 106
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	27 396	X	12 998
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	9 795	X	7 926
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	27 880	X	14 165
33299105	Ball bearings (mounted or unmounted) . . . . .	X	16 840	X	8 217
33299103	Roller bearings (mounted or unmounted) . . . . .	X	22 496	X	7 765
33361301	Plain bearings and bushings . . . . .	X	14 601	X	7 048
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	60 366	X	28 142
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	92 181	X	53 317
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets . . . . .	X	14 043	X	9 950
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	632 694	X	463 509
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	133 997	X	109 540
<b>333292, TEXTILE MACHINERY MFG</b>					
00190090	Fluid power products . . . . .	X	22 143	X	N
33200057	Fabricated metal products, except forgings . . . . .	X	54 948	X	N
33210001	Forgings . . . . .	X	4 857	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	31 556	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	8 496	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	3 123	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	35 106	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	10 818	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	2 862	X	N
33120025	Steel wire and wire products . . . . .	X	27 666	X	N
33120087	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 143	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 445	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	10 008	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	18 050	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	7 174	X	N
33299103	Roller bearings (mounted or unmounted) . . . . .	X	3 041	X	N
33360000	Speed reducers, gears, drives, and other mechanical power transmission equipment, except bearings . . . . .	X	16 519	X	N
32610011	Fabricated plastics products (except gaskets) . . . . .	X	8 535	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	44 668	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	162 425	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	116 353	X	N
<b>333293, PRINTING MACHINERY &amp; EQUIPMENT MFG</b>					
00190090	Fluid power products . . . . .	X	41 429	X	29 739
33200057	Fabricated metal products, except forgings . . . . .	X	197 701	X	98 267
33210001	Forgings . . . . .	X	13 891	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	33 951	X	47 828
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	5 316	X	4 742
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	41 541	X	46 978
33120085	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	21 068	X	16 364
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	7 993	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	2 314	X	2 979
33531217	Other fractional horsepower electric motors (under 1 hp) . . . . .	X	17 635	X	12 468

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333293, PRINTING MACHINERY &amp; EQUIPMENT MFG—Con.</b>					
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	20 818	X	15 227
33299105	Ball bearings (mounted or unmounted)	X	17 897	X	16 634
33299103	Roller bearings (mounted or unmounted)	X	15 554	X	7 823
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	34 536	X	65 964
001900B1	Electrical transmission, distribution, and control equipment	X	44 168	X	80 709
00970099	All other materials and components, parts, containers, and supplies	X	551 636	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	346 734	X	N
<b>333294, FOOD PRODUCT MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	9 007	X	9 197
33391103	All other pumps	X	13 329	X	9 915
33291207	Fluid power valves (hydraulic and pneumatic)	X	9 544	X	9 923
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	3 984	X	3 844
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	4 938	X	4 741
33399901	Fluid power filters (hydraulic and pneumatic)	X	1 786	X	2 518
00190089	Other fluid power products (hydraulic and pneumatic)	X	2 186	X	1 393
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products; fabricated steel plate and weldments	X	40 912	X	13 740
33200059	All other fabricated metal products, except forgings	X	68 858	X	35 243
33210001	Forgings	X	6 627	X	2 626
33151001	Iron and steel castings (rough and semifinished)	X	23 679	X	27 547
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	20 989	X	11 172
33152003	Other nonferrous castings (rough and semifinished)	X	4 716	X	5 612
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	49 466	X	47 936
33120017	Steel sheet and strip, including tin plate	X	57 603	X	54 806
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	15 089	X	20 568
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	18 681	X	17 357
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	2 838	X	8 169
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	12 524	X	11 361
33531217	Other fractional horsepower electric motors (under 1 hp)	X	14 314	X	7 825
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	18 091	X	23 831
33299101	Ball and roller bearings (mounted or unmounted)	X	12 310	X	12 767
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	21 821	X	20 218
001900B1	Electrical transmission, distribution, and control equipment	X	43 307	X	33 071
32192001	Wood boxes, pallets, skids, and containers	X	5 990	X	3 815
00970099	All other materials and components, parts, containers, and supplies	X	324 782	X	220 403
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	284 157	X	175 701
<b>333295, SEMICONDUCTOR MACHINERY MFG</b>					
001900B1	Electrical transmission, distribution, and control equipment	X	249 994	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	113 985	X	N
33391101	Other pumps and pump parts, except fluid power (complete assemblies)	X	172 452	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	85 866	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	20 957	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	57 797	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	39 041	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	37 579	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	55 701	X	N
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products; fabricated steel plate, and weldments	X	48 101	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings)	X	41 042	X	N
33200051	Other fabricated metal products (except fluid power products and forgings)	X	202 344	X	N
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	35 507	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	79 590	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	30 073	X	N
33120017	Steel sheet and strip, including tin plate	X	32 486	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	28 283	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	5 916	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	132 838	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33531217	Other fractional horsepower electric motors (under 1 hp)	X	63 483	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	66 805	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	23 128	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	5 513	X	N
33391200	Air and gas compressors except refrigeration compressors	X	8 489	X	N
32212031	Filter paper	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 978 113	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	981 273	X	N
<b>333298, ALL OTHER INDUSTRIAL MACHINERY MFG</b>					
001900B1	Electrical transmission, distribution, and control equipment	X	117 088	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	40 715	X	N
33391101	Other pumps and pump parts, except fluid power (complete assemblies)	X	26 602	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	21 620	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	23 360	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	13 060	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	7 483	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	6 413	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	45 372	X	N
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products; fabricated steel plate, and weldments	X	51 100	X	N

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333298, ALL OTHER INDUSTRIAL MACHINERY MFG—Con.</b>					
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	44 979	X	N
33200051	Other fabricated metal products (except fluid power products and forgings) . . . . .	X	173 863	X	N
33210001	Forgings . . . . .	X	8 592	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	61 994	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	18 708	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	4 685	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	122 068	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	147 301	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	28 619	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	53 827	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	18 970	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	12 047	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	18 718	X	N
33531217	Other fractional horsepower electric motors (under 1 hp) . . . . .	X	16 621	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	34 936	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	28 728	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	31 409	X	N
33391200	Air and gas compressors except refrigeration compressors . . . . .	X	4 542	X	N
32212031	Filter paper . . . . .	X	10 676	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 360	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	12 766	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	13 183	X	N
33593101	Current-carrying wiring devices . . . . .	X	1 832	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	2 551	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	3 485	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 113 202	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	921 620	X	N
<b>333311, AUTOMATIC VENDING MACHINE MFG</b>					
33531225	Fractional horsepower electric motors and generators (less than 1 hp) . . . . .	X	48 969	X	21 266
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment . . . . .	X	36 708	X	18 605
33593101	Current-carrying wiring devices . . . . .	X	82 655	X	22 369
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	17 889	X	8 863
332000AC	Metal stampings . . . . .	X	17 168	X	6 645
33200071	Other fabricated metal products (except electrical enclosures and forgings) . . . . .	X	30 046	X	7 747
33210001	Forgings . . . . .	X	—	X	N
33100035	Castings (rough and semifinished) . . . . .	X	6 307	X	4 147
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	65 405	X	39 277
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 327	X	1 328
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	51 293	X	25 207
32551003	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	X	12 405	X	8 003
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	7 829	X	6 892
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	252 811	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	39 396	X	75 612
<b>333312, COMMERCIAL LAUNDRY, DRYCLEANING, &amp; PRESSING MACHINE MFG</b>					
332000AC	Metal stampings . . . . .	X	13 102	X	10 785
33290001	Metal pipe, valves, and pipe fittings, except plumbers' and forgings . . . . .	X	12 853	X	7 943
33200069	Other fabricated metal products (except forgings) . . . . .	X	30 315	X	19 790
33210001	Forgings . . . . .	X	203	X	162
33100035	Castings (rough and semifinished) . . . . .	X	8 433	X	6 630
33120017	Steel sheet and strip, including tin plate . . . . .	X	54 666	X	40 663
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	9 034	X	8 204
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 016	X	8 447
33531217	Other fractional horsepower electric motors (under 1 hp) . . . . .	X	13 121	X	18 446
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	13 431	X	10 060
32622001	Rubber and plastics hose and belting . . . . .	X	7 731	X	4 310
33361301	Plain bearings and bushings . . . . .	X	7 993	X	15 012
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	7 626	X	8 943
33593101	Current-carrying wiring devices . . . . .	X	10 307	X	7 922
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	26 950	X	20 456
32192001	Wood boxes, pallets, skids, and containers . . . . .	X	3 691	X	2 225
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	63 201	X	47 027
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	23 335	X	19 089
<b>333313, OFFICE MACHINERY MFG</b>					
33441103	Cathode ray tubes (CRT'S) and all other transmittal, industrial, and special purpose electron tubes (except x-ray) . . . . .	X	D	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry . . . . .	X	9 013	X	N
001900C3	Printed memory boards for electronic circuitry . . . . .	X	7 048	X	N
001900C6	Printed peripheral controllers (graphic boards, drive controllers, etc.) for electronic circuitry . . . . .	X	9 818	X	N
001900C7	Printed computer processors (system boards, array processors, etc.) for electronic circuitry . . . . .	X	19 284	X	N
001900C5	Printed communication boards (LAN boards, D/A and A/D converters, etc.) for electronic circuitry . . . . .	X	D	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333313, OFFICE MACHINERY MFG—Con.</b>					
001900D1	Other printed circuit boards (loaded boards, subassemblies, and modules) for electronic circuitry	X	2 391	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	28 197	X	N
33441400	Capacitors for electronic circuitry	X	5 066	X	N
33441500	Resistors for electronic circuitry	X	2 428	X	N
33441700	Connectors for electronic circuitry	X	6 293	X	N
33400017	Battery packs for electronic circuitry	X	3 056	X	N
001900D2	Other power supply units for electronic circuitry	X	4 355	X	N
001900B8	Other components and accessories for elect. circuitry (incl. coils, transformers, transducers, switches, etc) exc. tubes	X	12 219	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	5 148	X	N
33232201	Steel, aluminum, and other metal electronic enclosure	X	14 477	X	N
32619901	Plastics electronic enclosures	X	8 287	X	N
33200003	Sheet metal products (including stampings), except enclosures	X	17 535	X	N
33200017	All other fabricated metal products (except forgings)	X	14 089	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	1 812	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	9 022	X	N
331000A9	Insulated copper wire and cable (including magnet wire)	X	3 040	X	N
32610031	Fabricated plastics products, except enclosures	X	10 546	X	N
33461100	Purchased software	X	D	X	N
33593103	Appliance outlets, switches, lampholders, and other current-carrying wiring devices	X	3 311	X	N
33531201	Electric motors and generators	X	14 370	X	N
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard	X	5 774	X	N
33411101	Purchased computers	X	10 573	X	N
33411200	Purchased peripheral storage devices	X	D	X	N
33411300	Purchased computer terminals	X	194	X	N
33411903	Purchased peripheral input devices, including keyboards, mouse devices, trackballs, etc.	X	D	X	N
33411905	Purchased peripheral printers	X	9 271	X	N
33410007	Other purchased electronic computing and peripheral equipment	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	147 796	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	639 529	X	N
<b>333314, OPTICAL INSTRUMENT &amp; LENS MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	12 075	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	75 188	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	22 853	X	N
33441400	Capacitors for electronic circuitry	X	4 612	X	N
33441500	Resistors for electronic circuitry	X	1 618	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	11 095	X	N
33593101	Current-carrying wiring devices	X	27 125	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	2 908	X	5 183
33410001	Electronic computing equipment	X	28 844	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	11 245	X	N
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	S	X	1 815
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	23 899	X	5 528
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	38 630	X	N
332000A9	Sheet metal products, except stampings	X	18 061	X	N
332000AC	Metal stampings	X	5 724	X	N
332000AE	Other fabricated metal products (except forgings)	X	100 638	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	D	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	27 166	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	196 038	X	88 007
00970099	All other materials and components, parts, containers, and supplies	X	178 229	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	214 866	X	N
<b>333315, PHOTOGRAPHIC &amp; PHOTOCOPYING EQUIPMENT MFG</b>					
33200073	All other fabricated metal products (except forgings)	X	53 572	X	N
33151001	Iron and steel castings (rough and semifinished)	X	6 182	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	97 522	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	48	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	35 505	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	563 707	X	N
32210007	Paper and paperboard products (except paperboard boxes, containers, corrugated paperboard, and photographic base papers)	X	9 950	X	N
32212025	Photographic base papers	X	676	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	67 882	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	73 163	X	N
32611303	Unsupported plastics film and sheet for photographic, mimeographic, X-ray, etc.	X	D	X	N
32610011	Fabricated plastics products (except gaskets)	X	269 701	X	N
33331405	Photographic and projection lenses and prisms	X	D	X	N
32599203	Light sensitive films and papers	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 321 588	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	284 688	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333319, OTHER COMMERCIAL &amp; SERVICE INDUSTRY MACHINERY MFG</b>					
001900B1	Electrical transmission, distribution, and control equipment	X	155 103	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	68 315	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	53 820	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	19 129	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	41 397	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	25 396	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	9 310	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	66 710	X	N
33200051	Other fabricated metal products (except fluid power products and forgings)	X	27 449	X	N
33210001	Forgings	X	5 946	X	N
33151001	Iron and steel castings (rough and semifinished)	X	67 925	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	9 813	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	6 360	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	59 385	X	N
33120017	Steel sheet and strip, including tin plate	X	254 224	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	21 510	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	44 419	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	49 118	X	N
33531217	Other fractional horsepower electric motors (under 1 hp)	X	23 702	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	93 994	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	6 472	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	27 201	X	N
33391103	All other pumps	X	60 191	X	24 802
33290001	Metal pipe, valves, and pipe fittings, except plumbers' and forgings	X	40 703	X	44 406
33200077	Other fabricated metal products, except electrical enclosures and forgings	X	141 131	X	89 971
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	22 584	X	22 766
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	26 308	X	N
33531225	Fractional horsepower electric motors and generators (less than 1 hp)	X	53 271	X	43 263
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	80 694	X	52 251
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	72 343	X	70 642
00190091	Electrical enclosures (metal and plastics)	X	20 011	X	19 284
33593101	Current-carrying wiring devices	X	38 669	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	42 998	X	N
33200097	Other fabricated metal products (except forgings)	X	6 063	X	N
00190090	Fluid power products	X	5 994	X	N
332000AC	Metal stampings	X	4 066	X	N
33200033	Other fabricated metal products (except forgings)	X	8 461	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	7 202	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	7 542	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	5 686	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	8 265	X	N
331000A7	Insulated wire and cable, including magnet wire	X	4 182	X	N
33410001	Electronic computing equipment	X	D	X	N
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	4 948	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 096 786	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	823 033	X	N
<b>333411, AIR PURIFICATION EQUIPMENT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	24 758	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings)	X	43 077	X	N
33200051	Other fabricated metal products (except fluid power products and forgings)	X	21 906	X	N
33200099	Fabricated structural metal products (except forgings)	X	43 826	X	N
00190090	Fluid power products	X	17 611	X	N
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	21 840	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	39 552	X	N
33120017	Steel sheet and strip, including tin plate	X	100 262	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	11 537	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	52 601	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	45 142	X	N
33531201	Electric motors and generators	X	40 778	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	4 189	X	N
00190011	Flexible packaging materials and paperboard containers and boxes and corrugated paperboard	X	21 027	X	N
00970099	All other materials and components, parts, containers, and supplies	X	257 891	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	104 372	X	N
<b>333412, INDUSTRIAL &amp; COMMERCIAL FAN &amp; BLOWER MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	17 918	X	N
00190090	Fluid power products	X	D	X	N
33200051	Other fabricated metal products (except fluid power products and forgings)	X	D	X	N
33200099	Fabricated structural metal products (except forgings)	X	37 446	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings)	X	3 408	X	N
33210001	Forgings	X	5 418	X	N
33151001	Iron and steel castings (rough and semifinished)	X	23 939	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	19 082	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333412, INDUSTRIAL &amp; COMMERCIAL FAN &amp; BLOWER MFG—Con.</b>					
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	30 079	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	110 643	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	7 409	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 014	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	22 467	X	N
33531201	Electric motors and generators . . . . .	X	94 586	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	25 216	X	N
00190011	Flexible packaging materials and paperboard containers and boxes and corrugated paperboard . . . . .	X	9 440	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	231 896	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	156 619	X	N
<b>333414, HEATING EQUIPMENT (EXCEPT WARM AIR FURNACES) MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	20 071	X	N
33200037	Other fabricated metal products (except forgings) . . . . .	X	242 958	X	N
33210001	Forgings . . . . .	X	9 956	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	73 431	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	30 321	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	23 175	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	161 760	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	21 501	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	12 618	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	33 797	X	N
33531201	Electric motors and generators . . . . .	X	57 729	X	N
33451200	Automatic temperature controls (thermostats, regulators, etc.) . . . . .	X	115 062	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	42 994	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	385 778	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	265 107	X	N
<b>333415, AC &amp; WARM AIR HEATING &amp; COMMERCIAL/ INDUSTRIAL REFRIG EQUIP MFG</b>					
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	363 827	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	94 726	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	10 184	X	N
33210001	Forgings . . . . .	X	26 023	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	722 136	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products) . . . . .	X	532 341	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	314 793	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	76 507	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	67 220	X	N
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment . . . . .	X	1 686 209	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp) . . . . .	X	233 853	X	N
33531223	Fractional horsepower electric motors (less than 1 hp), except timing motors . . . . .	X	334 893	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	772 225	X	N
33341200	Fans and blowers . . . . .	X	160 903	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	494 627	X	N
33593101	Current-carrying wiring devices . . . . .	X	191 831	X	N
33451200	Automatic temperature controls (thermostats, regulators, etc.) . . . . .	X	361 032	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	32 498	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	168 472	X	N
332000AC	Metal stampings . . . . .	X	274 329	X	N
33251005	Metal hardware, including hinges, handles, locks, casters, etc. . . . .	X	70 484	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	198 373	X	N
33200053	All other fabricated metal products (except forgings) . . . . .	X	315 747	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	288 263	X	N
33120025	Steel wire and wire products . . . . .	X	33 633	X	N
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	156 366	X	N
33142143	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	109 780	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	15 873	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	161 505	X	N
32192003	Wooden containers, complete (including combination wood and paperboard) . . . . .	X	45 406	X	N
32510027	Refrigerant gases and other synthetic organic chemicals . . . . .	X	85 994	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	59 485	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	94 501	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting) . . . . .	X	169 435	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	42 354	X	N
33999101	Gaskets (all types) and asbestos packing . . . . .	X	43 206	X	N
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.) . . . . .	X	94 281	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 472 027	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 160 160	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333511, INDUSTRIAL MOLD MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	26 294	X	N
33200095	Other fabricated metal products (except forgings)	X	51 896	X	N
33210001	Forgings	X	9 884	X	N
33151001	Iron and steel castings (rough and semifinished)	X	52 290	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	24 534	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	155 497	X	N
33120017	Steel sheet and strip, including tin plate	X	12 544	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	41 681	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	21 606	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	13 350	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 769	X	N
33149200	Tungsten carbide metal powders	X	777	X	N
331000AC	All other metal powders	X	311	X	N
00190023	Iron and steel scrap (excluding home scrap)	X	929	X	N
32799903	Industrial diamonds	X	1 955	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	5 071	X	N
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	10 951	X	N
00190090	Fluid power products	X	8 258	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses)	X	1 302	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	988	X	N
00970099	All other materials and components, parts, containers, and supplies	X	217 336	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	282 769	X	N
<b>333512, MACHINE TOOL (METAL CUTTING TYPES) MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	43 237	X	33 161
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	8 955	X	15 341
33399901	Fluid power filters (hydraulic and pneumatic)	X	3 128	X	4 491
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	8 896	X	11 274
33291207	Fluid power valves (hydraulic and pneumatic)	X	17 613	X	13 323
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	29 172	X	N
33200063	Other fabricated metal products (except fluid power products and forgings)	X	115 231	X	70 117
33210001	Forgings	X	15 390	X	N
33151001	Iron and steel castings (rough and semifinished)	X	178 001	X	117 864
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	8 700	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	63 625	X	39 803
33120017	Steel sheet and strip, including tin plate	X	20 978	X	18 294
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	8 843	X	10 411
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	30 467	X	6 183
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	10 824	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp)	X	26 860	X	20 817
33531217	Other fractional horsepower electric motors (under 1 hp)	X	20 412	X	12 687
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	25 202	X	20 218
001900B1	Electrical transmission, distribution, and control equipment	X	85 123	X	42 439
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings	X	23 855	X	13 374
33531409	Numerical controls for metalworking machinery (except programmable)	X	74 810	X	46 562
33531411	Programmable controllers for metalworking machinery	X	79 542	X	68 147
33299105	Ball bearings (mounted or unmounted)	X	30 260	X	18 664
33299103	Roller bearings (mounted or unmounted)	X	8 298	X	7 484
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	33 236	X	40 588
32192001	Wood boxes, pallets, skids, and containers	X	6 440	X	5 918
33351503	Cutting tools for machine tools	X	89 178	X	23 043
00970099	All other materials and components, parts, containers, and supplies	X	689 424	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	504 834	X	N
<b>333513, MACHINE TOOL (METAL FORMING TYPES) MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	25 110	X	18 322
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	14 030	X	8 777
33399901	Fluid power filters (hydraulic and pneumatic)	X	2 920	X	2 180
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	8 579	X	3 285
33291207	Fluid power valves (hydraulic and pneumatic)	X	13 634	X	8 981
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	14 402	X	11 486
33200063	Other fabricated metal products (except fluid power products and forgings)	X	44 638	X	25 907
33210001	Forgings	X	5 183	X	N
33151001	Iron and steel castings (rough and semifinished)	X	32 070	X	29 738
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	4 217	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	69 502	X	76 423
33120017	Steel sheet and strip, including tin plate	X	10 332	X	7 883
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	7 271	X	21 069
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	28 125	X	16 884
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 242	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp)	X	2 112	X	1 531
33531217	Other fractional horsepower electric motors (under 1 hp)	X	3 666	X	620
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	15 071	X	15 547
001900B1	Electrical transmission, distribution, and control equipment	X	32 233	X	19 668
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings	X	6 694	X	4 230



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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>333513, MACHINE TOOL (METAL FORMING TYPES) MFG—Con.</b>				
33531409	Numerical controls for metalworking machinery (except programmable) .....	X	13 826	X	3 704
33531411	Programmable controllers for metalworking machinery .....	X	22 763	X	22 956
33299105	Ball bearings (mounted or unmounted) .....	X	9 014	X	4 878
33299103	Roller bearings (mounted or unmounted) .....	X	9 425	X	3 049
33361200	Mechanical speed changers, gears, and industrial high-speed drives .....	X	15 816	X	8 272
32192001	Wood boxes, pallets, skids, and containers .....	X	3 851	X	2 893
33351503	Cutting tools for machine tools .....	X	15 831	X	16 614
00970099	All other materials and components, parts, containers, and supplies .....	X	197 101	X	141 601
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	168 017	X	110 613
	<b>333514, SPECIAL DIE &amp; TOOL, DIE SET, JIG, &amp; FIXTURE MFG</b>				
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	87 646	X	N
33200095	Other fabricated metal products (except forgings) .....	X	113 706	X	N
33210001	Forgings .....	X	10 461	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	96 376	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....	X	30 869	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	318 976	X	N
33120017	Steel sheet and strip, including tin plate .....	X	108 574	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	40 773	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing .....	X	16 402	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	5 932	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	14 243	X	N
33149200	Tungsten carbide metal powders .....	X	28 988	X	N
331000AC	All other metal powders .....	X	2 572	X	N
00190023	Iron and steel scrap (excluding home scrap) .....	X	2 438	X	N
32799903	Industrial diamonds .....	X	8 892	X	N
001900B1	Electrical transmission, distribution, and control equipment .....	X	21 013	X	N
32791001	Grinding wheels and other abrasive products, except industrial diamonds .....	X	18 993	X	N
00190090	Fluid power products .....	X	46 859	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses) .....	X	1 889	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories .....	X	2 032	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	336 805	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	364 569	X	N
	<b>333515, CUTTING TOOL &amp; MACHINE TOOL ACCESSORY MFG</b>				
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	37 492	X	N
33200095	Other fabricated metal products (except forgings) .....	X	56 759	X	N
33210001	Forgings .....	X	14 241	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	50 575	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....	X	4 282	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	283 838	X	N
33120017	Steel sheet and strip, including tin plate .....	X	9 136	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	25 244	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing .....	X	4 723	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	6 922	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	7 697	X	N
33149200	Tungsten carbide metal powders .....	X	267 727	X	N
331000AC	All other metal powders .....	X	8 607	X	N
00190023	Iron and steel scrap (excluding home scrap) .....	X	2 360	X	N
32799903	Industrial diamonds .....	X	40 395	X	N
001900B1	Electrical transmission, distribution, and control equipment .....	X	19 222	X	N
32791001	Grinding wheels and other abrasive products, except industrial diamonds .....	X	56 965	X	N
00190090	Fluid power products .....	X	29 673	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses) .....	X	6 680	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories .....	X	5 777	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	193 229	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	233 869	X	N
	<b>333516, ROLLING MILL MACHINERY &amp; EQUIPMENT MFG</b>				
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) .....	X	9 322	X	4 761
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) .....	X	7 715	X	2 099
33399901	Fluid power filters (hydraulic and pneumatic) .....	X	1 735	X	258
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) .....	X	3 733	X	1 699
33291207	Fluid power valves (hydraulic and pneumatic) .....	X	3 471	X	679
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	4 345	X	2 138
33200063	Other fabricated metal products (except fluid power products and forgings) .....	X	20 411	X	9 636
33210001	Forgings .....	X	43 198	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	12 706	X	9 992
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....	X	1 349	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) .....	X	23 947	X	16 912
33120017	Steel sheet and strip, including tin plate .....	X	1 716	X	1 482
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products) .....	X	3 370	X	2 532
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	2 090	X	5 107
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	104	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp) .....	X	143	X	1 370
33531217	Other fractional horsepower electric motors (under 1 hp) .....	X	D	X	D

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333516, ROLLING MILL MACHINERY &amp; EQUIPMENT MFG—Con.</b>					
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	12 328	X	1 506
001900B1	Electrical transmission, distribution, and control equipment	X	11 868	X	3 664
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings	X	3 399	X	D
33531409	Numerical controls for metalworking machinery (except programmable)	X	D	X	D
33531411	Programmable controllers for metalworking machinery	X	5 129	X	2 614
33299105	Ball bearings (mounted or unmounted)	X	9 582	X	D
33299103	Roller bearings (mounted or unmounted)	X	5 694	X	2 483
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	16 252	X	D
32192001	Wood boxes, pallets, skids, and containers	X	1 076	X	308
33351503	Cutting tools for machine tools	X	2 273	X	2 707
00970099	All other materials and components, parts, containers, and supplies	X	65 487	X	43 300
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	23 481	X	25 897
<b>333518, OTHER METALWORKING MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	25 918	X	9 918
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	14 140	X	6 432
33399901	Fluid power filters (hydraulic and pneumatic)	X	1 819	X	1 107
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	5 471	X	3 217
33291207	Fluid power valves (hydraulic and pneumatic)	X	14 767	X	4 979
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	11 639	X	7 448
33200063	Other fabricated metal products (except fluid power products and forgings)	X	35 917	X	18 115
33210001	Forgings	X	2 276	X	N
33151001	Iron and steel castings (rough and semifinished)	X	41 070	X	8 647
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	3 757	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	30 806	X	23 351
33120017	Steel sheet and strip, including tin plate	X	15 001	X	5 042
33120069	Steel structural shapes (except castings, forgings, and fabricated metal products)	X	7 508	X	4 212
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	6 222	X	3 970
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 046	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subynchronous (less than 1 hp)	X	15 133	X	2 120
33531217	Other fractional horsepower electric motors (under 1 hp)	X	2 737	X	2 533
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	20 268	X	12 340
001900B1	Electrical transmission, distribution, and control equipment	X	85 359	X	40 427
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings	X	7 026	X	3 029
33531409	Numerical controls for metalworking machinery (except programmable)	X	4 069	X	1 346
33531411	Programmable controllers for metalworking machinery	X	23 346	X	12 050
33299105	Ball bearings (mounted or unmounted)	X	12 310	X	4 324
33299103	Roller bearings (mounted or unmounted)	X	6 853	X	3 372
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	14 465	X	8 351
32192001	Wood boxes, pallets, skids, and containers	X	4 255	X	1 601
33351503	Cutting tools for machine tools	X	10 251	X	2 732
00970099	All other materials and components, parts, containers, and supplies	X	398 657	X	150 700
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	487 226	X	165 960
<b>333611, TURBINE &amp; TURBINE GENERATOR SET UNIT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	D	X	D
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	D	X	2 278
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	D
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	D	X	D
33291207	Fluid power valves (hydraulic and pneumatic)	X	28 254	X	30 712
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	49 428	X	41 921
332000AC	Metal stampings	X	D	X	D
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products, fabricated steel plate, and weldments	X	28 802	X	D
33200099	Fabricated structural metal products (except forgings)	X	D	X	D
33200079	All other fabricated metal products (except forgings)	X	182 209	X	161 166
33211101	Iron and steel forgings	X	406 288	X	D
33211201	Nonferrous forgings	X	D	X	D
33151001	Iron and steel castings (rough and semifinished)	X	386 958	X	330 634
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	3 025	X	1 729
33152003	Other nonferrous castings (rough and semifinished)	X	669	X	D
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	85 557	X	70 928
33120017	Steel sheet and strip, including tin plate	X	26 263	X	24 716
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	37 986	X	19 363
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	34 015
33631100	Pistons, piston rings, carburetors, valves (intake and exhaust only)	X	-	X	D
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	D	X	D
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	D	X	D
33299105	Ball bearings (mounted or unmounted)	X	D	X	4 507
33299103	Roller bearings (mounted or unmounted)	X	D	X	D
33361301	Plain bearings and bushings	X	32 794	X	12 552
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	D	X	30 130
33361101	Turbines purchased for incorporation into turbine generator sets	X	12 654	X	D
33361103	Generators purchased for incorporation into turbine generator sets	X	D	X	10 393
33999101	Gaskets (all types) and asbestos packing	X	D	X	3 302
32610011	Fabricated plastics products (except gaskets)	X	D	X	1 734
32622001	Rubber and plastics hose and belting	X	D	X	594
33351503	Cutting tools for machine tools	X	14 245	X	8 557
00970099	All other materials and components, parts, containers, and supplies	X	516 697	X	437 891
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	71 851	X	59 846

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333612, SPEED CHANGER, INDUSTRIAL HIGH-SPEED DRIVE, &amp; GEAR MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	19 970	X	17 146
33200095	Other fabricated metal products (except forgings)	X	37 765	X	18 257
33211103	Cold iron and steel forgings	X	23 960	X	16 280
33211111	Other iron and steel forgings	X	65 620	X	31 872
33211201	Nonferrous forgings	X	6 149	X	2 583
33151001	Iron and steel castings (rough and semifinished)	X	80 934	X	59 964
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	24 076	X	12 416
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	88 629	X	46 470
33120017	Steel sheet and strip, including tin plate	X	—	X	842
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	40 740	X	3 632
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	12 314	X	5 494
33100075	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	6 252	X	4 294
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	3 487	X	N
33299105	Ball bearings (mounted or unmounted)	X	21 528	X	16 159
33299103	Roller bearings (mounted or unmounted)	X	41 914	X	22 933
33299107	Balls, rollers, cages, collars, races, and other antifriction bearing components and parts	X	6 021	X	1 434
33361305	Clutches, couplings, shafts, sprockets, and other mechanical power transmission equipment	X	77 653	X	44 620
33531207	Electric motors, generators, and parts	X	87 441	X	47 448
32221001	Paperboard containers, boxes, and corrugated paperboard	X	6 419	X	3 984
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	2 858	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	12 423	X	N
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	7 685	X	N
00970099	All other materials and components, parts, containers, and supplies	X	63 019	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	58 059	X	77 834
<b>333613, MECHANICAL POWER TRANSMISSION EQUIPMENT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	27 506	X	28 177
33200095	Other fabricated metal products (except forgings)	X	48 527	X	33 903
33211103	Cold iron and steel forgings	X	31 136	X	15 789
33211111	Other iron and steel forgings	X	16 520	X	13 891
33211201	Nonferrous forgings	X	420	X	158
33151001	Iron and steel castings (rough and semifinished)	X	131 235	X	60 398
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	21 052	X	23 482
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	160 897	X	109 548
33120017	Steel sheet and strip, including tin plate	X	79 322	X	43 696
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	35 125	X	22 664
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	23 305	X	8 911
33100075	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	9 277	X	9 341
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	9 007	X	D
33299105	Ball bearings (mounted or unmounted)	X	25 074	X	10 380
33299103	Roller bearings (mounted or unmounted)	X	17 562	X	5 524
33299107	Balls, rollers, cages, collars, races, and other antifriction bearing components and parts	X	26 175	X	D
33361305	Clutches, couplings, shafts, sprockets, and other mechanical power transmission equipment	X	153 318	X	15 763
33531207	Electric motors, generators, and parts	X	9 798	X	12 356
32221001	Paperboard containers, boxes, and corrugated paperboard	X	11 559	X	6 934
32791001	Grinding wheels and other abrasive products, except industrial diamonds	X	D	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	16 800	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor)	X	D	X	N
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	16 673	X	N
00970099	All other materials and components, parts, containers, and supplies	X	137 650	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	84 219	X	144 610
<b>333618, OTHER ENGINE EQUIPMENT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	474 655	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	50 545	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	55 747	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	40 671	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	18 535	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	201 601	X	N
332000AC	Metal stampings	X	154 453	X	N
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products, fabricated steel plate, and weldments	X	161 268	X	N
33200099	Fabricated structural metal products (except forgings)	X	D	X	N
33200079	All other fabricated metal products (except forgings)	X	592 825	X	N
33211101	Iron and steel forgings	X	558 185	X	N
33211201	Nonferrous forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	1 574 339	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	747 609	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	112 695	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	76 962	X	N
33120017	Steel sheet and strip, including tin plate	X	50 462	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	83 419	X	N

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[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333618, OTHER ENGINE EQUIPMENT MFG—Con.</b>					
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	17 340	X	N
33631100	Pistons, piston rings, carburetors, valves (intake and exhaust only) . . . . .	X	779 546	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc. . . . .	X	628 838	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	D	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	18 127	X	N
33299103	Roller bearings (mounted or unmounted) . . . . .	X	23 206	X	N
33361301	Plain bearings and bushings . . . . .	X	68 181	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	262 801	X	N
33361101	Turbines purchased for incorporation into turbine generator sets . . . . .	X	—	N	N
33361103	Generators purchased for incorporation into turbine generator sets . . . . .	X	D	X	N
33999101	Gaskets (all types) and asbestos packing . . . . .	X	112 627	X	N
32610011	Fabricated plastics products (except gaskets) . . . . .	X	62 195	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	54 819	X	N
33351503	Cutting tools for machine tools . . . . .	X	59 843	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	2 276 614	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	551 460	X	N
<b>333911, PUMP &amp; PUMPING EQUIPMENT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	145 361	X	N
33291211	Fluid power valves and hose and tube fittings and assemblies . . . . .	X	29 210	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	58 304	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	75 840	X	N
33200099	Fabricated structural metal products (except forgings) . . . . .	X	126 327	X	N
33200051	Other fabricated metal products (except fluid power products and forgings) . . . . .	X	55 326	X	N
33211101	Iron and steel forgings . . . . .	X	39 186	X	28 628
33211201	Nonferrous forgings . . . . .	X	9 369	X	5 722
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	380 128	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	66 792	X	39 396
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	115 989	X	70 849
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	168 062	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	9 323	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	17 994	X	10 357
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	34 772	X	4 364
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	26 177	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor) . . . . .	X	41 084	X	56 701
33531211	Fractional horsepower electric motors (less than 1 hp) . . . . .	X	248 326	X	175 952
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	192 385	X	169 278
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	38 173	X	19 928
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	26 744	X	19 508
32600011	Fabricated rubber products, except gaskets . . . . .	X	26 582	X	23 048
32610011	Fabricated plastics products (except gaskets) . . . . .	X	79 824	X	46 688
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	57 502	X	33 383
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	106 531	X	55 051
32551003	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	X	27 003	X	4 909
00190087	Other fluid power products (hydraulic and pneumatic) . . . . .	X	62 684	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	328 131	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	295 837	X	N
<b>333912, AIR &amp; GAS COMPRESSOR MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	50 727	X	N
33291211	Fluid power valves and hose and tube fittings and assemblies . . . . .	X	29 493	X	N
00190087	Other fluid power products (hydraulic and pneumatic) . . . . .	X	19 630	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	54 399	X	39 448
33200051	Other fabricated metal products (except fluid power products and forgings) . . . . .	X	87 341	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	53 812	X	N
33200099	Fabricated structural metal products (except forgings) . . . . .	X	159 426	X	N
33211101	Iron and steel forgings . . . . .	X	32 285	X	42 270
33211201	Nonferrous forgings . . . . .	X	D	X	1 149
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	188 855	X	130 175
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	45 762	X	28 123
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	5 019
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	53 128	X	49 298
33120017	Steel sheet and strip, including tin plate . . . . .	X	38 299	X	29 404
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	16 981	X	10 898
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	7 393	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	6 915	X	3 830
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor) . . . . .	X	67 588	X	92 631
33531217	Other fractional horsepower electric motors (under 1 hp) . . . . .	X	45 855	X	52 918
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	204 082	X	83 186
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	30 096	X	19 546
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	29 282	X	14 157
32600011	Fabricated rubber products, except gaskets . . . . .	X	17 165	X	6 451
32610011	Fabricated plastics products (except gaskets) . . . . .	X	45 325	X	27 761
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	30 119	X	28 563
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	87 487	X	68 183
32551003	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	X	10 015	X	7 212
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	514 633	X	366 028
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	385 669	X	244 669

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333913, MEASURING &amp; DISPENSING PUMP MFG</b>					
00190087	Other fluid power products (hydraulic and pneumatic) . . . . .	X	D	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	D	X	N
33291211	Fluid power valves and hose and tube fittings and assemblies . . . . .	X	10 899	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	16 477	X	16 604
33200051	Other fabricated metal products (except fluid power products and forgings) . . . . .	X	D	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	5 398	X	N
33200099	Fabricated structural metal products (except forgings) . . . . .	X	11 090	X	N
33211101	Iron and steel forgings . . . . .	X	489	X	N
33211201	Nonferrous forgings . . . . .	X	D	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	24 701	X	9 979
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	40 194	X	16 596
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	1 308	X	3 413
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	8 826	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	24 057	X	16 680
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 789	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	666	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 849	X	4 916
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor) . . . . .	X	D	X	N
33531217	Other fractional horsepower electric motors (under 1 hp) . . . . .	X	28 369	X	13 099
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	5 912	X	2 481
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	5 729	X	2 091
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	9 482	X	5 147
32600011	Fabricated rubber products, except gaskets . . . . .	X	6 584	X	5 828
32610011	Fabricated plastics products (except gaskets) . . . . .	X	26 238	X	31 812
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	7 612	X	7 479
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	24 655	X	8 506
32551003	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	X	2 121	X	1 369
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	70 690	X	104 820
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	41 204	X	30 925
<b>333921, ELEVATOR &amp; MOVING STAIRWAY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	29 275	X	17 819
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	29 528	X	18 625
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	7 533	X	4 989
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	10 321	X	7 955
33200057	Fabricated metal products, except forgings . . . . .	X	44 111	X	31 159
33211101	Iron and steel forgings . . . . .	X	16 140	X	1 912
33211201	Nonferrous forgings . . . . .	X	840	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	24 362	X	10 441
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	4 685	X	3 694
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	88 460	X	57 641
33120017	Steel sheet and strip, including tin plate . . . . .	X	111 437	X	71 738
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	24 673	X	22 424
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	50 039	X	27 591
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	7 679	X	5 435
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	22 645	X	12 203
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	3 251	X	2 512
33361805	Gasoline and other carburetor engines . . . . .	X	D	X	N
33531205	Fractional horsepower electric motors (less than 1 hp) (excluding timing motors) . . . . .	X	8 040	X	5 013
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	11 709	X	7 836
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	90 169	X	53 919
33591101	Storage batteries . . . . .	X	470	X	495
33299105	Ball bearings (mounted or unmounted) . . . . .	X	8 761	X	4 926
33299103	Roller bearings (mounted or unmounted) . . . . .	X	4 728	X	3 991
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	10 766	X	4 599
32621003	Pneumatic tires and inner tubes . . . . .	X	6	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	9 559	X	4 052
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	91 861	X	86 999
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	85 154	X	50 317
<b>333922, CONVEYOR &amp; CONVEYING EQUIPMENT MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	27 126	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	29 339	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	5 235	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	9 766	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	23 594	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	5 423	X	N
33211101	Iron and steel forgings . . . . .	X	33 385	X	N
33211201	Nonferrous forgings . . . . .	X	1 220	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	74 892	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	234 275	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	217 295	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	85 298	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	67 394	X	N
33361805	Gasoline and other carburetor engines . . . . .	X	540	X	N
33531201	Electric motors and generators . . . . .	X	103 361	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	71 998	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333922, CONVEYOR &amp; CONVEYING EQUIPMENT MFG—Con.</b>					
33299103	Roller bearings (mounted or unmounted) . . . . .	X	55 875	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	81 612	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	68 320	X	N
33200057	Fabricated metal products, except forgings . . . . .	X	210 570	X	128 714
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	10 603	X	5 405
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 189	X	400
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	35 432	X	12 665
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	9 289	X	5 370
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	111 525	X	56 044
32621003	Pneumatic tires and inner tubes . . . . .	X	7 687	X	3 111
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	386 979	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	397 796	X	N
<b>333923, OVERHEAD TRAVELING CRANE, HOIST, &amp; MONORAIL SYSTEM MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	146 852	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	84 225	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	23 394	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	32 674	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	17 522	X	N
33200099	Fabricated structural metal products (except forgings) . . . . .	X	133 260	X	N
33290009	Fabricated metal wire products (including wire rope, cable, springs, etc.) . . . . .	X	98 472	X	N
33200065	All other fabricated metal products (except forgings) . . . . .	X	55 014	X	N
332000AC	Metal stampings . . . . .	X	19 115	X	N
33210001	Forgings . . . . .	X	18 574	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	54 756	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	8 817	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	62 089	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	22 692	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	25 047	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	16 678	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor) . . . . .	X	D	X	N
33531201	Electric motors and generators . . . . .	X	55 376	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	68 854	X	N
32621001	Tires and inner tubes . . . . .	X	D	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	2 347	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting) . . . . .	X	3 035	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	11 139	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	50 952	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	3 031	X	145
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	25 177	X	6 097
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	194 067	X	59 140
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	171 675	X	N
<b>333924, INDUSTRIAL TRUCK, TRACTOR, TRAILER, &amp; STACKER MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	160 655	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	147 825	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	5 594	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	43 186	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	58 882	X	N
33200057	Fabricated metal products, except forgings . . . . .	X	213 575	X	N
33211101	Iron and steel forgings . . . . .	X	60 415	X	N
33211201	Nonferrous forgings . . . . .	X	8 509	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	145 932	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	37 620	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	350 314	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	151 550	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	72 374	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	103 571	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 680	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	27 688	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 407	X	N
33361805	Gasoline and other carburetor engines . . . . .	X	183 669	X	N
33531205	Fractional horsepower electric motors (less than 1 hp) (excluding timing motors) . . . . .	X	22 770	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	62 347	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	201 074	X	N
33591101	Storage batteries . . . . .	X	9 804	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	22 350	X	N
33299103	Roller bearings (mounted or unmounted) . . . . .	X	51 747	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	200 107	X	N
32621003	Pneumatic tires and inner tubes . . . . .	X	36 377	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	38 102	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	467 208	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	264 881	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333991, POWER-DRIVEN HANDTOOL MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	88 854	X	37 739
33200063	Other fabricated metal products (except fluid power products and forgings)	X	167 738	X	120 936
33210001	Forgings	X	2 547	X	1 769
33151001	Iron and steel castings (rough and semifinished)	X	52 980	X	29 163
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	61 476	X	68 876
33152003	Other nonferrous castings (rough and semifinished)	X	11 663	X	7 397
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	70 689	X	51 057
33120085	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	25 686	X	12 828
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	2 343	X	5 266
331000A3	Insulated copper wire and cable, except magnet wire	X	19 104	X	14 734
33100097	Magnet wire	X	49 338	X	20 593
33531201	Electric motors and generators	X	48 541	X	29 008
33591101	Storage batteries	X	119 488	X	43 922
33299101	Ball and roller bearings (mounted or unmounted)	X	50 042	X	45 978
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	50 836	X	18 919
32610011	Fabricated plastics products (except gaskets)	X	114 143	X	86 580
32221001	Paperboard containers, boxes, and corrugated paperboard	X	43 284	X	29 514
001900A1	Packaging paper and plastics film, coated and laminated	X	15 024	X	4 016
00970099	All other materials and components, parts, containers, and supplies	X	289 528	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	84 750	X	122 929
<b>333992, WELDING &amp; SOLDERING EQUIPMENT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	55 584	X	N
33200095	Other fabricated metal products (except forgings)	X	108 491	X	N
33210001	Forgings	X	15 842	X	N
33151001	Iron and steel castings (rough and semifinished)	X	80 460	X	N
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	38 589	X	N
33152013	Other nonferrous castings (rough and semifinished)	X	8 564	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	49 329	X	N
33120017	Steel sheet and strip, including tin plate	X	112 819	X	N
33120025	Steel wire and wire products	X	257 940	X	N
33120015	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	102 657	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	118 568	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	54 593	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	21 077	X	N
331000A3	Insulated copper wire and cable, except magnet wire	X	29 839	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp)	X	18 765	X	N
33531223	Fractional horsepower electric motors (less than 1 hp), except timing motors	X	5 307	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	84 826	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	118 926	X	N
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings	X	81 929	X	N
33451300	Pressure gauges	X	25 684	X	N
33299105	Ball bearings (mounted or unmounted)	X	8 486	X	N
33299103	Roller bearings (mounted or unmounted)	X	3 110	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	58 889	X	N
33399003	Industrial robots purchased for fabrication with welding equipment	X	35 403	X	N
00970099	All other materials and components, parts, containers, and supplies	X	387 920	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	252 480	X	N
<b>333993, PACKAGING MACHINERY MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	28 573	X	8 024
00190086	Other fluid power products (hydraulic and pneumatic), except pumps, motors, and hydrostatic transmissions	X	75 276	X	22 492
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	56 715	X	22 846
33299101	Ball and roller bearings (mounted or unmounted)	X	46 321	X	17 048
33361303	Other mechanical power transmission equipment	X	31 708	X	25 450
33200005	Fabricated metal products, including forgings	X	297 167	X	N
33151001	Iron and steel castings (rough and semifinished)	X	31 675	X	20 668
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	19 413	X	N
33120031	Stainless steel shapes and forms (except castings, forgings, and fabricated metal products)	X	55 714	X	29 367
33120023	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	42 141	X	28 458
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	54 082	X	N
33531407	Relays and industrial controls for drives, clutches, brakes, motors, etc., including programmable controllers	X	182 261	X	56 142
33530000	Transformers (except electronic-type) and other electric power transmission and distribution equipment	X	30 393	X	12 842
33531201	Electric motors and generators	X	84 577	X	N
33399309	Purchased packaging machinery devices for incorporation into complete finished product	X	198 813	X	N
00190096	Other purchased devices for incorporation into complete finished product, except packaging machinery devices	X	30 400	X	N
00970099	All other materials and components, parts, containers, and supplies	X	384 859	X	9 852
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	128 913	X	275 012
<b>333994, INDUSTRIAL PROCESS FURNACE &amp; OVEN MFG</b>					
00190090	Fluid power products	X	102 779	X	21 573
33200005	Fabricated metal products, including forgings	X	141 752	X	N
33151001	Iron and steel castings (rough and semifinished)	X	14 134	X	4 342
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	17 548	X	3 439
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	47 977	X	18 073
33120017	Steel sheet and strip, including tin plate	X	56 865	X	24 731

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>333994, INDUSTRIAL PROCESS FURNACE &amp; OVEN MFG—Con.</b>				
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	28 887	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	28 768	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	10 084	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	151 769	X	67 256
33399400	Electric heating elements for industrial furnaces, ovens, and kilns . . . . .	X	38 858	X	18 505
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	385 641	X	241 046
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	155 258	X	150 920
	<b>333995, FLUID POWER CYLINDER &amp; ACTUATOR MFG</b>				
33399603	Fluid power pumps purchased for incorporation into products of this establishment . . . . .	X	91 418	X	15 745
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	89 083	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	19 252	X	9 450
33200075	Other fabricated metal products (except forgings) . . . . .	X	157 031	X	37 350
33210001	Forgings . . . . .	X	42 869	X	3 002
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	83 654	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	14 376	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	17 322	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	186 331	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	5 212	X	N
33121000	Steel tubing . . . . .	X	114 279	X	45 440
33120061	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	37 378	X	44 602
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	25 525	X	11 533
33100047	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	18 653	X	10 727
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	6 932	X	3 174
331000AA	Metal powders . . . . .	X	D	X	343
32410005	Lubricating and cutting oils . . . . .	X	6 558	X	3 029
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	4 039	X	N
33531201	Electric motors and generators . . . . .	X	19 953	X	3 984
33299105	Ball bearings (mounted or unmounted) . . . . .	X	3 069	X	4 441
33299103	Roller bearings (mounted or unmounted) . . . . .	X	D	X	4 082
33361301	Plain bearings and bushings . . . . .	X	9 745	X	2 215
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	6 253	X	2 222
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	20 281	X	12 301
33351503	Cutting tools for machine tools . . . . .	X	27 308	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	127 829	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	62 093	X	N
	<b>333996, FLUID POWER PUMP &amp; MOTOR MFG</b>				
33399603	Fluid power pumps purchased for incorporation into products of this establishment . . . . .	X	76 252	X	16 587
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	76 790	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings) . . . . .	X	19 794	X	6 323
33200075	Other fabricated metal products (except forgings) . . . . .	X	71 034	X	43 891
33210001	Forgings . . . . .	X	10 707	X	7 743
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	104 552	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	25 666	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	28 812	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	628	X	N
33121000	Steel tubing . . . . .	X	7 294	X	N
33120061	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	67 790	X	8 164
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	4 959	X	1 221
33100047	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	3 389
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	13 370	X	7 239
331000AA	Metal powders . . . . .	X	12 248	X	8 430
32410005	Lubricating and cutting oils . . . . .	X	7 769	X	4 653
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	2 717	X	N
33531201	Electric motors and generators . . . . .	X	45 855	X	25 134
33299105	Ball bearings (mounted or unmounted) . . . . .	X	8 997	X	5 329
33299103	Roller bearings (mounted or unmounted) . . . . .	X	20 597	X	12 979
33361301	Plain bearings and bushings . . . . .	X	19 227	X	3 441
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	11 411	X	12 221
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	11 003	X	8 344
33351503	Cutting tools for machine tools . . . . .	X	24 601	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	153 546	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	157 997	X	N
	<b>333997, SCALE &amp; BALANCE (EXCEPT LABORATORY) MFG</b>				
332000A9	Sheet metal products, except stampings . . . . .	X	13 149	X	12 936
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	5 156	X	6 113
33200087	All other fabricated metal products (except forgings) . . . . .	X	D	X	13 348
33210001	Forgings . . . . .	X	D	X	121
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	5 238	X	7 608
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) . . . . .	X	1 937	X	3 867
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	24 917	X	13 405



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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>333997, SCALE &amp; BALANCE (EXCEPT LABORATORY) MFG—Con.</b>					
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	8 291	X	4 386
33120089	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	10 621	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	2 146	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	20 727	X	26 162
001900B6	Resistors, capacitors, transformers, transducers, and other electronic-type components	X	46 701	X	29 690
33593103	Appliance outlets, switches, lampholders, and other current-carrying wiring devices	X	6 578	X	5 601
001900B1	Electrical transmission, distribution, and control equipment	X	4 226	X	9 960
32221001	Paperboard containers, boxes, and corrugated paperboard	X	3 962	X	4 811
32610011	Fabricated plastics products (except gaskets)	X	6 258	X	3 774
00970099	All other materials and components, parts, containers, and supplies	X	93 825	X	95 694
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	19 191	X	17 835
<b>333999, ALL OTHER MISCELLANEOUS GENERAL-PURPOSE MACHINERY MFG</b>					
33531201	Electric motors and generators	X	68 488	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	71 977	X	40 940
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	76 094	X	21 730
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	44 002	X	12 151
33399901	Fluid power filters (hydraulic and pneumatic)	X	80 233	X	49 892
33291207	Fluid power valves (hydraulic and pneumatic)	X	24 590	X	12 753
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	35 184	X	9 150
00190089	Other fluid power products (hydraulic and pneumatic)	X	39 615	X	5 124
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	51 846	X	15 808
33299101	Ball and roller bearings (mounted or unmounted)	X	26 167	X	12 765
33391101	Other pumps and pump parts, except fluid power (complete assemblies)	X	50 619	X	18 978
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	98 744	X	N
332000A1	Metal tanks, heat exchangers, steam condensers, and other boiler products, fabricated steel plate, and weldments	X	66 496	X	27 542
33291901	Metal pipe, valves, and pipe fittings (except forgings)	X	70 795	X	31 101
33200051	Other fabricated metal products (except fluid power products and forgings)	X	142 812	X	125 794
33210001	Forgings	X	19 225	X	N
33151001	Iron and steel castings (rough and semifinished)	X	150 053	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	62 892	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	131 054	X	N
33120017	Steel sheet and strip, including tin plate	X	75 751	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	58 253	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	42 153	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	89 145	X	21 521
32212031	Filter paper	X	76 597	X	97 309
00970099	All other materials and components, parts, containers, and supplies	X	661 211	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	831 155	X	N
<b>334111, ELECTRONIC COMPUTER MFG</b>					
33441103	Cathode ray tubes (CRT'S) and all other transmittal, industrial, and special purpose electron tubes (except x-ray)	X	D	X	70 221
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	205 820	X	327 943
001900C3	Printed memory boards for electronic circuitry	X	1 264 260	X	2 013 758
001900C6	Printed peripheral controllers (graphic boards, drive controllers, etc.) for electronic circuitry	X	443 961	X	456 944
001900C7	Printed computer processors (system boards, array processors, etc.) for electronic circuitry	X	2 915 193	X	1 411 250
001900C5	Printed communication boards (LAN boards, D/A and A/D converters, etc.) for electronic circuitry	X	307 132	X	N
001900D1	Other printed circuit boards (loaded boards, subassemblies, and modules) for electronic circuitry	X	280 173	X	178 479
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	548 761	X	789 118
33441400	Capacitors for electronic circuitry	X	62 276	X	42 803
33441500	Resistors for electronic circuitry	X	31 083	X	35 636
33441700	Connectors for electronic circuitry	X	80 715	X	59 438
33400017	Battery packs for electronic circuitry	X	34 362	X	462 763
001900D2	Other power supply units for electronic circuitry	X	376 893	X	168 228
001900B8	Other components and accessories for elect. circuitry (incl. coils, transformers, transducers, switches, etc) exc. tubes	X	D	X	388 229
001900B1	Electrical transmission, distribution, and control equipment	X	37 110	X	28 831
33232201	Steel, aluminum, and other metal electronic enclosure	X	394 602	X	204 432
32619901	Plastics electronic enclosures	X	123 877	X	114 043
33200003	Sheet metal products (including stampings), except enclosures	X	21 180	X	88 544
33200017	All other fabricated metal products (except forgings)	X	D	X	32 022
33210001	Forgings	X	-	X	D
33100035	Castings (rough and semifinished)	X	2 165	X	3 401
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	927	X	1 261
331000A9	Insulated copper wire and cable (including magnet wire)	X	50 014	X	149 424
32610031	Fabricated plastics products, except enclosures	X	2 877	X	9 264
33461100	Purchased software	X	225 883	X	194 413
33593103	Appliance outlets, switches, lampholders, and other current-carrying wiring devices	X	7 604	X	30 374
33531201	Electric motors and generators	X	4 053	X	4 972
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard	X	73 806	X	60 243
33411101	Purchased computers	X	4 047 314	X	4 671 187
33411200	Purchased peripheral storage devices	X	2 866 679	X	1 386 953

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334111, ELECTRONIC COMPUTER MFG—Con.</b>					
33411300	Purchased computer terminals .....	X	D	X	774 909
33411903	Purchased peripheral input devices, including keyboards, mouse devices, trackballs, etc. ....	X	590 925	X	429 967
33411905	Purchased peripheral printers .....	X	37 072	X	76 307
33410007	Other purchased electronic computing and peripheral equipment .....	X	1 635 245	X	121 312
00970099	All other materials and components, parts, containers, and supplies .....	X	6 497 488	X	808 354
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	9 724 451	X	3 018 084
<b>334112, COMPUTER STORAGE DEVICE MFG</b>					
33441103	Cathode ray tubes (CRT'S) and all other transmittal, industrial, and special purpose electron tubes (except x-ray) .....	X	D	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry .....	X	45 560	X	29 568
001900C3	Printed memory boards for electronic circuitry .....	X	19 729	X	N
001900C6	Printed peripheral controllers (graphic boards, drive controllers, etc.) for electronic circuitry .....	X	85 543	X	N
001900C7	Printed computer processors (system boards, array processors, etc.) for electronic circuitry .....	X	27 333	X	N
001900C5	Printed communication boards (LAN boards, D/A and A/D converters, etc.) for electronic circuitry .....	X	823	X	N
001900D1	Other printed circuit boards (loaded boards, subassemblies, and modules) for electronic circuitry .....	X	33 687	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry .....	X	84 010	X	119 958
33441400	Capacitors for electronic circuitry .....	X	1 960	X	10 562
33441500	Resistors for electronic circuitry .....	X	1 271	X	5 058
33441700	Connectors for electronic circuitry .....	X	4 465	X	15 918
33400017	Battery packs for electronic circuitry .....	X	1 885	X	D
001900D2	Other power supply units for electronic circuitry .....	X	35 715	X	N
001900B8	Other components and accessories for elect. circuitry (incl. coils, transformers, transducers, switches, etc) exc. tubes .....	X	D	X	N
001900B1	Electrical transmission, distribution, and control equipment .....	X	4 258	X	D
33232201	Steel, aluminum, and other metal electronic enclosure .....	X	59 331	X	15 965
32619901	Plastics electronic enclosures .....	X	D	X	D
33200003	Sheet metal products (including stampings), except enclosures .....	X	52 558	X	31 229
33200017	All other fabricated metal products (except forgings) .....	X	D	X	35 732
33210001	Forgings .....	X	-	X	D
33100035	Castings (rough and semifinished) .....	X	6 184	X	29 636
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products .....	X	D	X	27 546
331000A9	Insulated copper wire and cable (including magnet wire) .....	X	7 514	X	23 370
32610031	Fabricated plastics products, except enclosures .....	X	D	X	15 092
33461100	Purchased software .....	X	D	X	D
33593103	Appliance outlets, switches, lampholders, and other current-carrying wiring devices .....	X	D	X	D
33531201	Electric motors and generators .....	X	48 936	X	85 552
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard .....	X	7 417	X	12 446
33411101	Purchased computers .....	X	D	X	N
33411200	Purchased peripheral storage devices .....	X	2 204 984	X	N
33411300	Purchased computer terminals .....	X	D	X	N
33411903	Purchased peripheral input devices, including keyboards, mouse devices, trackballs, etc. ....	X	D	X	N
33411905	Purchased peripheral printers .....	X	31	X	N
33410007	Other purchased electronic computing and peripheral equipment .....	X	50 723	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	1 060 374	X	780 987
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	1 730 041	X	619 370
<b>334113, COMPUTER TERMINAL MFG</b>					
33441103	Cathode ray tubes (CRT'S) and all other transmittal, industrial, and special purpose electron tubes (except x-ray) .....	X	85 218	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry .....	X	1 509	X	22 198
001900C3	Printed memory boards for electronic circuitry .....	X	D	X	N
001900C6	Printed peripheral controllers (graphic boards, drive controllers, etc.) for electronic circuitry .....	X	1 953	X	3 344
001900C7	Printed computer processors (system boards, array processors, etc.) for electronic circuitry .....	X	D	X	N
001900C5	Printed communication boards (LAN boards, D/A and A/D converters, etc.) for electronic circuitry .....	X	D	X	N
001900D1	Other printed circuit boards (loaded boards, subassemblies, and modules) for electronic circuitry .....	X	D	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry .....	X	8 486	X	N
33441400	Capacitors for electronic circuitry .....	X	3 722	X	5 668
33441500	Resistors for electronic circuitry .....	X	800	X	4 235
33441700	Connectors for electronic circuitry .....	X	2 370	X	N
33400017	Battery packs for electronic circuitry .....	X	D	X	D
001900D2	Other power supply units for electronic circuitry .....	X	D	X	N
001900B8	Other components and accessories for elect. circuitry (incl. coils, transformers, transducers, switches, etc) exc. tubes .....	X	3 581	X	N
001900B1	Electrical transmission, distribution, and control equipment .....	X	D	X	D
33232201	Steel, aluminum, and other metal electronic enclosure .....	X	4 499	X	6 740
32619901	Plastics electronic enclosures .....	X	9 884	X	26 439
33200003	Sheet metal products (including stampings), except enclosures .....	X	12 748	X	D
33200017	All other fabricated metal products (except forgings) .....	X	D	X	D
33210001	Forgings .....	X	-	X	N
33100035	Castings (rough and semifinished) .....	X	94	X	D
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products .....	X	D	X	D
331000A9	Insulated copper wire and cable (including magnet wire) .....	X	886	X	2 074
32610031	Fabricated plastics products, except enclosures .....	X	2 319	X	1 996
33461100	Purchased software .....	X	1 103	X	D
33593103	Appliance outlets, switches, lampholders, and other current-carrying wiring devices .....	X	D	X	D
33531201	Electric motors and generators .....	X	D	X	D
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard .....	X	3 588	X	D
33411101	Purchased computers .....	X	D	X	N
33411200	Purchased peripheral storage devices .....	X	-	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334113, COMPUTER TERMINAL MFG—Con.</b>					
33411300	Purchased computer terminals .....	X	9 893	X	N
33411903	Purchased peripheral input devices, including keyboards, mouse devices, trackballs, etc. ....	X	21 785	X	N
33411905	Purchased peripheral printers .....	X	D	X	N
33410007	Other purchased electronic computing and peripheral equipment .....	X	21 047	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	138 024	X	205 785
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	318 091	X	401 845
<b>334119, OTHER COMPUTER PERIPHERAL EQUIPMENT MFG</b>					
33441103	Cathode ray tubes (CRT'S) and all other transmittal, industrial, and special purpose electron tubes (except x-ray) .....	X	30 676	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry .....	X	426 994	X	N
001900C3	Printed memory boards for electronic circuitry .....	X	478 641	X	N
001900C6	Printed peripheral controllers (graphic boards, drive controllers, etc.) for electronic circuitry .....	X	154 259	X	N
001900C7	Printed computer processors (system boards, array processors, etc.) for electronic circuitry .....	X	56 226	X	N
001900C5	Printed communication boards (LAN boards, D/A and A/D converters, etc.) for electronic circuitry .....	X	20 605	X	N
001900D1	Other printed circuit boards (loaded boards, subassemblies, and modules) for electronic circuitry .....	X	493 268	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry .....	X	601 146	X	N
33441400	Capacitors for electronic circuitry .....	X	48 999	X	N
33441500	Resistors for electronic circuitry .....	X	36 348	X	N
33441700	Connectors for electronic circuitry .....	X	121 896	X	N
33400017	Battery packs for electronic circuitry .....	X	5 627	X	N
001900D2	Other power supply units for electronic circuitry .....	X	121 428	X	N
001900B8	Other components and accessories for elect. circuitry (incl. coils, transformers, transducers, switches, etc) exc. tubes .....	X	188 331	X	N
001900B1	Electrical transmission, distribution, and control equipment .....	X	23 775	X	N
33232201	Steel, aluminum, and other metal electronic enclosure .....	X	120 327	X	N
32619901	Plastics electronic enclosures .....	X	105 777	X	N
33200003	Sheet metal products (including stampings), except enclosures .....	X	112 616	X	N
33200017	All other fabricated metal products (except forgings) .....	X	149 266	X	N
33210001	Forgings .....	X	1 350	X	N
33100035	Castings (rough and semifinished) .....	X	12 101	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products .....	X	57 882	X	N
331000A9	Insulated copper wire and cable (including magnet wire) .....	X	227 307	X	N
32610031	Fabricated plastics products, except enclosures .....	X	244 144	X	N
33461100	Purchased software .....	X	12 029	X	N
33593103	Appliance outlets, switches, lampholders, and other current-carrying wiring devices .....	X	14 603	X	N
33531201	Electric motors and generators .....	X	306 099	X	N
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard .....	X	72 450	X	N
33411101	Purchased computers .....	X	269 768	X	N
33411200	Purchased peripheral storage devices .....	X	24 452	X	N
33411300	Purchased computer terminals .....	X	17 397	X	N
33411903	Purchased peripheral input devices, including keyboards, mouse devices, trackballs, etc. ....	X	44 268	X	N
33411905	Purchased peripheral printers .....	X	264 328	X	N
33410007	Other purchased electronic computing and peripheral equipment .....	X	93 296	X	N
332000A9	Sheet metal products, except stampings .....	X	9 593	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	D	X	N
332000AC	Metal stampings .....	X	D	X	N
33200033	Other fabricated metal products (except forgings) .....	X	440	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	45	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) .....	X	44 194	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes .....	X	D	X	N
331000A7	Insulated wire and cable, including magnet wire .....	X	D	X	N
33593101	Current-carrying wiring devices .....	X	D	X	N
33531211	Fractional horsepower electric motors (less than 1 hp) .....	X	D	X	N
33422001	Electronic communication equipment .....	X	2 483	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) .....	X	D	X	N
33410001	Electronic computing equipment .....	X	4 363	X	N
33331401	Optical instruments and lenses (except sighting, tracking, and fire control) .....	X	D	X	N
33599900	Automatic garage door controllers .....	X	-	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting) .....	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	14 378	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	4 534 839	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	3 870 338	X	N
<b>334210, TELEPHONE APPARATUS MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry .....	X	442 757	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) .....	X	615 696	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry .....	X	1 117 354	X	N
33441400	Capacitors for electronic circuitry .....	X	102 111	X	X
33441500	Resistors for electronic circuitry .....	X	70 207	X	X
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes .....	X	1 021 652	X	X
33422001	Electronic communication equipment .....	X	1 620 566	X	X

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334210, TELEPHONE APPARATUS MFG—Con.</b>					
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) . . . . .	X	22 562	X	X
33410001	Electronic computing equipment . . . . .	X	91 750	X	X
33593101	Current-carrying wiring devices . . . . .	X	49 021	X	X
331000A7	Insulated wire and cable, including magnet wire . . . . .	X	122 553	X	X
33431005	Loudspeakers, microphones, and tuners (all types) . . . . .	X	51 007	X	X
33531211	Fractional horsepower electric motors (less than 1 hp) . . . . .	X	D	X	X
32518835	Silicon, hyperpure . . . . .	X	D	X	X
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	8 391	X	X
32610007	Fabricated plastics products (except gaskets, hoses, and belting) . . . . .	X	80 040	X	X
332000A9	Sheet metal products, except stampings . . . . .	X	107 985	X	X
332000AC	Metal stampings . . . . .	X	34 890	X	X
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	D	X	X
33200033	Other fabricated metal products (except forgings) . . . . .	X	D	X	X
33210001	Forgings . . . . .	X	-	X	X
33100035	Castings (rough and semifinished) . . . . .	X	15 650	X	X
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	23 942	X	X
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	6 673	X	X
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	483	X	X
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	32 435	X	X
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	2 178 814	X	X
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	5 674 872	X	X
<b>334220, RADIO &amp; TV BROADCASTING &amp; WIRELESS COMMUNICATIONS EQUIPMENT MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry . . . . .	X	1 028 338	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) . . . . .	X	656 221	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry . . . . .	X	2 589 043	X	N
33441400	Capacitors for electronic circuitry . . . . .	X	132 281	X	N
33441500	Resistors for electronic circuitry . . . . .	X	69 323	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes . . . . .	X	1 320 595	X	N
33422001	Electronic communication equipment . . . . .	X	2 008 924	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) . . . . .	X	47 454	X	N
33410001	Electronic computing equipment . . . . .	X	165 366	X	N
33593101	Current-carrying wiring devices . . . . .	X	74 969	X	N
331000A7	Insulated wire and cable, including magnet wire . . . . .	X	554 232	X	N
33431005	Loudspeakers, microphones, and tuners (all types) . . . . .	X	10 456	X	42 204
33531211	Fractional horsepower electric motors (less than 1 hp) . . . . .	X	13 010	X	11 647
32518835	Silicon, hyperpure . . . . .	X	1 699	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	14 463	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting) . . . . .	X	49 023	X	69 934
332000A9	Sheet metal products, except stampings . . . . .	X	359 269	X	N
332000AC	Metal stampings . . . . .	X	35 050	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	74 225	X	N
33200033	Other fabricated metal products (except forgings) . . . . .	X	236 647	X	N
33210001	Forgings . . . . .	X	3 255	X	N
33100035	Castings (rough and semifinished) . . . . .	X	110 235	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	29 880	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	100 085	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	12 049	X	26 687
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	43 227	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 751 535	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	5 277 473	X	N
<b>334290, OTHER COMMUNICATIONS EQUIPMENT MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry . . . . .	X	145 206	X	46 049
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) . . . . .	X	53 968	X	35 119
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry . . . . .	X	68 814	X	73 818
33441400	Capacitors for electronic circuitry . . . . .	X	19 783	X	17 928
33441500	Resistors for electronic circuitry . . . . .	X	14 767	X	13 985
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes . . . . .	X	32 335	X	64 291
33422001	Electronic communication equipment . . . . .	X	58 623	X	22 736
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) . . . . .	X	12 108	X	24 827
33410001	Electronic computing equipment . . . . .	X	6 687	X	3 332
33593101	Current-carrying wiring devices . . . . .	X	13 591	X	9 089
331000A7	Insulated wire and cable, including magnet wire . . . . .	X	19 339	X	12 470
33431005	Loudspeakers, microphones, and tuners (all types) . . . . .	X	15 759	X	6 657
33531211	Fractional horsepower electric motors (less than 1 hp) . . . . .	X	D	X	7 336
32518835	Silicon, hyperpure . . . . .	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	D	X	7 210
32610007	Fabricated plastics products (except gaskets, hoses, and belting) . . . . .	X	60 525	X	38 213
332000A9	Sheet metal products, except stampings . . . . .	X	40 618	X	29 386
332000AC	Metal stampings . . . . .	X	10 038	X	17 178
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	24 540	X	10 048
33200033	Other fabricated metal products (except forgings) . . . . .	X	63 211	X	D

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334290, OTHER COMMUNICATIONS EQUIPMENT MFG—Con.</b>					
33210001	Forgings	X	1 812	X	D
33100035	Castings (rough and semifinished)	X	19 379	X	22 075
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	5 635	X	6 150
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	6 247	X	6 433
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	971	X	1 699
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	11 805	X	12 586
00970099	All other materials and components, parts, containers, and supplies	X	193 163	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	452 387	X	D
<b>334310, AUDIO &amp; VIDEO EQUIPMENT MFG</b>					
33172000	Cabinets (wood, metal, and plastics)	X	258 430	X	510 391
33431003	Tuners	X	47 708	X	183 100
33431007	Speakers and speaker systems	X	253 561	X	159 291
33441101	Cathode ray picture tubes	X	986 893	X	1 593 287
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	184 160	X	143 242
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	126 799	X	750 669
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	165 807	X	107 102
33441400	Capacitors for electronic circuitry	X	86 026	X	41 500
33441500	Resistors for electronic circuitry	X	28 848	X	23 783
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	139 771	X	314 582
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	180 127	X	98 864
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	67 042	X	83 906
33593101	Current-carrying wiring devices	X	273 551	X	112 589
332000AC	Metal stampings	X	50 373	X	88 676
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	25 840	X	28 659
33200085	All other fabricated metal products (except forgings)	X	22 394	X	73 213
33210001	Forgings	X	D	X	D
33100035	Castings (rough and semifinished)	X	D	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	9 124	X	19 634
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	6 853	X	25 451
331000A7	Insulated wire and cable, including magnet wire	X	32 662	X	75 753
00970099	All other materials and components, parts, containers, and supplies	X	531 436	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 847 264	X	D
<b>334411, ELECTRON TUBE MFG</b>					
32721203	Tube blanks	X	538 666	X	D
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	2 658	X	4 988
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	13 529	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	D	X	3 949
33441400	Capacitors for electronic circuitry	X	1 584	X	3 142
33441500	Resistors for electronic circuitry	X	1 364	X	2 079
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	D	X	N
32518835	Silicon, hyperpure	X	D	X	D
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	11 424	X	8 633
33141917	Doped chemicals, and other doped materials for electronic use	X	D	X	D
33111107	Ferrites (powder and paste)	X	D	X	D
331000AA	Metal powders	X	4 448	X	7 890
33410001	Electronic computing equipment	X	352	X	D
33593101	Current-carrying wiring devices	X	1 164	X	D
33422001	Electronic communication equipment	X	211	X	D
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	D	X	D
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	337	X	D
32610011	Fabricated plastics products (except gaskets)	X	1 049	X	1 765
332000A9	Sheet metal products, except stampings	X	45 272	X	65 592
332000AC	Metal stampings	X	71 924	X	57 900
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	6 253	X	5 372
33200033	Other fabricated metal products (except forgings)	X	41 573	X	28 089
33210001	Forgings	X	94	X	D
33100035	Castings (rough and semifinished)	X	D	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	2 214	X	1 319
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	2 106
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	814
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	2 975	X	3 069
331000A7	Insulated wire and cable, including magnet wire	X	D	X	6 601
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	1 780	X	2 005
32611305	Resists (photosensitive resin films applied to the surface of a wafer)	X	D	X	N
32512005	Commodity gases	X	4 114	X	N
32518843	Speciality gases	X	D	X	N
32599217	Masks	X	D	X	N
33141957	Silicon chips	X	—	X	N
00970099	All other materials and components, parts, containers, and supplies	X	448 572	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	670 584	X	831 297

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334412, BARE PRINTED CIRCUIT BOARD MFG</b>					
32721203	Tube blanks . . . . .	X	1 659	X	D
33441200	Printed circuit boards (without inserted components) for electronic circuitry . . . . .	X	522 536	X	293 083
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) . . . . .	X	104 155	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry . . . . .	X	122 456	X	67 041
33441400	Capacitors for electronic circuitry . . . . .	X	37 014	X	11 132
33441500	Resistors for electronic circuitry . . . . .	X	25 880	X	6 699
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes . . . . .	X	117 694	X	N
32518835	Silicon, hyperpure . . . . .	X	D	X	D
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.) . . . . .	X	49 824	X	56 728
33141917	Doped chemicals, and other doped materials for electronic use . . . . .	X	34 373	X	50 689
33111107	Ferrites (powder and paste) . . . . .	X	138	X	D
331000AA	Metal powders . . . . .	X	502	X	D
33410001	Electronic computing equipment . . . . .	X	2 801	X	430
33593101	Current-carrying wiring devices . . . . .	X	2 636	X	2 436
33422001	Electronic communication equipment . . . . .	X	D	X	D
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) . . . . .	X	4 193	X	497
33331401	Optical instruments and lenses (except sighting, tracking, and fire control) . . . . .	X	D	X	337
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	15 768	X	3 831
32610011	Fabricated plastics products (except gaskets) . . . . .	X	80 640	X	23 982
332000A9	Sheet metal products, except stampings . . . . .	X	10 911	X	9 824
332000AC	Metal stampings . . . . .	X	3 337	X	2 240
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	3 222	X	5 169
33200033	Other fabricated metal products (except forgings) . . . . .	X	16 668	X	90 988
33210001	Forgings . . . . .	X	D	X	N
33100035	Castings (rough and semifinished) . . . . .	X	D	X	232
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	457
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	44 364	X	42 739
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	3 085	X	5 619
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	395	X	6 734
331000A7	Insulated wire and cable, including magnet wire . . . . .	X	10 025	X	9 768
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	9 169	X	6 482
32518843	Specialty gases . . . . .	X	385	X	N
32512005	Commodity gases . . . . .	X	897	X	N
33141957	Silicon chips . . . . .	X	D	X	N
32599217	Masks . . . . .	X	6 719	X	N
32611305	Resists (photosensitive resin films applied to the surface of a wafer) . . . . .	X	54 814	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	843 663	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	920 456	X	789 679
<b>334413, SEMICONDUCTOR &amp; RELATED DEVICE MFG</b>					
32721203	Tube blanks . . . . .	X	6 404	X	2 529
33441200	Printed circuit boards (without inserted components) for electronic circuitry . . . . .	X	77 350	X	44 519
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) . . . . .	X	62 872	X	97 956
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry . . . . .	X	1 550 393	X	1 341 833
33441400	Capacitors for electronic circuitry . . . . .	X	209 149	X	15 886
33441500	Resistors for electronic circuitry . . . . .	X	25 043	X	4 641
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes . . . . .	X	322 358	X	195 671
32518835	Silicon, hyperpure . . . . .	X	1 529 415	X	675 715
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.) . . . . .	X	267 963	X	55 002
33141917	Doped chemicals, and other doped materials for electronic use . . . . .	X	349 933	X	133 899
33111107	Ferrites (powder and paste) . . . . .	X	D	X	D
331000AA	Metal powders . . . . .	X	671	X	3 597
33410001	Electronic computing equipment . . . . .	X	76 751	X	38 640
33593101	Current-carrying wiring devices . . . . .	X	19 940	X	6 465
33422001	Electronic communication equipment . . . . .	X	22 295	X	7 768
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) . . . . .	X	144 698	X	D
33331401	Optical instruments and lenses (except sighting, tracking, and fire control) . . . . .	X	8 462	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	30 065	X	29 838
32610011	Fabricated plastics products (except gaskets) . . . . .	X	56 003	X	30 747
332000A9	Sheet metal products, except stampings . . . . .	X	7 775	X	10 781
332000AC	Metal stampings . . . . .	X	33 807	X	49 854
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	16 721	X	3 045
33200033	Other fabricated metal products (except forgings) . . . . .	X	40 460	X	41 623
33210001	Forgings . . . . .	X	D	X	D
33100035	Castings (rough and semifinished) . . . . .	X	2 172	X	1 048
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 147	X	4 351
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	15 564	X	3 384
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	79 397	X	11 447
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	64 260	X	7 730
331000A7	Insulated wire and cable, including magnet wire . . . . .	X	18 415	X	6 338

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334413, SEMICONDUCTOR &amp; RELATED DEVICE MFG—Con.</b>					
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	47 389	X	44 449
32611305	Resists (photosensitive resin films applied to the surface of a wafer)	X	59 289	X	N
32518843	Specialty gases	X	107 983	X	N
33141957	Silicon chips	X	524 912	X	N
32599217	Masks	X	208 645	X	N
32512005	Commodity gases	X	539 420	X	N
00970099	All other materials and components, parts, containers, and supplies	X	2 498 740	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	790 370	X	1 074 829
<b>334414, ELECTRONIC CAPACITOR MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	3 830	X	237
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	D	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	5 693	X	688
33441400	Capacitors for electronic circuitry	X	85 331	X	20 154
33441500	Resistors for electronic circuitry	X	D	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	32 209	X	N
32518835	Silicon, hyperpure	X	—	X	D
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	83 502	X	42 953
33141917	Doped chemicals, and other doped materials for electronic use	X	D	X	D
33111107	Ferrites (powder and paste)	X	D	X	D
331000AA	Metal powders	X	203 473	X	D
33410001	Electronic computing equipment	X	D	X	D
33593101	Current-carrying wiring devices	X	D	X	N
33422001	Electronic communication equipment	X	—	X	D
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	—	X	D
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	—	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	12 167	X	13 017
32610011	Fabricated plastics products (except gaskets)	X	15 725	X	2 109
332000A9	Sheet metal products, except stampings	X	7 769	X	D
332000AC	Metal stampings	X	22 300	X	D
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	4 493	X	3 003
33200033	Other fabricated metal products (except forgings)	X	7 034	X	3 799
33100035	Castings (rough and semifinished)	X	D	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	950	X	D
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	916	X	D
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	17 651
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	4 582	X	D
331000A7	Insulated wire and cable, including magnet wire	X	D	X	771
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	10 686	X	3 901
32512005	Commodity gases	X	3 873	X	N
32518843	Specialty gases	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	174 633	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	47 257	X	115 639
<b>334415, ELECTRONIC RESISTOR MFG</b>					
32721203	Tube blanks	X	1 470	X	D
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	4 472	X	528
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	D	X	311
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	D	X	N
33441400	Capacitors for electronic circuitry	X	20 221	X	N
33441500	Resistors for electronic circuitry	X	12 636	X	8 382
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	4 837	X	N
32518835	Silicon, hyperpure	X	D	X	D
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	19 816	X	6 611
33141917	Doped chemicals, and other doped materials for electronic use	X	D	X	D
33111107	Ferrites (powder and paste)	X	5 203	X	2 221
331000AA	Metal powders	X	2 816	X	696
33410001	Electronic computing equipment	X	464	X	D
33593101	Current-carrying wiring devices	X	2 291	X	677
33422001	Electronic communication equipment	X	D	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	D	X	19
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	419
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	8 460	X	4 677
32610011	Fabricated plastics products (except gaskets)	X	14 282	X	3 765
332000A9	Sheet metal products, except stampings	X	1 913	X	152
332000AC	Metal stampings	X	11 605	X	14 174
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	8 996	X	2 528
33200033	Other fabricated metal products (except forgings)	X	7 731	X	3 652
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	—	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	2 538	X	1 520
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	1 758	X	1 534
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	1 825	X	611
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	504	X	D

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334415, ELECTRONIC RESISTOR MFG—Con.</b>					
331000A7	Insulated wire and cable, including magnet wire	X	4 032	X	3 661
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	4 699	X	2 094
33141957	Silicon chips	X	D	X	N
32611305	Resists (photosensitive resin films applied to the surface of a wafer)	X	1 276	X	N
32599217	Masks	X	D	X	N
32512005	Commodity gases	X	1 577	X	N
32518843	Specialty gases	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	66 413	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	11 170	X	39 985
<b>334416, ELECTRONIC COIL, TRANSFORMER, &amp; OTHER INDUCTOR MFG</b>					
32721203	Tube blanks	X	1 047	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	1 582	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	2 874	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	2 874	X	N
33441400	Capacitors for electronic circuitry	X	2 794	X	N
33441500	Resistors for electronic circuitry	X	1 856	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	7 806	X	N
32518835	Silicon, hyperpure	X	D	X	N
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	1 218	X	N
33141917	Doped chemicals, and other doped materials for electronic use	X	418	X	N
33111107	Ferrites (powder and paste)	X	11 918	X	N
331000AA	Metal powders	X	2 186	X	N
33410001	Electronic computing equipment	X	D	X	N
33593101	Current-carrying wiring devices	X	6 794	X	N
33422001	Electronic communication equipment	X	373	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	2 306	X	N
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	4 811	X	N
32610011	Fabricated plastics products (except gaskets)	X	8 860	X	N
332000A9	Sheet metal products, except stampings	X	3 043	X	N
332000AC	Metal stampings	X	16 252	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	8 313	X	N
33200033	Other fabricated metal products (except forgings)	X	9 478	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	2 063	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	51 261	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	15 534	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	11 231	X	N
331000A7	Insulated wire and cable, including magnet wire	X	74 714	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	8 127	X	N
32512005	Commodity gases	X	400	X	N
32518843	Specialty gases	X	D	X	N
33141957	Silicon chips	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	71 652	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	143 704	X	N
<b>334417, ELECTRONIC CONNECTOR MFG</b>					
32721203	Tube blanks	X	—	X	D
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	12 775	X	4 540
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	21 762	X	6 261
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	D	X	6 310
33441400	Capacitors for electronic circuitry	X	14 314	X	4 871
33441500	Resistors for electronic circuitry	X	1 009	X	209
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	27 232	X	17 119
32518835	Silicon, hyperpure	X	—	X	D
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	157 386	X	135 165
33141917	Doped chemicals, and other doped materials for electronic use	X	291	X	3 814
33111107	Ferrites (powder and paste)	X	172	X	D
331000AA	Metal powders	X	D	X	D
33410001	Electronic computing equipment	X	388	X	D
33593101	Current-carrying wiring devices	X	9 594	X	19 098
33422001	Electronic communication equipment	X	D	X	D
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	160	X	414
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	107 373	X	65 609
32610011	Fabricated plastics products (except gaskets)	X	81 380	X	120 118
332000A9	Sheet metal products, except stampings	X	4 681	X	5 744
332000AC	Metal stampings	X	51 270	X	140 184
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	71 363	X	83 527
33200033	Other fabricated metal products (except forgings)	X	82 214	X	46 723
33210001	Forgings	X	4 407	X	97
33100035	Castings (rough and semifinished)	X	12 928	X	15 594
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	19 265	X	15 738



**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334417, ELECTRONIC CONNECTOR MFG—Con.</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	67 769	X	40 758
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	21 187	X	21 354
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	82 589	X	18 954
331000A7	Insulated wire and cable, including magnet wire	X	38 788	X	30 686
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	27 551	X	13 964
32512005	Commodity gases	X	D	X	N
32611305	Resists (photosensitive resin films applied to the surface of a wafer)	X	D	X	N
33141957	Silicon chips	X	—	X	N
32599217	Masks	X	D	X	N
32518843	Speciality gases	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	285 510	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	220 916	X	146 968
<b>334418, PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	1 589 225	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	1 631 034	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	3 468 132	X	N
33441400	Capacitors for electronic circuitry	X	391 797	X	N
33441500	Resistors for electronic circuitry	X	362 048	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	1 592 394	X	N
33422001	Electronic communication equipment	X	D	X	N
33410001	Electronic computing equipment	X	20 008	X	N
33593101	Current-carrying wiring devices	X	19 645	X	N
331000A7	Insulated wire and cable, including magnet wire	X	54 775	X	N
33431005	Loudspeakers, microphones, and tuners (all types)	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	11 072	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	6 686	X	N
332000A9	Sheet metal products, except stampings	X	158 205	X	N
332000AC	Metal stampings	X	29 272	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	31 837	X	N
33200033	Other fabricated metal products (except forgings)	X	D	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	8 113	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	1 144	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	6 720	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32721203	Tube blanks	X	42 026	X	N
32518835	Silicon, hyperpure	X	D	X	N
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	28 369	X	N
33141917	Doped chemicals, and other doped materials for electronic use	X	3 322	X	N
33111107	Ferrites (powder and paste)	X	1 796	X	N
331000AA	Metal powders	X	D	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	17 947	X	N
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	N
32610011	Fabricated plastics products (except gaskets)	X	201 496	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	216	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	40 249	X	N
32518843	Speciality gases	X	D	X	N
32512005	Commodity gases	X	4 589	X	N
32611305	Resists (photosensitive resin films applied to the surface of a wafer)	X	2 268	X	N
33141957	Silicon chips	X	73 018	X	N
32599217	Masks	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	659 700	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	3 197 510	X	N
<b>334419, OTHER ELECTRONIC COMPONENT MFG</b>					
32721203	Tube blanks	X	9 413	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	59 999	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	126 102	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	138 266	X	N
33441400	Capacitors for electronic circuitry	X	54 464	X	N
33441500	Resistors for electronic circuitry	X	23 492	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	244 113	X	N
32518835	Silicon, hyperpure	X	D	X	N
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	53 887	X	N
33141917	Doped chemicals, and other doped materials for electronic use	X	1 353	X	N
33111107	Ferrites (powder and paste)	X	41 778	X	N
331000AA	Metal powders	X	11 229	X	N
33410001	Electronic computing equipment	X	10 226	X	N
33593101	Current-carrying wiring devices	X	53 487	X	N
33422001	Electronic communication equipment	X	116 819	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	8 422	X	N
33331401	Optical instruments and lenses (except sighting, tracking, and fire control)	X	D	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334419, OTHER ELECTRONIC COMPONENT MFG—Con.</b>					
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	39 691	X	N
32610011	Fabricated plastics products (except gaskets) .....	X	59 743	X	N
332000A9	Sheet metal products, except stampings .....	X	55 070	X	N
332000AC	Metal stampings .....	X	39 699	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	59 321	X	N
33200033	Other fabricated metal products (except forgings) .....	X	72 364	X	N
33210001	Forgings .....	X	873	X	N
33100035	Castings (rough and semifinished) .....	X	15 638	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	72 775	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	9 689	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	33 150	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	9 898	X	N
331000A7	Insulated wire and cable, including magnet wire .....	X	183 334	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	29 781	X	N
32518843	Specialty gases .....	X	128	X	N
33141957	Silicon chips .....	X	11 789	X	N
32512005	Commodity gases .....	X	3 413	X	N
32599217	Masks .....	X	1 723	X	N
32611305	Resists (photosensitive resin films applied to the surface of a wafer) .....	X	2 411	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	907 176	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	1 180 745	X	N
<b>334510, ELECTROMEDICAL &amp; ELECTROTHERAPEUTIC APPARATUS MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	61 703	X	N
33200095	Other fabricated metal products (except forgings) .....	X	157 724	X	N
33210001	Forgings .....	X	1 627	X	N
33100035	Castings (rough and semifinished) .....	X	20 620	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	27 887	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	27 541	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components .....	X	1 069 487	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	1 651 521	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	467 164	X	N
<b>334511, SEARCH, DETECTION, NAVIGATION, &amp; GUIDANCE INSTRUMENT MFG</b>					
332000A9	Sheet metal products, except stampings .....	X	180 318	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	62 759	X	N
332000AC	Metal stampings .....	X	13 611	X	N
33200033	Other fabricated metal products (except forgings) .....	X	137 820	X	N
33210001	Forgings .....	X	9 250	X	N
33100035	Castings (rough and semifinished) .....	X	73 206	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	5 476	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	11 901	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry .....	X	170 738	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) .....	X	251 948	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry .....	X	475 551	X	N
33441400	Capacitors for electronic circuitry .....	X	72 197	X	N
33441500	Resistors for electronic circuitry .....	X	70 899	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes .....	X	456 627	X	N
331000A7	Insulated wire and cable, including magnet wire .....	X	71 079	X	N
33593101	Current-carrying wiring devices .....	X	69 451	X	N
33531211	Fractional horsepower electric motors (less than 1 hp) .....	X	35 280	X	N
33422001	Electronic communication equipment .....	X	355 625	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) .....	X	102 889	X	N
33410001	Electronic computing equipment .....	X	278 392	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting) .....	X	45 022	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies .....	X	9 123	X	N
33431005	Loudspeakers, microphones, and tuners (all types) .....	X	7 125	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	16 254	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	2 180 714	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	2 564 871	X	N
<b>334512, AUTOMATIC ENVIRONMENTAL CONTROL MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry .....	X	34 426	X	30 654
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) .....	X	14 728	X	7 903
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry .....	X	62 517	X	42 196
33441400	Capacitors for electronic circuitry .....	X	10 117	X	9 400
33441500	Resistors for electronic circuitry .....	X	13 086	X	7 646
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes .....	X	45 722	X	47 865
33593101	Current-carrying wiring devices .....	X	19 069	X	12 303
001900B1	Electrical transmission, distribution, and control equipment .....	X	13 038	X	7 355
33410001	Electronic computing equipment .....	X	8 261	X	7 070
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) .....	X	D	X	3 186

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>334512, AUTOMATIC ENVIRONMENTAL CONTROL MFG—Con.</b>				
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X		X	20 737
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	35 017	X	25 236
332000A9	Sheet metal products, except stampings	X	36 897	X	21 252
332000AC	Metal stampings	X	35 501	X	33 355
332000AE	Other fabricated metal products (except forgings)	X	63 796	X	N
33210001	Forgings	X	44 944	X	51
33100035	Castings (rough and semifinished)	X	7 004	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	37 255	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	34 262	X	2 264
00970099	All other materials and components, parts, containers, and supplies	X	4 965	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	268 194	X	D
	<b>334513, INDUSTRIAL PROCESS CONTROL INSTRUMENT MFG</b>				
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	103 326	X	47 013
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	168 987	X	71 269
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	128 250	X	69 361
33441400	Capacitors for electronic circuitry	X	22 765	X	13 918
33441500	Resistors for electronic circuitry	X	98 826	X	60 883
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	102 272	X	43 656
33593101	Current-carrying wiring devices	X	24 159	X	15 505
001900B1	Electrical transmission, distribution, and control equipment	X	71 823	X	14 915
33410001	Electronic computing equipment	X	80 498	X	84 931
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	24 106	X	24 571
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	68 789	X	67 056
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X		X	2 637
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	5 608	X	26 136
332000A9	Sheet metal products, except stampings	X	39 259	X	60 227
332000AC	Metal stampings	X	49 195	X	23 013
332000AE	Other fabricated metal products (except forgings)	X	57 093	X	N
33210001	Forgings	X	79 852	X	4 101
33100035	Castings (rough and semifinished)	X	8 600	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	86 336	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	54 698	X	7 592
00970099	All other materials and components, parts, containers, and supplies	X	10 568	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	364 616	X	N
	<b>334514, TOTALIZING FLUID METER &amp; COUNTING DEVICE MFG</b>				
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	74 966	X	42 468
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	61 700	X	19 894
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	72 465	X	79 762
33441400	Capacitors for electronic circuitry	X	6 966	X	22 585
33441500	Resistors for electronic circuitry	X	5 558	X	7 331
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	34 541	X	3 928
33593101	Current-carrying wiring devices	X	12 140	X	12 110
001900B1	Electrical transmission, distribution, and control equipment	X	10 093	X	5 568
33410001	Electronic computing equipment	X	11 406	X	11 424
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	20 191	X	26 509
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	10 712	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X		X	46 476
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	91 160	X	27 687
332000A9	Sheet metal products, except stampings	X	57 455	X	10 376
332000AC	Metal stampings	X	9 873	X	16 542
332000AE	Other fabricated metal products (except forgings)	X	16 082	X	N
33210001	Forgings	X	30 767	X	D
33100035	Castings (rough and semifinished)	X	D	X	D
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	D	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	15 565	X	N
00970099	All other materials and components, parts, containers, and supplies	X	3 725	X	2 361
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	801 548	X	N
	<b>334515, ELECTRICITY MEASURING &amp; TESTING INSTRUMENT MFG</b>				
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	223 187	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	310 399	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	485 218	X	N
33441400	Capacitors for electronic circuitry	X	39 103	X	N
33441500	Resistors for electronic circuitry	X	33 332	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	501 753	X	N
33593101	Current-carrying wiring devices	X	85 973	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	138 757	X	N
33410001	Electronic computing equipment	X	112 622	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	69 960	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334515, ELECTRICITY MEASURING &amp; TESTING INSTRUMENT MFG—Con.</b>					
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	415 717	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	4 719	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	43 656	X	N
332000A9	Sheet metal products, except stampings	X	116 518	X	N
332000AC	Metal stampings	X	28 405	X	N
332000AE	Other fabricated metal products (except forgings)	X	68 019	X	N
33210001	Forgings	X	4 102	X	N
33100035	Castings (rough and semifinished)	X	15 860	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	15 818	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	11 725	X	N
00970099	All other materials and components, parts, containers, and supplies	X	832 699	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 034 068	X	N
<b>334516, ANALYTICAL LABORATORY INSTRUMENT MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	68 509	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	185 463	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	49 929	X	N
33441400	Capacitors for electronic circuitry	X	13 279	X	N
33441500	Resistors for electronic circuitry	X	12 194	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	67 363	X	N
33593101	Current-carrying wiring devices	X	48 521	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	102 587	X	N
33410001	Electronic computing equipment	X	112 489	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	53 066	X	26 232
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	132 380	X	75 564
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	1 853
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	112 179	X	N
332000A9	Sheet metal products, except stampings	X	110 765	X	N
332000AC	Metal stampings	X	9 464	X	N
332000AE	Other fabricated metal products (except forgings)	X	146 195	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	29 880	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	39 135	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	63 104	X	47 841
00970099	All other materials and components, parts, containers, and supplies	X	399 345	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	490 053	X	N
<b>334517, IRRADIATION APPARATUS MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	12 180	X	11 136
332000AC	Metal stampings	X	19 745	X	D
33200085	All other fabricated metal products (except forgings)	X	137 743	X	99 133
33210001	Forgings	X	D	X	D
33100035	Castings (rough and semifinished)	X	7 054	X	953
33120031	Stainless steel shapes and forms (except castings, forgings, and fabricated metal products)	X	9 555	X	4 248
33120043	Other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	7 749	X	5 248
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	9 144	X	8 893
33410005	Purchased electronic computing and peripheral equipment for incorporation into complete finished products	X	390 806	X	D
33441105	Transmittal, industrial, and special-purpose electron tubes, except x-ray	X	D	X	D
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	26 499	X	8 062
33441400	Capacitors for electronic circuitry	X	6 847	X	3 756
33441500	Resistors for electronic circuitry	X	9 077	X	3 671
33441700	Connectors for electronic circuitry	X	5 261	X	3 193
001900C2	Other electronic components and accessories	X	71 746	X	169 317
331000A1	Insulated wire and cable, except magnet wire	X	25 860	X	14 585
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	7 681	X	5 664
32221001	Paperboard containers, boxes, and corrugated paperboard	X	8 390	X	1 553
00970099	All other materials and components, parts, containers, and supplies	X	129 865	X	272 162
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	627 491	X	248 713
<b>334518, WATCH, CLOCK, &amp; PART MFG</b>					
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	D	X	N
33100035	Castings (rough and semifinished)	X	2 906	X	N
33200095	Other fabricated metal products (except forgings)	X	7 277	X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	1 297	X	N
001900C7	Printed computer processors (system boards, array processors, etc.) for electronic circuitry	X	D	X	N
001900B8	Other components and accessories for elect. circuitry (incl. coils, transformers, transducers, switches, etc) exc. tubes	X	3 493	X	N
33531201	Electric motors and generators	X	570	X	N
33451801	Domestic (made in the United States) watch movements or modules	X	25 734	X	N
33451803	Imported (not made in the United States) watch movements or modules	X	8 208	X	N
33451805	Domestic (made in the United States) watchcases	X	D	X	N
33451807	Imported (not made in the United States) watchcases	X	586	X	N
33451811	Domestic (made in the United States) watch parts (incl. dials, hands, displays, etc., exc. movements and face crystals)	X	4 750	X	N
33451815	Imported (not made in the US) watch parts (including dials, hands, displays, etc., except movements and face crystals)	X	573	X	N
00190092	Watchbands	X	3 243	X	N
00190093	Face crystals	X	295	X	N
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc.	X	15 449	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>334518, WATCH, CLOCK, &amp; PART MFG—Con.</b>					
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	16 893	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	13 567	X	N
00970099	All other materials and components, parts, containers, and supplies	X	93 063	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	41 969	X	N
<b>334519, OTHER MEASURING &amp; CONTROLLING DEVICE MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	40 742	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	74 707	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	57 973	X	N
33441400	Capacitors for electronic circuitry	X	11 873	X	N
33441500	Resistors for electronic circuitry	X	9 651	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	43 470	X	N
33593101	Current-carrying wiring devices	X	24 561	X	N
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	X	22 531	X	N
33410001	Electronic computing equipment	X	77 418	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	27 929	X	N
33451503	Electrical measuring instruments and parts, not listed elsewhere	X	27 242	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	7 842	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	35 399	X	N
332000A9	Sheet metal products, except stampings	X	51 104	X	N
332000AC	Metal stampings	X	18 352	X	N
332000AE	Other fabricated metal products (except forgings)	X	108 323	X	N
33210001	Forgings	X	7 792	X	N
33100035	Castings (rough and semifinished)	X	26 706	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	55 806	X	N
32720003	Glass and glass products (excluding windows and mirrors)	X	8 897	X	N
00970099	All other materials and components, parts, containers, and supplies	X	370 638	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	560 042	X	N
<b>334612, PRERECORDED CD (EXCEPT SOFTWARE), TAPE, &amp; RECORD REPRODUCING</b>					
33461301	Unrecorded audio-range magnetic tape, with or without cassettes or cartridges	X	181 123	X	N
33461200	Record blanks, audio	X	2 107	X	N
33461303	Compact disc blanks for audio and computer use	X	27 374	X	N
32619907	Empty tape cassettes and cartridges	X	127 540	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	67 797	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	88 246	X	N
32200005	Paper and paperboard products (including album covers, sleeves, etc.)	X	88 614	X	N
00970099	All other materials and components, parts, containers, and supplies	X	219 075	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	444 629	X	N
<b>334613, MAGNETIC &amp; OPTICAL RECORDING MEDIA MFG</b>					
33100037	Other metal powders, including chromium	X	12 205	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard	X	76 032	X	113 680
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	329 340	X	346 268
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	103 808	X	151 017
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	75 374	X	200 067
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	D	X	N
33200095	Other fabricated metal products (except forgings)	X	D	X	N
33210001	Forgings	X	—	X	N
33100035	Castings (rough and semifinished)	X	D	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	34 840
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	208 280	X	91 281
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33111107	Ferrites (powder and paste)	X	D	X	41 131
33593101	Current-carrying wiring devices	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	430 738	X	599 561
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	689 837	X	174 409
<b>335110, ELECTRIC LAMP BULB &amp; PART MFG</b>					
32720009	Glass and glass products (including lamp bulb blanks)	X	297 162	X	257 806
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	117 588	X	89 666
325000A7	Industrial inorganic chemicals	X	65 856	X	33 170
33100045	Nonferrous metal wire	X	169 988	X	124 296
33511005	Electric lamp (bulb) bases	X	119 233	X	91 970
00970099	All other materials and components, parts, containers, and supplies	X	208 899	X	149 885
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	33 824	X	86 462
<b>335121, RESIDENTIAL ELECTRIC LIGHTING FIXTURE MFG</b>					
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	5 696	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	11 871	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	43 423	X	N
33531100	Specialty transformers and fluorescent ballasts	X	68 672	X	7 162
33593101	Current-carrying wiring devices	X	32 751	X	21 612
33511001	Electric lamp bulbs	X	21 375	X	11 234
32721101	Flat glass (plate, float, and sheet)	X	13 085	X	16 476
32610011	Fabricated plastics products (except gaskets)	X	22 787	X	4 723
331000A7	Insulated wire and cable, including magnet wire	X	12 946	X	8 531

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335121, RESIDENTIAL ELECTRIC LIGHTING FIXTURE MFG—Con.</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	19 839	X	12 358
33299903	Metal poles	X	4 528	X	2 767
33200027	All other fabricated metal products (except forgings)	X	34 331	X	28 419
33210001	Forgings	X	881	X	N
33151001	Iron and steel castings (rough and semifinished)	X	10 461	X	4 524
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	16 657	X	6 414
33152003	Other nonferrous castings (rough and semifinished)	X	12 121	X	8 151
33120017	Steel sheet and strip, including tin plate	X	34 278	X	15 586
33120025	Steel wire and wire products	X	4 960	X	1 725
33120097	All other steel mill shapes and forms (except castings and forgings)	X	26 574	X	5 487
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	3 477	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	7 021	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	13 923	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	5 679	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	8 429	X	N
33512100	Lamp shades	X	23 359	X	22 011
00970099	All other materials and components, parts, containers, and supplies	X	250 395	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	151 384	X	N
<b>335122, COMMERCIAL/INDUSTRIAL/INSTITUTIONAL ELECTRIC LIGHTING FIXTURE MFG</b>					
33531100	Specialty transformers and fluorescent ballasts	X	546 146	X	466 878
33593101	Current-carrying wiring devices	X	88 612	X	60 286
33511001	Electric lamp bulbs	X	57 801	X	41 302
32721101	Flat glass (plate, float, and sheet)	X	10 196	X	9 198
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	15 737	X	24 507
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	66 287	X	40 288
32610011	Fabricated plastics products (except gaskets)	X	53 573	X	45 381
331000A7	Insulated wire and cable, including magnet wire	X	20 010	X	6 353
32221001	Paperboard containers, boxes, and corrugated paperboard	X	72 244	X	56 949
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	39 893	X	38 947
33299903	Metal poles	X	7 648	X	1 427
33200027	All other fabricated metal products (except forgings)	X	88 087	X	52 347
33210001	Forgings	X	—	N	N
33151001	Iron and steel castings (rough and semifinished)	X	5 865	X	14 267
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	49 303	X	28 391
33152003	Other nonferrous castings (rough and semifinished)	X	2 351	X	1 996
33120017	Steel sheet and strip, including tin plate	X	189 348	X	172 871
33120025	Steel wire and wire products	X	12 464	X	7 104
33120097	All other steel mill shapes and forms (except castings and forgings)	X	64 313	X	18 204
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	59 806	X	63 846
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	D	X	20 750
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	1 720
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	8 025	X	884
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 315	X	N
33512100	Lamp shades	X	2 444	X	N
00970099	All other materials and components, parts, containers, and supplies	X	303 709	X	110 355
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	58 873	X	159 762
<b>335129, OTHER LIGHTING EQUIPMENT MFG</b>					
33531100	Specialty transformers and fluorescent ballasts	X	77 613	X	64 388
33593101	Current-carrying wiring devices	X	44 517	X	N
33511001	Electric lamp bulbs	X	65 294	X	50 616
32721101	Flat glass (plate, float, and sheet)	X	14 835	X	11 266
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	23 061	X	9 696
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	16 722	X	12 884
32610011	Fabricated plastics products (except gaskets)	X	46 788	X	36 541
331000A7	Insulated wire and cable, including magnet wire	X	16 002	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	35 234	X	27 383
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	23 076	X	N
33299903	Metal poles	X	29 551	X	18 305
33200027	All other fabricated metal products (except forgings)	X	48 370	X	30 876
33210001	Forgings	X	—	X	N
33151001	Iron and steel castings (rough and semifinished)	X	42 527	X	3 680
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	75 179	X	57 782
33152003	Other nonferrous castings (rough and semifinished)	X	8 063	X	4 054
33120017	Steel sheet and strip, including tin plate	X	26 428	X	24 064
33120025	Steel wire and wire products	X	2 526	X	2 232
33120097	All other steel mill shapes and forms (except castings and forgings)	X	11 685	X	7 429
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	41 727	X	19 223
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	62 228	X	40 775
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	5 225	X	6 023
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	6 532	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 758	X	N
00970099	All other materials and components, parts, containers, and supplies	X	311 974	X	7 748
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	181 991	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335211, ELECTRIC HOUSEWARES &amp; HOUSEHOLD FAN MFG</b>					
332000AC	Metal stampings	X	26 574	X	N
33290011	Metal wire racks, grills, springs, and other fabricated nonelectric wire products (except forgings)	X	9 757	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	18 214	X	N
33200025	All other fabricated metal products (except forgings)	X	39 126	X	N
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	21 580	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	D	X	N
33120017	Steel sheet and strip, including tin plate	X	81 678	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	15 416	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	28 483	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	853	X	N
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc.	X	28 771	X	N
33531219	Fractional horsepower electric motors and generators (less than 1 hp) including timing motors	X	81 891	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	69 208	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	D	X	N
33593101	Current-carrying wiring devices	X	23 437	X	N
33451809	Timing mechanisms, except microprocessors	X	D	X	N
33451200	Automatic temperature controls (thermostats, regulators, etc.)	X	47 245	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	13 006	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	4 463	X	N
32622001	Rubber and plastics hose and belting	X	1 610	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	63 058	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	82 607	X	N
33100095	Complete flexible cord sets	X	16 059	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	34 416	X	N
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.)	X	4 044	X	N
00970099	All other materials and components, parts, containers, and supplies	X	315 451	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	239 023	X	N
<b>335212, HOUSEHOLD VACUUM CLEANER MFG</b>					
332000AC	Metal stampings	X	16 807	X	N
33290011	Metal wire racks, grills, springs, and other fabricated nonelectric wire products (except forgings)	X	1 535	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	15 284	X	N
33200025	All other fabricated metal products (except forgings)	X	11 501	X	N
33210001	Forgings	X	—	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	D	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	2 340	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	D	X	N
33120017	Steel sheet and strip, including tin plate	X	D	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	19 515	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	1 277	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc.	X	D	X	N
33531219	Fractional horsepower electric motors and generators (less than 1 hp) including timing motors	X	53 340	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	54 009	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	58 223	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	5 025	X	N
33593101	Current-carrying wiring devices	X	20 570	X	N
33451809	Timing mechanisms, except microprocessors	X	—	X	N
33451200	Automatic temperature controls (thermostats, regulators, etc.)	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	4 794	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	D	X	N
32622001	Rubber and plastics hose and belting	X	27 835	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	52 274	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	117 823	X	N
33100095	Complete flexible cord sets	X	31 550	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	7 949	X	N
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.)	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	362 680	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	82 999	X	N
<b>335221, HOUSEHOLD COOKING APPLIANCE MFG</b>					
332000AC	Metal stampings	X	159 194	X	98 886
33290011	Metal wire racks, grills, springs, and other fabricated nonelectric wire products (except forgings)	X	51 124	X	36 458
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	19 310	X	20 524
33200025	All other fabricated metal products (except forgings)	X	21 697	X	29 894

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335221, HOUSEHOLD COOKING APPLIANCE MFG—Con.</b>					
33210001	Forgings	X	D	X	D
33151001	Iron and steel castings (rough and semifinished)	X	22 195	X	12 568
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	83 317	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	D	X	D
33120017	Steel sheet and strip, including tin plate	X	234 196	X	103 187
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	46 289	X	49 929
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	16 174	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc.	X	26 010	X	4 706
33531219	Fractional horsepower electric motors and generators (less than 1 hp) including timing motors	X	13 457	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	69 527	X	58 792
001900B1	Electrical transmission, distribution, and control equipment	X	D	X	48 971
33593101	Current-carrying wiring devices	X	D	X	34 033
33451809	Timing mechanisms, except microprocessors	X	95 317	X	12 791
33451200	Automatic temperature controls (thermostats, regulators, etc.)	X	40 285	X	28 773
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	48 534	X	27 836
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	5 576	X	4 552
32622001	Rubber and plastics hose and belting	X	8 054	X	6 000
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	26 761	X	28 761
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	4 833	X	3 259
33100095	Complete flexible cord sets	X	7 716	X	D
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	28 131	X	53 907
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.)	X	33 667	X	12 216
00970099	All other materials and components, parts, containers, and supplies	X	297 000	X	354 207
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	250 506	X	336 071
<b>335222, HOUSEHOLD REFRIGERATOR &amp; HOME FREEZER MFG</b>					
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment	X	435 216	X	343 722
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp)	X	34 999	X	N
33531223	Fractional horsepower electric motors (less than 1 hp), except timing motors	X	73 222	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	D	X	N
33341200	Fans and blowers	X	D	X	D
001900B1	Electrical transmission, distribution, and control equipment	X	87 843	X	30 556
33593101	Current-carrying wiring devices	X	87 051	X	72 967
33451200	Automatic temperature controls (thermostats, regulators, etc.)	X	64 949	X	48 076
33299101	Ball and roller bearings (mounted or unmounted)	X	D	X	D
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	22 066	X	59 135
332000AC	Metal stampings	X	D	X	30 235
33251005	Metal hardware, including hinges, handles, locks, casters, etc.	X	27 629	X	37 827
33291901	Metal pipe, valves, and pipe fittings (except forgings)	X	D	X	N
33200053	All other fabricated metal products (except forgings)	X	56 411	X	N
33210001	Forgings	X	—	X	N
33151001	Iron and steel castings (rough and semifinished)	X	7 439	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	7 287	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	D	X	N
33120017	Steel sheet and strip, including tin plate	X	187 543	X	249 539
33120025	Steel wire and wire products	X	64 130	X	N
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	29 067	X	19 351
33142143	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	15 209
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	20 282	X	20 640
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	77 199	X	48 316
32192003	Wooden containers, complete (including combination wood and paperboard)	X	13 005	X	6 299
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	30 897	X	29 098
32510027	Refrigerant gases and other synthetic organic chemicals	X	101 318	X	90 161
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	156 821	X	139 746
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	173 392	X	44 641
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	246 096	X	209 081
32622001	Rubber and plastics hose and belting	X	23 490	X	D
33999101	Gaskets (all types) and asbestos packing	X	40 484	X	41 634
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.)	X	55 703	X	24 265
00970099	All other materials and components, parts, containers, and supplies	X	229 112	X	191 952
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	232 216	X	343 574



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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335224, HOUSEHOLD LAUNDRY EQUIPMENT MFG</b>					
332000AC	Metal stampings . . . . .	X	90 822	X	42 806
33290011	Metal wire racks, grills, springs, and other fabricated nonelectric wire products (except forgings) . . . . .	X	5 471	X	8 831
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	48 780	X	40 073
33200025	All other fabricated metal products (except forgings) . . . . .	X	D	X	34 555
33210001	Forgings . . . . .	X	D	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	D	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	34 742	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	22 832	X	19 098
33120017	Steel sheet and strip, including tin plate . . . . .	X	343 389	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	49 337	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	49 712	X	D
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc. . . . .	X	D	X	D
33531219	Fractional horsepower electric motors and generators (less than 1 hp) including timing motors . . . . .	X	219 378	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	D	X	29 914
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	61 922	X	37 742
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	D	X	49 368
33593101	Current-carrying wiring devices . . . . .	X	D	X	D
33451809	Timing mechanisms, except microprocessors . . . . .	X	95 907	X	72 886
33451200	Automatic temperature controls (thermostats, regulators, etc.) . . . . .	X	43 034	X	42 509
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	57 165	X	46 335
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets . . . . .	X	D	X	D
32622001	Rubber and plastics hose and belting . . . . .	X	41 282	X	46 193
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	120 633	X	67 631
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	58 632	X	29 318
33100095	Complete flexible cord sets . . . . .	X	D	X	D
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	D	X	D
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.) . . . . .	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	157 863	X	142 403
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	45 823	X	4 550
<b>335228, OTHER MAJOR HOUSEHOLD APPLIANCE MFG</b>					
332000AC	Metal stampings . . . . .	X	39 516	X	N
33290011	Metal wire racks, grills, springs, and other fabricated nonelectric wire products (except forgings) . . . . .	X	39 246	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	72 223	X	N
33200025	All other fabricated metal products (except forgings) . . . . .	X	14 923	X	N
33210001	Forgings . . . . .	X	D	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	D	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	D	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	180 961	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	13 941	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	14 533	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc. . . . .	X	16 693	X	N
33531219	Fractional horsepower electric motors and generators (less than 1 hp) including timing motors . . . . .	X	96 467	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	48 112	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	64 997	X	N
33593101	Current-carrying wiring devices . . . . .	X	19 716	X	N
33451809	Timing mechanisms, except microprocessors . . . . .	X	18 990	X	N
33451200	Automatic temperature controls (thermostats, regulators, etc.) . . . . .	X	95 416	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	19 378	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets . . . . .	X	721	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	14 505	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	66 443	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	61 320	X	N
33100095	Complete flexible cord sets . . . . .	X	D	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	18 425	X	N
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.) . . . . .	X	27 985	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	171 190	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	251 961	X	N
<b>335311, POWER, DISTRIBUTION, &amp; SPECIALTY TRANSFORMER MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	35 501	X	N
33200095	Other fabricated metal products (except forgings) . . . . .	X	80 045	X	N
33210001	Forgings . . . . .	X	D	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335311, POWER, DISTRIBUTION, &amp; SPECIALTY TRANSFORMER MFG—Con.</b>					
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	33 742	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	5 444	X	N
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings . . . . .	X	167 778	X	N
33100035	Castings (rough and semifinished) . . . . .	X	D	X	2 938
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	523 399	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	50 455	X	28 803
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	14 776	X	33 893
33100097	Magnet wire . . . . .	X	242 954	X	117 042
331000A1	Insulated wire and cable, except magnet wire . . . . .	X	33 607	X	40 862
32410003	Refined petroleum products (transformer oils, lubricating oils and greases, etc.) . . . . .	X	75 312	X	59 608
32711301	Porcelain, steatite, and other ceramic electrical products . . . . .	X	65 592	X	45 154
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard . . . . .	X	52 137	X	53 563
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	24 197	X	16 798
33593101	Current-carrying wiring devices . . . . .	X	68 156	X	41 138
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	265 079	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	306 511	X	N
<b>335312, MOTOR &amp; GENERATOR MFG</b>					
332000AC	Metal stampings . . . . .	X	218 133	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	93 160	X	N
33200085	All other fabricated metal products (except forgings) . . . . .	X	134 243	X	N
33210001	Forgings . . . . .	X	25 355	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	129 730	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	99 213	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	52 701	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	151 171	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	601 555	X	N
33120025	Steel wire and wire products . . . . .	X	26 194	X	N
33120015	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	101 295	X	N
33100093	Copper and copper-base alloy bare wire for electrical conduction only . . . . .	X	36 074	X	N
33142105	Copper and copper-base alloy rod, bar, and mechanical wire, including extruded and/or drawn shapes . . . . .	X	84 099	X	N
33142139	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	25 921	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	82 895	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	14 228	X	N
33100097	Magnet wire . . . . .	X	312 906	X	N
331000A3	Insulated copper wire and cable, except magnet wire . . . . .	X	57 157	X	N
33131201	Primary aluminum and aluminum-base alloy refinery shapes . . . . .	X	8 300	X	N
33361811	Diesel and semidiesel engines . . . . .	X	D	X	N
33361805	Gasoline and other carburetor engines . . . . .	X	D	X	N
33531211	Fractional horsepower electric motors (less than 1 hp) . . . . .	X	109 906	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	81 858	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	97 814	X	N
33361301	Plain bearings and bushings . . . . .	X	45 917	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	20 653	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry . . . . .	X	104 065	X	N
33599105	Carbon brushes . . . . .	X	22 661	X	N
32711303	Ceramic magnets (ferrite) . . . . .	X	73 569	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	128 315	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	91 961	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	32 705	X	N
33500007	Electrical industrial capacitors, resistors, rheostats, and coil windings . . . . .	X	156 200	X	N
001900B1	Electrical transmission, distribution, and control equipment . . . . .	X	89 588	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	40 118	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	660 769	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 123 865	X	N
<b>335313, SWITCHGEAR &amp; SWITCHBOARD APPARATUS MFG</b>					
332000A9	Sheet metal products, except stampings . . . . .	X	45 648	X	40 877
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	85 353	X	73 096
33200087	All other fabricated metal products (except forgings) . . . . .	X	145 119	X	89 227
33210001	Forgings . . . . .	X	8 164	X	5 323
33100035	Castings (rough and semifinished) . . . . .	X	51 494	X	38 201
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	41 924	X	21 995
33120017	Steel sheet and strip, including tin plate . . . . .	X	149 684	X	136 134
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	5 597	X	5 459
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	65 256	X	12 972
33140001	Nonferrous metal smelter and refinery shapes, including precious metal (except castings, forgings, & fabr. metal prods) . . . . .	X	20 626	X	11 953
33100061	Aluminum and aluminum-base alloy shapes and forms (except wire, castings, forgings, and fabricated metal products) . . . . .	X	50 718	X	36 332
33142123	Copper and copper-base alloy shapes and forms (except wire, castings, forgings, and fabricated metal products) . . . . .	X	165 242	X	126 246
33100081	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	26 876	X	15 008

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335313, SWITCHGEAR &amp; SWITCHBOARD APPARATUS MFG—Con.</b>					
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc.	X	51 527	X	50 988
33531401	Industrial electrical control equipment purchased from other companies	X	218 429	X	210 478
33531403	Industrial electrical control equipment received from other plants of the same company	X	407 428	X	165 208
32711301	Porcelain, steatite, and other ceramic electrical products	X	47 514	X	57 325
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	71 488	X	50 605
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	50 326	X	36 746
33531301	Switches, except snap, toggle and push, and circuit breakers	X	35 590	X	92 459
001900B5	Resistors, capacitors, transformers, and other electronic-type components, except electron tubes and semiconductors	X	84 892	X	91 488
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	25 597	X	N
001900B9	Semiconductors, microprocessors, memory, ASICs and power semiconductor devices	X	11 129	X	N
00970099	All other materials and components, parts, containers, and supplies	X	561 818	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	390 371	X	N
<b>335314, RELAY &amp; INDUSTRIAL CONTROL MFG</b>					
332000A9	Sheet metal products, except stampings	X	92 324	X	86 888
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	57 374	X	46 538
33200087	All other fabricated metal products (except forgings)	X	96 682	X	82 169
33210001	Forgings	X	1 696	X	3 582
33100035	Castings (rough and semifinished)	X	22 528	X	21 255
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	15 408	X	8 612
33120017	Steel sheet and strip, including tin plate	X	71 602	X	35 372
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	D	X	3 931
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	7 441
33140001	Nonferrous metal smelter and refinery shapes, including precious metal (except castings, forgings, & fabr. metal prods)	X	20 942	X	19 829
33100061	Aluminum and aluminum-base alloy shapes and forms (except wire, castings, forgings, and fabricated metal products)	X	14 718	X	10 885
33142123	Copper and copper-base alloy shapes and forms (except wire, castings, forgings, and fabricated metal products)	X	25 933	X	30 770
33100081	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	24 386	X	5 866
33100087	Nonferrous wire and cable, including magnet wire, bare or insulated wire, etc.	X	59 140	X	32 667
33531401	Industrial electrical control equipment purchased from other companies	X	552 141	X	247 398
33531403	Industrial electrical control equipment received from other plants of the same company	X	495 593	X	257 752
32711301	Porcelain, steatite, and other ceramic electrical products	X	7 145	X	7 745
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	43 024	X	44 367
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	32 532	X	22 090
33531301	Switches, except snap, toggle and push, and circuit breakers	X	38 007	X	31 471
001900B5	Resistors, capacitors, transformers, and other electronic-type components, except electron tubes and semiconductors	X	236 066	X	407 762
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	134 074	X	N
001900B9	Semiconductors, microprocessors, memory, ASICs and power semiconductor devices	X	146 228	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 524 369	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	928 036	X	N
<b>335911, STORAGE BATTERY MFG</b>					
332000AC	Metal stampings	X	10 168	X	N
33200073	All other fabricated metal products (except forgings)	X	61 438	X	N
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	D
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	15 029	X	D
33141951	Refined unalloyed lead shapes and forms (except castings, forgings, and fabricated metal products)	X	434 281	X	277 237
33141953	Antimonial lead	X	276 636	X	177 272
33141955	Lead-calcium alloyed	X	198 170	X	86 335
33120017	Steel sheet and strip, including tin plate	X	34 483	X	D
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33100063	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
32513105	Litharge	X	58 730	X	43 098
32518803	Sulfuric acid (new and spent) (100 percent H2SO4)	X	32 195	X	24 809
325000B3	Other industrial inorganic chemicals (including mercury oxide and silver oxide)	X	49 617	X	21 284
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	D
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	71 993	X	38 601
32610011	Fabricated plastics products (except gaskets)	X	260 684	X	232 713
32221001	Paperboard containers, boxes, and corrugated paperboard	X	25 644	X	15 538
33599101	Carbon and graphite electrodes, and other carbon and graphite products for electrical use	X	462	X	D
00970099	All other materials and components, parts, containers, and supplies	X	358 280	X	245 966
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	130 650	X	165 355

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335912, PRIMARY BATTERY MFG</b>					
332000AC	Metal stampings	X	177 722	X	82 129
33200073	All other fabricated metal products (except forgings)	X	D	X	D
33210001	Forgings	X	—	X	D
33151001	Iron and steel castings (rough and semifinished)	X	—	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	D	X	D
33141951	Refined unalloyed lead shapes and forms (except castings, forgings, and fabricated metal products)	X	—	X	D
33141953	Antimonial lead	X	—	X	N
33141955	Lead-calcium alloyed	X	—	X	N
33120017	Steel sheet and strip, including tin plate	X	D	X	38 450
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	38 419	X	34 366
33149105	Zinc and zinc-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	115 522	X	56 046
33100063	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
32513105	Litharge	X	D	X	N
32518803	Sulfuric acid (new and spent) (100 percent H2SO4)	X	D	X	D
325000B3	Other industrial inorganic chemicals (including mercury oxide and silver oxide)	X	D	X	71 001
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	15 744	X	10 159
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	27 095	X	30 302
32610011	Fabricated plastics products (except gaskets)	X	D	X	8 404
32221001	Paperboard containers, boxes, and corrugated paperboard	X	65 721	X	48 375
33599101	Carbon and graphite electrodes, and other carbon and graphite products for electrical use	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	292 541	X	495 327
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	45 979	X	39 885
<b>335921, FIBER OPTIC CABLE MFG</b>					
33122200	Bare steel wire 1,000 s tons	935.1	46 702	N	X
33120003	All other steel shapes and forms (except castings, forgings, and fabricated metal products) 1,000 s tons	23.1	30 035	N	X
33142119	Copper and copper-base alloy wire for redrawing mil lb.	D	D	N	X
33100091	Bare copper and copper-base alloy wire, electrical (except wire for redrawing) mil lb.	D	D	N	X
331000A5	Insulated copper wire and cable	X	26 351	X	X
33142147	All other copper and copper-base alloy shapes and forms including wire bar mil lb.	7.9	55 509	N	X
33100089	Bare aluminum and aluminum-base alloy wire, except for redrawing mil lb.	D	D	N	X
33100071	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) mil lb.	D	D	N	X
33100079	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) mil lb.	5.4	12 504	N	X
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. mil lb.	9108.0	92 932	N	X
32521205	Synthetic rubber mil lb.	D	D	N	X
32500029	All other chemicals and allied products mil lb.	D	D	N	X
32721501	Optical fiber, data and nondata transmission	X	715 673	X	X
32799305	Fiberglass insulating materials	X	3 696	X	X
32700003	All other stone, clay, glass, and concrete products	X	D	X	X
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	13 984	X	X
31311103	Cotton yarns mil lb.	2.8	13 402	N	X
33593105	Connectors	X	19 007	X	X
00970099	All other materials and components, parts, containers, and supplies	X	218 631	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	9 829	X	N
<b>335929, OTHER COMMUNICATION &amp; ENERGY WIRE MFG</b>					
33122200	Bare steel wire 1,000 s tons	14 763.1	35 639	N	N
33120003	All other steel shapes and forms (except castings, forgings, and fabricated metal products) 1,000 s tons	4 514.7	92 733	N	N
33142127	Unalloyed copper and copper-base alloy rods mil lb.	1 261.9	1 666 951	N	N
33142129	Alloyed copper and copper-base alloy rods mil lb.	182.5	190 068	N	N
33142119	Copper and copper-base alloy wire for redrawing mil lb.	P436.3	454 201	N	N
33100091	Bare copper and copper-base alloy wire, electrical (except wire for redrawing) mil lb.	335.6	575 395	N	N
331000A5	Insulated copper wire and cable	X	149 415	X	N
33141101	Copper and copper-base alloy cathodes 1,000 s tons	124.8	260 751	N	N
33142147	All other copper and copper-base alloy shapes and forms including wire bar mil lb.	187.9	312 618	N	N
33100051	Aluminum and aluminum-base alloy rods mil lb.	238.7	209 251	N	N
33131900	Aluminum and aluminum-base alloy wire for redrawing mil lb.	D	D	N	N
33100089	Bare aluminum and aluminum-base alloy wire, except for redrawing mil lb.	P20.5	74 572	N	N
33100071	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) mil lb.	P55.3	182 736	N	N
33141941	Refined unalloyed tin shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100079	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) mil lb.	79.1	123 177	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. mil lb.	1 153.9	1 075 276	N	N
32521205	Synthetic rubber mil lb.	53.7	86 234	N	N
32500029	All other chemicals and allied products mil lb.	101.9	107 651	N	N
32721501	Optical fiber, data and nondata transmission	X	64 633	X	N
32799305	Fiberglass insulating materials	X	5 500	X	N
32700003	All other stone, clay, glass, and concrete products	X	5 446	X	N
11321001	Natural rubber mil lb.	9.2	11 962	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	69 656	X	N
31311103	Cotton yarns mil lb.	P.3	2 247	N	N
33593105	Connectors	X	40 807	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 363 564	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 983	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335931, CURRENT-CARRYING WIRING DEVICE MFG</b>					
332000AC	Metal stampings	X	86 626	X	77 092
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	112 521	X	71 124
33200085	All other fabricated metal products (except forgings)	X	65 916	X	19 426
33210001	Forgings	X	5 591	X	2 185
33151001	Iron and steel castings (rough and semifinished)	X	6 756	X	12 255
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	26 812	X	17 954
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	11 828	X	18 210
33152009	Other nonferrous castings (rough and semifinished)	X	12 628	X	2 368
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	16 234	X	7 310
33120017	Steel sheet and strip, including tin plate	X	36 153	X	25 975
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	2 693	X	1 550
33142107	Copper and copper-base alloy rod, bar, and bar shapes (except castings, forgings, and fabricated metal products)	X	25 336	X	13 241
33142131	Copper and copper-base alloy plate, sheet, and strip, including military cups and discs	X	132 042	X	95 260
33142115	All other copper and copper-base alloy mill shapes and forms (including mechanical wire) (except castings and forgings)	X	26 112	X	20 383
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	42 756	X	25 811
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	14 285	X	18 492
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	120 720	X	107 037
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	94 729	X	64 030
33593101	Current-carrying wiring devices	X	88 320	X	76 919
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc.	X	62 326	X	54 620
331000A1	Insulated wire and cable, except magnet wire	X	45 369	X	45 619
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	56 707	X	74 337
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	35 459	X	21 796
00970099	All other materials and components, parts, containers, and supplies	X	567 573	X	239 469
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	306 843	X	301 241
<b>335932, NONCURRENT-CARRYING WIRING DEVICE MFG</b>					
332000AC	Metal stampings	X	20 357	X	18 064
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	46 809	X	37 970
33200085	All other fabricated metal products (except forgings)	X	27 646	X	8 434
33210001	Forgings	X	D	X	1 325
33151001	Iron and steel castings (rough and semifinished)	X	39 862	X	46 685
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	58 109	X	48 231
33152500	Copper and copper-base alloy castings (rough and semifinished)	X	2 878	X	3 838
33152009	Other nonferrous castings (rough and semifinished)	X	12 137	X	9 204
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	56 875	X	52 918
33120017	Steel sheet and strip, including tin plate	X	438 824	X	225 134
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	125 649	X	156 943
33142107	Copper and copper-base alloy rod, bar, and bar shapes (except castings, forgings, and fabricated metal products)	X	36 788	X	N
33142131	Copper and copper-base alloy plate, sheet, and strip, including military cups and discs	X	D	X	N
33142115	All other copper and copper-base alloy mill shapes and forms (including mechanical wire) (except castings and forgings)	X	D	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	50 339	X	20 562
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	10 108	X	10 939
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	266 020	X	186 727
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	27 784	X	15 598
33593101	Current-carrying wiring devices	X	38 657	X	4 383
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc.	X	6 217	X	15 144
331000A1	Insulated wire and cable, except magnet wire	X	20 411	X	10 903
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	9 903	X	2 590
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	37 670	X	21 793
00970099	All other materials and components, parts, containers, and supplies	X	310 629	X	182 379
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	138 918	X	165 674
<b>335991, CARBON &amp; GRAPHITE PRODUCT MFG</b>					
33200081	Fabricated metal products (except forgings)	X	D	X	N
33210001	Forgings	X	-	X	N
33100035	Castings (rough and semifinished)	X	D	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32519227	Pitch	X	50 848	X	33 548
32419900	Coke, petroleum coke, metallurgical coke, calcined coke, foundry coke, etc. used as raw material	X	191 885	X	91 163
32799213	Natural graphite	X	25 697	X	22 406
32799901	Artificial graphite	X	27 111	X	28 140
32799201	Carbon, ground or treated	X	43 406	X	13 108
00970099	All other materials and components, parts, containers, and supplies	X	489 621	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	62 920	X	33 454
<b>335999, ALL OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT &amp; COMPONENT MFG</b>					

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>335999, ALL OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT &amp; COMPONENT MFG—Con.</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	26 929	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	7 920	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	35 614	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	5 268	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	12 268	X	N
33531211	Fractional horsepower electric motors (less than 1 hp)	X	42 685	X	N
33422001	Electronic communication equipment	X	4 885	X	N
33599900	Automatic garage door controllers	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 614 710	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 073 150	X	N
<b>336111, AUTOMOBILE MFG</b>					
33631200	Gasoline engines and parts specially designed for gasoline engines	X	10 536 759	X	N
33361803	Diesel engines and parts specially designed for diesel engines	X	D	X	N
33635007	Drive train components and parts	X	7 620 624	X	N
33621101	Car bodies	X	D	X	N
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment	X	2 026 003	X	N
33633000	Shocks, struts, and other suspension equipment and parts	X	2 341 895	X	N
33639901	Exhaust systems and parts	X	1 130 261	X	N
33351501	Machine tool accessories, including cutting tools	X	D	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	266 241	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	186 439	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	335 400	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.)	X	7 117 895	X	N
33261100	Steel springs, except wire	X	170 801	X	N
33251011	Motor vehicle metal hardware (lock units, door and window handles, hinges, etc.), except forgings	X	1 060 386	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	574 259	X	N
33200049	Other fabricated metal products, except forgings	X	1 084 143	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	64 250	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	D	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	65 814	X	N
32621003	Pneumatic tires and inner tubes	X	1 284 894	X	N
32622001	Rubber and plastics hose and belting	X	136 216	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	396 373	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	D	X	N
32610033	Fabricated plastics products, including components, housings, accessories, etc. (except gaskets, hose and belting)	X	681 006	X	N
32720005	Glass and glass products including windows and mirrors	X	1 055 294	X	N
33636003	Seats (purchased separately) for automobiles, trucks, and buses	X	2 536 052	X	N
33636007	Seat covers, seat belts, and shoulder harnesses	X	399 926	X	N
33639911	Automotive air bag assemblies and parts thereof	X	1 097 884	X	N
33636001	Automotive trimmings, textile (panels, headliners, etc.)	X	1 949 771	X	N
31411003	Carpeting	X	258 784	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	D	X	N
32552003	Glues and adhesives	X	240 620	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	605 840	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	1 217 588	X	N
33632100	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; except auto lamps)	X	976 009	X	N
33511003	Automotive lamps (bulbs and sealed beams)	X	483 231	X	N
33591103	Storage batteries, automotive	X	164 809	X	N
33431001	Automotive radios and loudspeakers	X	1 294 441	X	N
33451400	Motor vehicle clusters, meters, and gauges, except electrical (including speedometers, fuel level)	X	766 210	X	N
001900C1	Semiconductors and related devices and electronic control modules	X	963 257	X	N
33411103	Purchased computers for incorporation into motor vehicles, trucks, or buses	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	11 853 929	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	599 920	X	N
<b>336112, LIGHT TRUCK &amp; UTILITY VEHICLE MFG</b>					
33631200	Gasoline engines and parts specially designed for gasoline engines	X	10 867 605	X	N
33361803	Diesel engines and parts specially designed for diesel engines	X	D	X	N
33635007	Drive train components and parts	X	13 051 022	X	N
33621101	Car bodies	X	D	X	N
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment	X	1 811 803	X	N
33633000	Shocks, struts, and other suspension equipment and parts	X	3 601 787	X	N
33639901	Exhaust systems and parts	X	1 291 015	X	N
33351501	Machine tool accessories, including cutting tools	X	D	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	156 967	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	D	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.)	X	9 707 741	X	N
33261100	Steel springs, except wire	X	732 197	X	N
33251011	Motor vehicle metal hardware (lock units, door and window handles, hinges, etc.), except forgings	X	D	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336112, LIGHT TRUCK &amp; UTILITY VEHICLE MFG—Con.</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	1 179 160	X	N
33200049	Other fabricated metal products, except forgings	X	1 278 150	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	—	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	D	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	15 593	X	N
32621003	Pneumatic tires and inner tubes	X	2 139 371	X	N
32622001	Rubber and plastics hose and belting	X	D	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	D	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	D	X	N
32610033	Fabricated plastics products, including components, housings, accessories, etc. (except gaskets, hose and belting)	X	308 198	X	N
32720005	Glass and glass products including windows and mirrors	X	1 323 694	X	N
33636003	Seats (purchased separately) for automobiles, trucks, and buses	X	2 955 253	X	N
33636007	Seat covers, seat belts, and shoulder harnesses	X	545 257	X	N
33639911	Automotive air bag assemblies and parts thereof	X	1 045 713	X	N
33636001	Automotive trimmings, textile (panels, headliners, etc.)	X	2 414 163	X	N
31411003	Carpeting	X	363 298	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	—	X	N
32552003	Glues and adhesives	X	310 254	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	969 805	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	740 224	X	N
33632100	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; except auto lamps)	X	D	X	N
33511003	Automotive lamps (bulbs and sealed beams)	X	492 774	X	N
33591103	Storage batteries, automotive	X	162 297	X	N
33431001	Automotive radios and loudspeakers	X	1 516 452	X	N
33451400	Motor vehicle clusters, meters, and gauges, except electrical (including speedometers, fuel level)	X	D	X	N
33411103	Purchased computers for incorporation into motor vehicles, trucks, or buses	X	D	X	N
001900C1	Semiconductors and related devices and electronic control modules	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	2 610 796	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	2 077 977	X	N
<b>336120, HEAVY DUTY TRUCK MFG</b>					
33631200	Gasoline engines and parts specially designed for gasoline engines	X	D	X	N
33361803	Diesel engines and parts specially designed for diesel engines	X	1 179 562	X	N
33635007	Drive train components and parts	X	724 290	X	N
33621101	Car bodies	X	D	X	N
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment	X	55 155	X	N
33633000	Shocks, struts, and other suspension equipment and parts	X	60 031	X	N
33639901	Exhaust systems and parts	X	13 728	X	N
33351501	Machine tool accessories, including cutting tools	X	82	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	16 435	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	1 299	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	1 424	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	4 451	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	1 542	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	D	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.)	X	108 060	X	N
33261100	Steel springs, except wire	X	D	X	N
33251011	Motor vehicle metal hardware (lock units, door and window handles, hinges, etc.), except forgings	X	26 541	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	38 874	X	N
33200049	Other fabricated metal products, except forgings	X	38 085	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	D	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	15 674	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	D	X	N
32621003	Pneumatic tires and inner tubes	X	68 809	X	N
32622001	Rubber and plastics hose and belting	X	4 964	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	D	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	D	X	N
32610033	Fabricated plastics products, including components, housings, accessories, etc. (except gaskets, hose and belting)	X	8 844	X	N
32720005	Glass and glass products including windows and mirrors	X	15 893	X	N
33636003	Seats (purchased separately) for automobiles, trucks, and buses	X	46 582	X	N
33636007	Seat covers, seat belts, and shoulder harnesses	X	D	X	N
33639911	Automotive air bag assemblies and parts thereof	X	D	X	N
33636001	Automotive trimmings, textile (panels, headliners, etc.)	X	32 360	X	N
31411003	Carpeting	X	D	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	—	X	N
32552003	Glues and adhesives	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	31 451	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	32 383	X	N
33632100	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; except auto lamps)	X	8 886	X	N
33511003	Automotive lamps (bulbs and sealed beams)	X	2 193	X	N
33591103	Storage batteries, automotive	X	13 438	X	N
33431001	Automotive radios and loudspeakers	X	10 910	X	N
33451400	Motor vehicle clusters, meters, and gauges, except electrical (including speedometers, fuel level)	X	28 183	X	N
001900C1	Semiconductors and related devices and electronic control modules	X	11 723	X	N
33411103	Purchased computers for incorporation into motor vehicles, trucks, or buses	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	2 079 833	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	5 178 999	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336211, MOTOR VEHICLE BODY MFG</b>					
33600001	Purchased chassis for vehicles (excluding passenger cars) . . . . .	X	500 898	X	333 418
33621103	Truck bodies . . . . .	X	57 412	X	38 829
33635003	Transmissions and parts . . . . .	X	65 297	X	35 089
33600005	Axles, brakes, drums, rims, wheels, and other metal motor wheel parts . . . . .	X	42 866	X	42 252
33621101	Car bodies . . . . .	X	14 518	X	N
33633000	Shocks, struts, and other suspension equipment and parts . . . . .	X	16 046	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.) . . . . .	X	69 082	X	N
33251011	Motor vehicle metal hardware (lock units, door and window handles, hinges, etc.), except forgings . . . . .	X	106 313	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	35 638	X	N
33200091	Other fabricated metal products, except forgings . . . . .	X	100 875	X	N
33210001	Forgings . . . . .	X	13 922	X	N
00190090	Fluid power products . . . . .	X	125 009	X	72 778
32621003	Pneumatic tires and inner tubes . . . . .	X	24 805	X	N
32610033	Fabricated plastics products, including components, housings, accessories, etc. (except gaskets, hose and belting) . . . . .	X	16 730	X	N
32720005	Glass and glass products including windows and mirrors . . . . .	X	26 009	X	N
33636003	Seats (purchased separately) for automobiles, trucks, and buses . . . . .	X	33 732	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	46 849	X	N
33632100	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; except auto lamps) . . . . .	X	29 285	X	N
33511003	Automotive lamps (bulbs and sealed beams) . . . . .	X	4 180	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	99 598	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	204 831	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	47 892	X	29 862
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	33 640	X	30 889
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	128 012	X	82 563
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	45 908	X	54 257
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	14 500
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	2 828
32100019	Rough and dressed lumber . . . . .	X	20 005	X	29 854
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	829 832	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	2 736 548	X	N
<b>336212, TRUCK TRAILER MFG</b>					
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.) . . . . .	X	D	X	N
33251011	Motor vehicle metal hardware (lock units, door and window handles, hinges, etc.), except forgings . . . . .	X	9 386	X	10 750
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	34 896	X	43 336
33200091	Other fabricated metal products, except forgings . . . . .	X	79 950	X	N
33210001	Forgings . . . . .	X	2 603	X	2 213
33100035	Castings (rough and semifinished) . . . . .	X	13 917	X	4 976
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	106 850	X	58 409
33120017	Steel sheet and strip, including tin plate . . . . .	X	98 836	X	86 381
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	50 678	X	33 939
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	77 548	X	21 208
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	284 296	X	183 513
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	282 385	X	163 132
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	36 737	X	7 086
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	2 846	X	252
33600001	Purchased chassis for vehicles (excluding passenger cars) . . . . .	X	9 371	X	16 597
33621103	Truck bodies . . . . .	X	4 879	X	D
33635003	Transmissions and parts . . . . .	X	3 512	X	D
33633000	Shocks, struts, and other suspension equipment and parts . . . . .	X	147 788	X	86 769
33600005	Axles, brakes, drums, rims, wheels, and other metal motor wheel parts . . . . .	X	346 494	X	264 931
32621003	Pneumatic tires and inner tubes . . . . .	X	320 024	X	223 158
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	86 294	X	33 901
32720005	Glass and glass products including windows and mirrors . . . . .	X	D	X	D
32100019	Rough and dressed lumber . . . . .	X	235 950	X	95 655
00190090	Fluid power products . . . . .	X	38 804	X	19 197
33632100	Motor vehicle lighting fixtures (including headlights, taillights, running lights, and dome fixtures; except auto lamps) . . . . .	X	22 900	X	20 111
33511003	Automotive lamps (bulbs and sealed beams) . . . . .	X	1 752	X	D
33636003	Seats (purchased separately) for automobiles, trucks, and buses . . . . .	X	D	X	D
32610033	Fabricated plastics products, including components, housings, accessories, etc. (except gaskets, hose and belting) . . . . .	X	5 018	X	12 477
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	916 035	X	404 938
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	248 988	X	291 598
<b>336213, MOTOR HOME MFG</b>					
33600003	Trailer axles, wheels, brakes, undercarriages, and other metal vehicular parts . . . . .	X	160 079	X	96 566
32621003	Pneumatic tires and inner tubes . . . . .	X	14 218	X	D
33612000	Purchased chassis for motor homes . . . . .	X	937 693	X	533 666
001900B2	Household appliances, including refrigerators, cooking equipment, and other household appliances, exc. air conditioners . . . . .	X	118 833	X	73 364
001900A7	Air-conditioning equipment . . . . .	X	41 848	X	24 339
33341401	Metal heating equipment (except electric) . . . . .	X	19 280	X	10 096
33232101	Metal doors and door units, windows and window units . . . . .	X	41 735	X	25 448
33291300	Metal plumbing fixtures, fittings, and trim (including enameled) (except forgings) . . . . .	X	26 314	X	9 993
332000A9	Sheet metal products, except stampings . . . . .	X	36 437	X	16 964



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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336213, MOTOR HOME MFG—Con.</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	12 241	X	N
33200083	Other fabricated metal products, except forgings	X	9 683	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	D	X	D
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	44 873	X	15 380
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	37 559	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	5 791	X	N
33593101	Current-carrying wiring devices	X	84 220	X	47 605
32121003	Plywood	X	79 195	X	41 865
32100021	Dressed lumber	X	55 239	X	37 947
00190099	Millwork, wood (including wood doors, window sash, moldings, and cabinets)	X	75 862	X	31 338
32720005	Glass and glass products including windows and mirrors	X	35 418	X	15 047
32610011	Fabricated plastics products (except gaskets)	X	33 827	X	23 393
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	18 750	X	23 415
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	13 517	X	8 719
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	35 290	X	8 857
31411003	Carpeting	X	38 135	X	21 735
31412100	Curtains and draperies	X	44 197	X	17 657
00190075	Molded composites	X	62 331	X	N
00970099	All other materials and components, parts, containers, and supplies	X	327 970	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	204 574	X	501 971
<b>336214, TRAVEL TRAILER &amp; CAMPER MFG</b>					
33600003	Trailer axles, wheels, brakes, undercarriages, and other metal vehicular parts	X	253 416	X	N
32621003	Pneumatic tires and inner tubes	X	82 155	X	N
33612000	Purchased chassis for motor homes	X	33 983	X	N
001900B2	Household appliances, including refrigerators, cooking equipment, and other household appliances, exc. air conditioners	X	121 082	X	N
001900A7	Air-conditioning equipment	X	43 445	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	D	X	N
33200081	Fabricated metal products (except forgings)	X	274 320	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	153 568	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	121 334	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 800	X	N
33593101	Current-carrying wiring devices	X	42 236	X	N
32720005	Glass and glass products including windows and mirrors	X	77 642	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	29 206	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	51 058	X	N
31411003	Carpeting	X	28 821	X	N
31412100	Curtains and draperies	X	28 543	X	N
00970099	All other materials and components, parts, containers, and supplies	X	732 511	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	584 587	X	N
<b>336311, CARBURETOR, PISTON, PISTON RING, &amp; VALVE MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	51 501	X	37 964
33200095	Other fabricated metal products (except forgings)	X	31 984	X	49 119
33151001	Iron and steel castings (rough and semifinished)	X	77 362	X	68 201
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	243 996	X	157 628
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	4 276
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	53 011	X	65 625
33120085	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	120 061	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	58 143	X	45 679
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	7 938	X	5 100
00190003	Flexible packaging materials	X	389	X	384
33999103	Gaskets (all types), and packing and sealing devices	X	9 156	X	8 482
00970099	All other materials and components, parts, containers, and supplies	X	231 435	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	50 522	X	36 390
<b>336312, GASOLINE ENGINE &amp; ENGINE PARTS MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	D	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	D	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.)	X	345 968	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	530 646	X	N
33200019	Other fabricated metal products, except fluid power and forgings	X	2 378 644	X	N
33210001	Forgings	X	D	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336312, GASOLINE ENGINE &amp; ENGINE PARTS MFG—Con.</b>					
33151001	Iron and steel castings (rough and semifinished)	X	2 968 701	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	941 482	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	268 524	X	N
33120017	Steel sheet and strip, including tin plate	X	162 045	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	69 640	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	21 405	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	183 771	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	166 239	X	N
33299105	Ball bearings (mounted or unmounted)	X	161 887	X	N
33299103	Roller bearings (mounted or unmounted)	X	38 914	X	N
32610011	Fabricated plastics products (except gaskets)	X	154 227	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	36 449	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	43 125	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	73 678	X	N
32622001	Rubber and plastics hose and belting	X	87 470	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses)	X	43 091	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	19 277	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	83 677	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	5 032	X	N
32552003	Glues and adhesives	X	12 781	X	N
00190003	Flexible packaging materials	X	5 090	X	N
32220015	Paper and paperboard containers	X	29 243	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	1 053 675	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	555 811	X	N
00999826	Core parts purchased for use in remanufacturing or rebuilding	X	71 632	X	N
00970099	All other materials and components, parts, containers, and supplies	X	1 590 317	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	2 700 239	X	N
<b>336321, VEHICULAR LIGHTING EQUIPMENT MFG</b>					
33531100	Specialty transformers and fluorescent ballasts	X	4 127	X	6 640
33593101	Current-carrying wiring devices	X	89 003	X	22 802
33511001	Electric lamp bulbs	X	96 831	X	91 022
32721101	Flat glass (plate, float, and sheet)	X	1 496	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	287 587	X	144 633
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	24 605	X	14 857
32610011	Fabricated plastics products (except gaskets)	X	138 778	X	173 688
331000A7	Insulated wire and cable, including magnet wire	X	25 438	X	10 193
32221001	Paperboard containers, boxes, and corrugated paperboard	X	62 270	X	23 365
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	50 374	X	25 247
33299903	Metal poles	X	D	X	D
33200027	All other fabricated metal products (except forgings)	X	35 669	X	18 229
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	5 862
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	4 830	X	1 953
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	D
33120017	Steel sheet and strip, including tin plate	X	8 407	X	5 215
33120025	Steel wire and wire products	X	D	X	D
33120097	All other steel mill shapes and forms (except castings and forgings)	X	D	X	1 080
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	3 578	X	D
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	5 289	X	D
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	817	X	1 285
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	335	X	621
33512100	Lamp shades	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	566 128	X	323 806
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	66 844	X	58 398
<b>336322, OTHER MOTOR VEHICLE ELECTRICAL &amp; ELECTRONIC EQUIPMENT MFG</b>					
32721203	Tube blanks	X	—	N	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry	X	301 117	X	N
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components)	X	D	X	N
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry	X	844 372	X	N
33441400	Capacitors for electronic circuitry	X	155 570	X	N
33441500	Resistors for electronic circuitry	X	116 689	X	N
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes	X	214 167	X	N
32518835	Silicon, hyperpure	X	—	N	N
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	X	31	X	N
33141917	Doped chemicals, and other doped materials for electronic use	X	—	N	N
33111107	Ferrites (powder and paste)	X	—	N	N
331000AA	Metal powders	X	—	N	N
33410001	Electronic computing equipment	X	43	X	N
33593101	Current-carrying wiring devices	X	83 083	X	N
33422001	Electronic communication equipment	X	D	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336322, OTHER MOTOR VEHICLE ELECTRICAL &amp; ELECTRONIC EQUIPMENT MFG—Con.</b>					
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) . . . . .	X	660	X	N
33331401	Optical instruments and lenses (except sighting, tracking, and fire control) . . . . .	X	—	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	179 554	X	N
32610011	Fabricated plastics products (except gaskets) . . . . .	X	439 335	X	N
332000A9	Sheet metal products, except stampings . . . . .	X	101	X	N
332000AC	Metal stampings . . . . .	X	4 518	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	374 618	X	N
33200033	Other fabricated metal products (except forgings) . . . . .	X	D	X	N
33210001	Forgings . . . . .	X	D	X	N
33100035	Castings (rough and semifinished) . . . . .	X	D	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	145 620	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	315 636	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	21 380	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
331000A7	Insulated wire and cable, including magnet wire . . . . .	X	2 364	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	930	X	N
33141957	Silicon chips . . . . .	X	D	X	N
32599217	Masks . . . . .	X	—	X	N
32512005	Commodity gases . . . . .	X	D	X	N
32611305	Resists (photosensitive resin films applied to the surface of a wafer) . . . . .	X	D	X	N
32518843	Speciality gases . . . . .	X	—	N	N
33200095	Other fabricated metal products (except forgings) . . . . .	X	60 793	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	25 476	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	65 041	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	1 399	X	N
33100075	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	39 394	X	30 388
33100099	Insulated wire and cable (except magnet wire) . . . . .	X	99 309	X	108 652
33100097	Magnet wire . . . . .	X	53 726	X	48 374
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	42 565	X	37 242
33361200	Mechanical speed changers, gears, and industrial high-speed drives . . . . .	X	D	X	34 114
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	50 441	X	35 243
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	27 649	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting) . . . . .	X	197 179	X	60 668
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets . . . . .	X	134 383	X	N
00190033	Used engine electrical equipment for rebuilding, or to be used in rebuilding (starting motors, generators, etc.) . . . . .	X	127 398	X	79 027
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	D	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	—	N	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.) . . . . .	X	55 569	X	N
33200019	Other fabricated metal products, except fluid power and forgings . . . . .	X	27 597	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	11 970	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	40 026	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	15 776	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	11 951	X	N
33299103	Roller bearings (mounted or unmounted) . . . . .	X	D	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	3 368	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses) . . . . .	X	D	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories . . . . .	X	D	X	N
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	4 676	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	9 787	X	N
32552003	Glues and adhesives . . . . .	X	4 248	X	N
00190003	Flexible packaging materials . . . . .	X	D	X	N
32220015	Paper and paperboard containers . . . . .	X	17 146	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc. . . . .	X	588 015	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	656 627	X	N
00999826	Core parts purchased for use in remanufacturing or rebuilding . . . . .	X	33 529	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 015 934	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 530 973	X	N
<b>336330, MOTOR VEHICLE STEERING &amp; SUSPENSION COMPONENT (EXCEPT SPRING) MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	D	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	D	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.) . . . . .	X	280 490	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	123 850	X	N
33200019	Other fabricated metal products, except fluid power and forgings . . . . .	X	397 398	X	N
33210001	Forgings . . . . .	X	184 635	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336330, MOTOR VEHICLE STEERING &amp; SUSPENSION COMPONENT (EXCEPT SPRING) MFG—Con.</b>					
33151001	Iron and steel castings (rough and semifinished)	X	377 459	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	287 185	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	553 492	X	N
33120017	Steel sheet and strip, including tin plate	X	171 902	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	237 988	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33299105	Ball bearings (mounted or unmounted)	X	33 905	X	N
		X	116 986	X	N
33299103	Roller bearings (mounted or unmounted)	X	77 128	X	N
32610011	Fabricated plastics products (except gaskets)	X	82 912	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	33 903	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	34 674	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	155 647	X	N
32622001	Rubber and plastics hose and belting	X	74 154	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses)	X	D	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	D	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	26 421	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	39 037	X	N
32552003	Glues and adhesives	X	6 768	X	N
00190003	Flexible packaging materials	X	D	X	N
32220015	Paper and paperboard containers	X	38 418	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	D	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	D	X	N
00999826	Core parts purchased for use in remanufacturing or rebuilding	X	19 930	X	N
00970099	All other materials and components, parts, containers, and supplies	X	130 276	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	670 131	X	N
		X	207 212	X	N
<b>336340, MOTOR VEHICLE BRAKE SYSTEM MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	D	X	N
33291207	Fluid power valves (hydraulic and pneumatic)	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic)	X	D	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.)	X	D	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	303 036	X	N
33200019	Other fabricated metal products, except fluid power and forgings	X	435 159	X	N
33210001	Forgings	X	276 189	X	N
		X	48 520	X	N
33151001	Iron and steel castings (rough and semifinished)	X	935 083	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	185 700	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	58 556	X	N
33120017	Steel sheet and strip, including tin plate	X	118 545	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	23 217	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	7 064	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	17 413	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	24 036	X	N
33299105	Ball bearings (mounted or unmounted)	X	D	X	N
33299103	Roller bearings (mounted or unmounted)	X	D	X	N
32610011	Fabricated plastics products (except gaskets)	X	190 897	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	24 900	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	14 132	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	149 270	X	N
32622001	Rubber and plastics hose and belting	X	20 692	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses)	X	101 091	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories	X	D	X	N
33999103	Gaskets (all types), and packing and sealing devices	X	24 353	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	17 240	X	N
32552003	Glues and adhesives	X	2 959	X	N
00190003	Flexible packaging materials	X	10 076	X	N
32220015	Paper and paperboard containers	X	31 390	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	D	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	D	X	N
00999826	Core parts purchased for use in remanufacturing or rebuilding	X	112 301	X	N
00970099	All other materials and components, parts, containers, and supplies	X	869 549	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	482 033	X	N
<b>336350, MOTOR VEHICLE TRANSMISSION &amp; POWER TRAIN PARTS MFG</b>					

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336350, MOTOR VEHICLE TRANSMISSION &amp; POWER TRAIN PARTS MFG—Con.</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	D	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	D	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.) . . . . .	X	595 888	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	399 463	X	N
33200019	Other fabricated metal products, except fluid power and forgings . . . . .	X	3 102 433	X	N
33210001	Forgings . . . . .	X	1 352 117	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	2 590 475	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	1 533 356	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	267 904	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	585 776	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	410 248	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	736 574	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	12 908	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	452 932	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	48 202	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	213 531	X	N
33299103	Roller bearings (mounted or unmounted) . . . . .	X	368 526	X	N
32610011	Fabricated plastics products (except gaskets) . . . . .	X	58 458	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	8 596	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	28 456	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets . . . . .	X	27 288	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	21 779	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses) . . . . .	X	D	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories . . . . .	X	D	X	N
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	113 884	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	10 779	X	N
32552003	Glues and adhesives . . . . .	X	30 636	X	N
00190003	Flexible packaging materials . . . . .	X	5 130	X	N
32220015	Paper and paperboard containers . . . . .	X	40 526	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc. . . . .	X	129 922	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	111 482	X	N
00999826	Core parts purchased for use in remanufacturing or rebuilding . . . . .	X	632 526	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	2 097 317	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	841 046	X	N
<b>336360, MOTOR VEHICLE SEATING &amp; INTERIOR TRIM MFG</b>					
31321013	Polyester broadwoven fabrics (piece goods) . . . . . mil sq yd . . . . .	94.8	194 830	N	N
31321003	Cotton broadwoven fabrics (piece goods) . . . . . mil sq yd . . . . .	D	D	N	N
31321009	Rayon and acetate broadwoven fabrics (piece goods) . . . . . mil sq yd . . . . .	D	D	N	N
31321021	Other broadwoven fabrics (piece goods) . . . . . mil sq yd . . . . .	S	704 517	N	N
31322103	Narrow fabrics (12 inches or less in width) . . . . . mil sq yd . . . . .	D	D	N	N
31311003	Yarn, all fibers . . . . . mil lb . . . . .	S	10 604	N	N
31332001	Plastics coated, impregnated, or laminated fabrics . . . . . mil sq yd . . . . .	S	773 140	N	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . . mil lb . . . . .	S	382 127	N	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	181 899	X	N
332000AC	Metal stampings . . . . .	X	404 315	X	N
33200043	All other fabricated metal products (except castings and forgings) . . . . .	X	488 145	X	N
33210001	Forgings . . . . .	X	D	X	N
33100035	Castings (rough and semifinished) . . . . .	X	8 742	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	15 577	X	N
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	114 331	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	17 584	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	420	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
32100025	Hardwood lumber, rough and dressed . . . . .	X	8 501	X	N
32100031	Softwood lumber, rough and dressed . . . . .	X	D	X	N
00190097	Hardwood dimension and parts, including wood furniture frames . . . . .	X	D	X	N
32121105	Hardwood veneer . . . . .	X	-	X	N
32121101	Hardwood plywood . . . . .	X	834	X	N
32121201	Softwood plywood . . . . .	X	2 688	X	N
32121903	Particleboard (wood) . . . . .	X	246	X	N
32121907	Medium density fiberboard (MDF) . . . . .	X	D	X	N
32121909	Hardboard . . . . .	X	D	X	N
32613001	Plastics laminated sheets . . . . .	X	D	X	N
32619909	Plastics furniture parts and components . . . . .	X	91 497	X	N
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane) . . . . .	X	353 127	X	N
32552001	Adhesives and sealants . . . . .	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	2 970	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc. . . . .	X	57 960	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	78 239	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	2 189 129	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 174 101	X	N

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336370, MOTOR VEHICLE METAL STAMPING</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	354 859	X	210 676
33200095	Other fabricated metal products (except forgings)	X	844 168	X	845 289
33151001	Iron and steel castings (rough and semifinished)	X	107 703	X	31 778
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	4 658	X	10 001
33210001	Forgings	X	D	X	N
33120071	Steel bars and bar shapes (except castings, forgings, and fabricated metal products)	X	28 276	X	67 696
33120017	Steel sheet and strip, including tin plate	98 982.2	6 096 450	P6 831.4	4 313 752
33120079	Steel plate	X	15 459	X	8 367
33120025	Steel wire and wire products	X	34 093	X	32 438
33120013	Steel tinplate, tin free steel, terneplate, and blackplate	441.1	27 123	S	11 210
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	1 231 941	X	326 224
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	74 861	X	25 505
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	120 991	X	85 167
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc.	X	34 365	X	4 049
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	24 677	X	13 446
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	20 208	X	16 493
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	37 341	X	31 791
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	23 976	X	16 322
32500051	All other chemicals and allied products	X	32 378	X	20 075
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	39 620	X	32 157
32221001	Paperboard containers, boxes, and corrugated paperboard	X	65 744	X	46 471
32200007	Other paper and paperboard products	X	1 972	X	9 420
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	211 401	X	287 628
00970099	All other materials and components, parts, containers, and supplies	X	1 270 877	X	904 858
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	726 436	X	380 265
<b>336391, MOTOR VEHICLE AIR-CONDITIONING MFG</b>					
001900A6	Refrigeration compressors, compressor units, condensing units, and other heat transfer equipment	X	465 873	X	N
33531209	Fractional horsepower electric timing motors, synchronous and subsynchronous (less than 1 hp)	X	D	X	N
33531223	Fractional horsepower electric motors (less than 1 hp), except timing motors	X	D	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	10 246	X	N
33341200	Fans and blowers	X	8 182	X	N
001900B1	Electrical transmission, distribution, and control equipment	X	37 078	X	N
33593101	Current-carrying wiring devices	X	58 811	X	N
33451200	Automatic temperature controls (thermostats, regulators, etc.)	X	170 392	X	N
33299101	Ball and roller bearings (mounted or unmounted)	X	47 646	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	86 492	X	N
332000AC	Metal stampings	X	92 728	X	N
33251005	Metal hardware, including hinges, handles, locks, casters, etc.	X	D	X	N
33291901	Metal pipe, valves, and pipe fittings (except forgings)	X	9 738	X	N
33200053	All other fabricated metal products (except forgings)	X	D	X	N
33210001	Forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	181 782	X	N
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	13 767	X	N
33120017	Steel sheet and strip, including tin plate	X	22 964	X	N
33120025	Steel wire and wire products	X	D	X	N
33120035	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	8 837	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products)	X	5 155	X	N
33142143	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	21 534	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	D	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies	X	10 182	X	N
32192003	Wooden containers, complete (including combination wood and paperboard)	X	723	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	5 894	X	N
32510027	Refrigerant gases and other synthetic organic chemicals	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	D	X	N
32610007	Fabricated plastics products (except gaskets, hoses, and belting)	X	65 925	X	N
32622001	Rubber and plastics hose and belting	X	51 978	X	N
33999101	Gaskets (all types) and asbestos packing	X	D	X	N
32799301	Mineral wool insulation (fibrous glass, rock wool, etc.)	X	-	X	N
00970099	All other materials and components, parts, containers, and supplies	X	427 730	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	22 726	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336399, ALL OTHER MOTOR VEHICLE PARTS MFG</b>					
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	D	X	N
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic) . . . . .	X	D	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	D	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	D	X	N
33291207	Fluid power valves (hydraulic and pneumatic) . . . . .	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	D	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	294 452	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	410 285	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	265 903	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	121 146	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	362 019	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	1 579 737	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	493 677	X	N
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc. . . . .	X	317 355	X	N
33299105	Ball bearings (mounted or unmounted) . . . . .	X	52 528	X	N
33299103	Roller bearings (mounted or unmounted) . . . . .	X	13 359	X	N
32610011	Fabricated plastics products (except gaskets) . . . . .	X	483 283	X	N
32622001	Rubber and plastics hose and belting . . . . .	X	84 089	X	N
33637000	Automotive stampings (including body parts, hubcaps, fenders, etc.) . . . . .	X	996 756	X	N
33200019	Other fabricated metal products, except fluid power and forgings . . . . .	X	866 492	X	N
33210001	Forgings . . . . .	X	216 285	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	76 331	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	675 213	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	117 204	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	202 362	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	469 727	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets . . . . .	X	69 524	X	N
32500023	Ceramic raw materials, including powders, chemicals, and fibers (excluding refractory uses) . . . . .	X	127 186	X	N
32700035	Ceramic and ceramic composite parts, components, and accessories . . . . .	X	255 029	X	N
33999103	Gaskets (all types), and packing and sealing devices . . . . .	X	110 120	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	165 134	X	N
32552003	Glues and adhesives . . . . .	X	36 806	X	N
00190003	Flexible packaging materials . . . . .	X	32 962	X	N
32220015	Paper and paperboard containers . . . . .	X	274 878	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	135 826	X	N
00999826	Core parts purchased for use in remanufacturing or rebuilding . . . . .	X	442 937	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	4 713 509	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	3 610 719	X	N
<b>336411, AIRCRAFT MFG</b>					
33641201	Aircraft engines . . . . .	X	D	X	N
33641203	Aircraft engine parts (except instruments) . . . . .	X	73 075	X	N
33641303	Structural fuselage components, excluding instruments . . . . .	X	D	X	N
33641305	Structural empennage (tail) components, excluding instruments . . . . .	X	D	X	N
33641307	Structural wing components, excluding instruments . . . . .	X	D	X	N
33641309	Structural landing gear components . . . . .	X	D	X	N
33641311	Other structural components (airframe), including engine mounts, excluding instruments . . . . .	X	794 688	X	N
33641301	Aircraft propellers and parts thereof . . . . .	X	37 804	X	45 002
33636005	Aircraft seats . . . . .	X	12 904	X	8 673
33422003	Radio communication systems and equipment, including airborne transmitters and receivers (microwave, UHF, VHF, etc.) . . . . .	X	D	X	655 769
33451103	Navigational systems and equipment (NAV AIDS) . . . . .	X	138 054	X	254 100
001900D5	Search, detection, tracking, and electronic communication systems and equipment (RADAR, SONAR, Optical) . . . . .	X	D	X	N
33400025	Flight, navigational, airframe, and engine indicators, instruments, and clusters, including sensors, displays, etc. . . . .	X	D	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	119 075	X	285 290
00190070	Resin matrix composites . . . . .	X	34 070	X	D
00190071	Other matrix composites, including ceramic, carbon, metal, etc. . . . .	X	145 086	X	41 595
33291209	Complete mechanical, hydraulic and pneumatic subassemblies . . . . .	X	D	X	163 948
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	D	X	149 611
33291201	Fluid power valves (except complete assemblies) . . . . .	X	D	X	147 309
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	D	X	101 391
33399503	Fluid power cylinders and rotary actuators (except complete assemblies) . . . . .	X	D	X	154 689
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	D	X	N
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	126 634	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	52 924	X	D
33351503	Cutting tools for machine tools . . . . .	X	D	X	D
33251015	Aircraft metal hardware (except forgings) . . . . .	X	D	X	215 681
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	D	X	N
33200009	Other fabricated metal products, except fluid power and forgings . . . . .	X	168 799	X	N
33211101	Iron and steel forgings . . . . .	X	8 313	X	D
33211203	Aluminum and aluminum-base alloy forgings . . . . .	X	8 469	X	D
33211205	Titanium and titanium-base alloy forgings . . . . .	X	D	X	D
33210003	Other forgings . . . . .	X	26 808	X	D
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	D	X	D
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	4 219	X	D
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	21 240
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	13 846	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	30 375	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336411, AIRCRAFT MFG—Con.</b>					
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	152 178	X	268 133
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	54 362
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
33100065	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	D
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	56 569	X	32 072
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	5 174 430	X	8 760 131
		X	7 342 173	X	2 327 185
<b>336412, AIRCRAFT ENGINE &amp; ENGINE PARTS MFG</b>					
33641201	Aircraft engines . . . . .	X	249 248	X	D
33641203	Aircraft engine parts (except instruments) . . . . .	X	5 174 339	X	4 353 141
00190071	Other matrix composites, including ceramic, carbon, metal, etc. . . . .	X	16 014	X	24 114
33291209	Complete mechanical, hydraulic and pneumatic subassemblies . . . . .	X	20 606	X	7 271
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	24 151	X	D
33351503	Cutting tools for machine tools . . . . .	X	16 270	X	D
33251015	Aircraft metal hardware (except forgings) . . . . .	X	181 081	X	104 449
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	29 104	X	65 801
33200009	Other fabricated metal products, except fluid power and forgings . . . . .	X	51 984	X	69 701
33211101	Iron and steel forgings . . . . .	X	185 520	X	128 105
33211203	Aluminum and aluminum-base alloy forgings . . . . .	X	19 800	X	N
33211205	Titanium and titanium-base alloy forgings . . . . .	X	114 733	X	137 539
33210003	Other forgings . . . . .	X	58 714	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	223 091	X	103 551
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	28 193	X	71 383
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	77 723	X	202 102
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	110 184	X	53 719
33120017	Steel sheet and strip, including tin plate . . . . .	X	48 063	X	22 046
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	10 883	X	18 198
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	9 733	X	5 015
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 391	X	13 583
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	230	X	N
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	21 724	X	28 853
33100065	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	32 263	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	2 317	X	912
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	527 787	X	D
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	2 024 014	X	D
<b>336413, OTHER AIRCRAFT PART &amp; AUXILIARY EQUIPMENT MFG</b>					
33641201	Aircraft engines . . . . .	X	3 663	X	N
33641203	Aircraft engine parts (except instruments) . . . . .	X	48 951	X	N
33641303	Structural fuselage components, excluding instruments . . . . .	X	D	X	N
33641305	Structural empennage (tail) components, excluding instruments . . . . .	X	38 334	X	N
33641307	Structural wing components, excluding instruments . . . . .	X	84 242	X	N
33641309	Structural landing gear components . . . . .	X	D	X	N
33641311	Other structural components (airframe), including engine mounts, excluding instruments . . . . .	X	314 576	X	N
33641301	Aircraft propellers and parts thereof . . . . .	X	D	X	N
33636005	Aircraft seats . . . . .	X	1 546	X	N
33422003	Radio communication systems and equipment, including airborne transmitters and receivers (microwave, UHF, VHF, etc.) . . . . .	X	D	X	N
33451103	Navigational systems and equipment (NAV AIDS) . . . . .	X	D	X	N
001900D5	Search, detection, tracking, and electronic communication systems and equipment (RADAR, SONAR, Optical) . . . . .	X	—	X	N
33400025	Flight, navigational, airframe, and engine indicators, instruments, and clusters, including sensors, displays, etc. . . . .	X	8 500	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	97 274	X	N
00190070	Resin matrix composites . . . . .	X	122 203	X	N
00190071	Other matrix composites, including ceramic, carbon, metal, etc. . . . .	X	209 836	X	N
33291209	Complete mechanical, hydraulic and pneumatic subassemblies . . . . .	X	201 883	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) . . . . .	X	4 245	X	N
33291201	Fluid power valves (except complete assemblies) . . . . .	X	9 546	X	N
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic) . . . . .	X	2 268	X	N
33399503	Fluid power cylinders and rotary actuators (except complete assemblies) . . . . .	X	3 834	X	N
33399901	Fluid power filters (hydraulic and pneumatic) . . . . .	X	580	X	N
00190089	Other fluid power products (hydraulic and pneumatic) . . . . .	X	2 072	X	N
33299101	Ball and roller bearings (mounted or unmounted) . . . . .	X	27 070	X	N
33351503	Cutting tools for machine tools . . . . .	X	59 073	X	N
33251015	Aircraft metal hardware (except forgings) . . . . .	X	1 267 701	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	221 505	X	N
33200009	Other fabricated metal products, except fluid power and forgings . . . . .	X	213 584	X	N
33211101	Iron and steel forgings . . . . .	X	63 780	X	N
33211203	Aluminum and aluminum-base alloy forgings . . . . .	X	103 646	X	N
33211205	Titanium and titanium-base alloy forgings . . . . .	X	45 528	X	N
33210003	Other forgings . . . . .	X	20 485	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	41 540	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	66 701	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	14 769	X	N



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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>336413, OTHER AIRCRAFT PART &amp; AUXILIARY EQUIPMENT MFG—Con.</b>				
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	56 607	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	25 617	X	N
33120033	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	8 068	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	275 751	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	80 843	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 009	X	N
33149101	Titanium and titanium-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	52 670	X	N
33100065	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	8 011	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	43 091	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	1 286 546	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	715 759	X	N
	<b>336414, GUIDED MISSILE &amp; SPACE VEHICLE MFG</b>				
33641503	Guided missile and space vehicle engines and parts . . . . .	X	400 143	X	620 965
33641501	Guided missile and space vehicle propulsion units and parts . . . . .	X	D	X	D
33641900	Guided missile and space vehicle airframe parts . . . . .	X	D	X	D
33422003	Radio communication systems and equipment, including airborne transmitters and receivers (microwave, UHF, VHF, etc.) . . . . .	X	D	X	N
33451103	Navigational systems and equipment (NAV AIDS) . . . . .	X	D	X	N
001900D5	Search, detection, tracking, and electronic communication systems and equipment (RADAR, SONAR, Optical) . . . . .	X	D	X	N
33400025	Flight, navigational, airframe, and engine indicators, instruments, and clusters, including sensors, displays, etc. . . . .	X	D	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	D	X	D
00190070	Resin matrix composites . . . . .	X	D	X	N
00190071	Other matrix composites, including ceramic, carbon, metal, etc. . . . .	X	D	X	8 413
33291209	Complete mechanical, hydraulic and pneumatic subassemblies . . . . .	X	16 300	X	77 066
00190090	Fluid power products . . . . .	X	6 978	X	26 550
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	D	X	13 263
33200063	Other fabricated metal products (except fluid power products and forgings) . . . . .	X	D	X	D
33211101	Iron and steel forgings . . . . .	X	D	X	D
33211201	Nonferrous forgings . . . . .	X	D	X	D
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	D	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	D	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products . . . . .	X	D	X	12 689
32500045	Chemicals, all types (including propellants) . . . . .	X	D	X	D
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools . . . . .	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	824 554	X	1 654 250
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	1 724 970	X	786 802
	<b>336415, GUIDED MISSILE &amp; SPACE VEHICLE PROPULSION UNIT &amp; PARTS MFG</b>				
33641503	Guided missile and space vehicle engines and parts . . . . .	X	153 060	X	N
33641501	Guided missile and space vehicle propulsion units and parts . . . . .	X	494 364	X	N
33641900	Guided missile and space vehicle airframe parts . . . . .	X	—	X	N
33422003	Radio communication systems and equipment, including airborne transmitters and receivers (microwave, UHF, VHF, etc.) . . . . .	X	—	X	N
33451103	Navigational systems and equipment (NAV AIDS) . . . . .	X	—	X	D
001900D5	Search, detection, tracking, and electronic communication systems and equipment (RADAR, SONAR, Optical) . . . . .	X	—	X	N
33400025	Flight, navigational, airframe, and engine indicators, instruments, and clusters, including sensors, displays, etc. . . . .	X	D	X	D
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components . . . . .	X	D	X	5 406
00190070	Resin matrix composites . . . . .	X	D	X	D
00190071	Other matrix composites, including ceramic, carbon, metal, etc. . . . .	X	D	X	D
33291209	Complete mechanical, hydraulic and pneumatic subassemblies . . . . .	X	5 703	X	D
00190090	Fluid power products . . . . .	X	4 195	X	D
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	D	X	5 685
33200063	Other fabricated metal products (except fluid power products and forgings) . . . . .	X	17 085	X	59 518
33211101	Iron and steel forgings . . . . .	X	1 573	X	N
33211201	Nonferrous forgings . . . . .	X	6 088	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	D	X	5 979
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	D	X	2 025
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	4 540	X	2 439
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products . . . . .	X	3 471	X	9 503
32500045	Chemicals, all types (including propellants) . . . . .	X	D	X	D
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools . . . . .	X	D	X	7 213
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	187 669	X	367 839
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	18 133	X	798 632
	<b>336419, OTHER GUIDED MISSILE &amp; SPACE VEHICLE PARTS &amp; AUXILIARY EQUIP MFG</b>				
33641503	Guided missile and space vehicle engines and parts . . . . .	X	—	X	3 123
33641501	Guided missile and space vehicle propulsion units and parts . . . . .	X	—	X	D
33641900	Guided missile and space vehicle airframe parts . . . . .	X	D	X	D
33422003	Radio communication systems and equipment, including airborne transmitters and receivers (microwave, UHF, VHF, etc.) . . . . .	X	—	X	5 029
33451103	Navigational systems and equipment (NAV AIDS) . . . . .	X	D	X	26 941
001900D5	Search, detection, tracking, and electronic communication systems and equipment (RADAR, SONAR, Optical) . . . . .	X	—	X	23 388

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336419, OTHER GUIDED MISSILE &amp; SPACE VEHICLE PARTS &amp; AUXILIARY EQUIP MFG—Con.</b>					
33400025	Flight, navigational, airframe, and engine indicators, instruments, and clusters, including sensors, displays, etc.	X	D	X	2 771
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components	X	D	X	D
00190070	Resin matrix composites	X	D	X	N
00190071	Other matrix composites, including ceramic, carbon, metal, etc.	X	D	X	N
33291209	Complete mechanical, hydraulic and pneumatic subassemblies	X	D	X	D
00190090	Fluid power products	X	D	X	D
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	1 164	X	4 323
33200063	Other fabricated metal products (except fluid power products and forgings)	X	16 132	X	11 819
33211101	Iron and steel forgings	X	1 579	X	N
33211201	Nonferrous forgings	X	D	X	N
33151001	Iron and steel castings (rough and semifinished)	X	D	X	D
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	D	X	D
33152003	Other nonferrous castings (rough and semifinished)	X	D	X	46
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	D	X	D
32500045	Chemicals, all types (including propellants)	X	D	X	1 082
33510000	Special dies, tools, die sets, jigs, and fixtures, except cutting tools for machine tools	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	93 679	X	86 033
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	34 194	X	211 278
<b>336510, RAILROAD ROLLING STOCK MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	67 945	X	N
00190090	Fluid power products	X	89 618	X	N
33210001	Forgings	X	377 128	X	N
33200063	Other fabricated metal products (except fluid power products and forgings)	X	496 475	X	N
33151001	Iron and steel castings (rough and semifinished)	X	357 545	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	385 851	X	N
33120017	Steel sheet and strip, including tin plate	X	157 982	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	102 899	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	112 914	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	96 777	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished)	X	22 405	X	N
33299103	Roller bearings (mounted or unmounted)	X	107 369	X	N
33361301	Plain bearings and bushings	X	62 459	X	N
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	52 441	X	N
33531303	Railway electrical control equipment	X	386 169	X	N
33651000	Brake equipment, truck assemblies, hooks and other coupling devices, buffers, and parts	X	573 466	X	N
00970099	All other materials and components, parts, containers, and supplies	X	908 595	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	465 033	X	N
<b>336611, SHIP BUILDING &amp; REPAIRING</b>					
33361811	Diesel and semidiesel engines	X	128 993	X	96 980
33361105	Steam engines and turbines	X	117 033	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more)	X	45 305	X	76 454
33632200	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	X	68 888	X	67 930
33361200	Mechanical speed changers, gears, and industrial high-speed drives	X	94 519	X	88 606
33531415	Industrial controls	X	46 664	X	N
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic)	X	36 148	X	27 475
33291207	Fluid power valves (hydraulic and pneumatic)	X	71 486	X	54 546
33399501	Fluid power cylinders and rotary actuators (hydraulic and pneumatic)	X	2 636	X	1 809
33291203	Fluid power hose or tube fittings and assemblies (hydraulic and pneumatic)	X	54 256	X	35 224
33399901	Fluid power filters (hydraulic and pneumatic)	X	D	X	11 791
00190089	Other fluid power products (hydraulic and pneumatic)	X	D	X	18 721
33231203	Fabricated structural metal for ships and barges (except forgings)	X	55 632	X	113 456
332000A7	Metal boilers, condensers, and parts thereof (except forgings)	X	5 627	X	11 396
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	24 697	X	41 752
33200055	Other fabricated metal products (except fluid power products and forgings)	X	73 146	X	23 739
33210001	Forgings	X	12 811	X	4 062
33100035	Castings (rough and semifinished)	X	39 492	X	20 705
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products)	X	366 340	X	281 295
33120017	Steel sheet and strip, including tin plate	X	27 482	X	26 135
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products)	X	56 754	X	64 525
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	17 415	X	24 849
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	25 183	X	15 873
33100057	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	5 829	X	3 033
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	25 322	X	26 893
33300011	Construction machinery and parts thereof, including shipwinches, cranes, derricks, and capstans	X	44 574	X	42 873
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	53 066	X	61 082
32100021	Dressed lumber	X	9 761	X	12 604
00970099	All other materials and components, parts, containers, and supplies	X	1 615 600	X	1 425 077
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	658 400	X	705 420

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>336612, BOAT BUILDING</b>					
33361811	Diesel and semidiesel engines . . . . .	X	117 573	X	N
33361807	Gasoline and other internal combustion engines . . . . .	X	665 814	X	N
33531221	Integral horsepower electric motors and generators (1 hp or more) . . . . .	X	57 985	X	N
00190088	Boat propellers . . . . .	X	22 986	X	N
33251013	Marine metal hardware (including shackles, rope shackles, rope sockets, tackle blocks) (except forgings) . . . . .	X	70 383	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	23 590	X	N
33200061	Other fabricated metal products (except forgings) . . . . .	X	45 863	X	N
33210001	Forgings . . . . .	X	2 605	X	N
33100035	Castings (rough and semifinished) . . . . .	X	6 989	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	10 327	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	57 945	X	N
33131600	Aluminum and aluminum-base alloy extruded shapes, including extruded rod, bar, pipe, tube, etc. . . . .	X	34 796	X	N
33100049	Other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	37 361	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	1 712	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. . . . .	X	129 970	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	68 450	X	N
32721205	Glass fiber, textile type, bonded mat type, etc. . . . .	X	115 839	X	N
32100021	Dressed lumber . . . . .	X	37 129	X	N
32121003	Plywood . . . . .	X	62 126	X	N
31411003	Carpeting . . . . .	X	29 020	X	N
31491200	Canvas products . . . . .	X	29 479	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	28 144	X	N
33451101	Marine nautical and navigation equipment operating by radio signal . . . . .	X	45 965	X	N
33391105	Bilge pumps . . . . .	X	11 281	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	732 931	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	525 399	X	N
<b>336991, MOTORCYCLE, BICYCLE, &amp; PARTS MFG</b>					
33699101	Frames, forks, and parts thereof, bicycle . . . . .	X	92 282	X	N
33699103	Wheel rims and spokes, bicycle . . . . .	X	33 678	X	N
33699109	Seats (saddles), bicycle . . . . .	X	15 672	X	N
32621003	Pneumatic tires and inner tubes . . . . .	X	49 593	X	N
33699115	Other bicycle parts . . . . .	X	143 963	X	N
33200081	Fabricated metal products (except forgings) . . . . .	X	D	X	N
33210001	Forgings . . . . .	X	D	X	N
33100035	Castings (rough and semifinished) . . . . .	X	D	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products . . . . .	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	245 494	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	237 200	X	N
<b>336992, MILITARY ARMORED VEHICLE, TANK, &amp; TANK COMPONENT MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products . . . . .	X	15 426	X	N
33200095	Other fabricated metal products (except forgings) . . . . .	X	165 166	X	N
33151001	Iron and steel castings (rough and semifinished) . . . . .	X	3 756	X	N
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) . . . . .	X	D	X	N
33152003	Other nonferrous castings (rough and semifinished) . . . . .	X	D	X	N
33211101	Iron and steel forgings . . . . .	X	D	X	N
33211203	Aluminum and aluminum-base alloy forgings . . . . .	X	D	X	N
33211207	Other nonferrous forgings . . . . .	X	-	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	-	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	126 848	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	34 795	X	N
<b>336999, ALL OTHER TRANSPORTATION EQUIPMENT MFG</b>					
33600003	Trailer axles, wheels, brakes, undercarriages, and other metal vehicular parts . . . . .	X	199 528	X	N
33361801	Internal combustion engines, gasoline . . . . .	X	592 957	X	N
32621003	Pneumatic tires and inner tubes . . . . .	X	47 970	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	207 712	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	60 354	X	N
33200081	Fabricated metal products (except forgings) . . . . .	X	188 360	X	N
33210001	Forgings . . . . .	X	18 485	X	N
33100035	Castings (rough and semifinished) . . . . .	X	56 456	X	N
33120007	Steel bars, bar shapes, and plates (except castings, forgings, and fabricated metal products) . . . . .	X	51 925	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	84 254	X	N
33120019	Steel structural shapes and sheet piling (except castings, forgings, and fabricated metal products) . . . . .	X	86 293	X	N
33120091	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	30 948	X	N
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	39 221	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	6 773	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	689 908	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	262 390	X	N

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<b>337110, WOOD KITCHEN CABINET &amp; COUNTER TOP MFG</b>					
32191203	Hardwood cut stock and dimension, excluding furniture frames	X	308 585	X	N
32121105	Hardwood veneer	X	60 639	X	N
32121101	Hardwood plywood	X	179 245	X	N
32121201	Softwood plywood	X	26 774	X	N
32121903	Particleboard (wood)	X	352 053	X	N
32121909	Hardboard	X	32 074	X	N
32121907	Medium density fiberboard (MDF)	X	46 675	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	82 734	X	N
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32100025	Hardwood lumber, rough and dressed	X	386 383	X	N
32100031	Softwood lumber, rough and dressed	X	23 635	X	N
32721101	Flat glass (plate, float, and sheet)	X	D	X	N
32552001	Adhesives and sealants	X	38 075	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	204 408	X	N
32610017	Plastics parts, components, sheets, and other shapes (excluding plastics resins)	X	130 993	X	N
00970099	All other materials and components, parts, containers, and supplies	X	379 964	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 273 583	X	N
<b>337121, UPHOLSTERED HOUSEHOLD FURNITURE MFG</b>					
32100025	Hardwood lumber, rough and dressed	X	142 492	X	N
32100031	Softwood lumber, rough and dressed	X	54 175	X	N
32191203	Hardwood cut stock and dimension, excluding furniture frames	X	96 311	X	N
33721500	Furniture frames, wood	X	381 538	X	N
31321007	Woven cotton upholstery fabrics, excluding ticking	X	355 785	X	N
31321011	Other woven upholstery fabrics (rayon, nylon, polyester, etc.), excluding ticking	X	501 040	X	N
31499901	Paddings, battings, and fillings, except rubber and plastics foam	X	202 468	X	N
31332007	Coated or laminated fabrics, including vinyl coated	X	372 987	X	N
33261200	Springs, innerspring units, and box spring constructions	X	108 283	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	142 651	X	N
33251007	Constructions (sleeper mechanisms) for dual purpose sleep furniture	X	73 128	X	N
32600001	Foam cores for mattresses, including latex, excluding topper pads	X	49 215	X	N
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane)	X	444 590	X	N
00970099	All other materials and components, parts, containers, and supplies	X	553 779	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	622 087	X	N
<b>337122, NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MFG</b>					
32100025	Hardwood lumber, rough and dressed	X	696 621	X	N
32100031	Softwood lumber, rough and dressed	X	175 670	X	N
32191203	Hardwood cut stock and dimension, excluding furniture frames	X	286 361	X	N
32121201	Softwood plywood	X	38 876	X	N
32121101	Hardwood plywood	X	133 713	X	N
32121105	Hardwood veneer	X	143 269	X	N
32121903	Particleboard (wood)	X	341 775	X	N
32121907	Medium density fiberboard (MDF)	X	136 458	X	N
32121909	Hardboard	X	37 568	X	N
33721500	Furniture frames, wood	X	239 502	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	149 355	X	N
32552001	Adhesives and sealants	X	30 345	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	12 253	X	N
32610017	Plastics parts, components, sheets, and other shapes (excluding plastics resins)	X	44 735	X	N
32721101	Flat glass (plate, float, and sheet)	X	61 260	X	N
32721503	Mirrors, framed and unframed	X	58 076	X	N
31320027	Fabrics, all types	X	80 043	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	332 687	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	244 648	X	N
00970099	All other materials and components, parts, containers, and supplies	X	640 247	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	778 914	X	N
<b>337124, METAL HOUSEHOLD FURNITURE MFG</b>					
332000AC	Metal stampings	X	7 611	X	8 379
332000AA	Other fabricated metal products, except forgings	X	71 753	X	52 859
33120017	Steel sheet and strip, including tin plate	X	37 869	X	42 244
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	94 034	X	83 619
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	48 164	X	39 276
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	47 952	X	21 252
32610017	Plastics parts, components, sheets, and other shapes (excluding plastics resins)	X	47 712	X	49 219
00190097	Hardwood dimension and parts, including wood furniture frames	X	40 900	X	40 077
32121903	Particleboard (wood)	X	23 148	X	13 242
32721101	Flat glass (plate, float, and sheet)	X	14 561	X	18 071
31332007	Coated or laminated fabrics, including vinyl coated	X	52 034	X	50 055
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	21 402	X	18 762
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	38 539	X	32 563
32221001	Paperboard containers, boxes, and corrugated paperboard	X	61 615	X	44 568
00970099	All other materials and components, parts, containers, and supplies	X	241 498	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	185 450	X	116 292

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>337125, HOUSEHOLD FURNITURE (EXCEPT WOOD &amp; METAL) MFG</b>					
32100025	Hardwood lumber, rough and dressed	X	1 669	X	444
32100031	Softwood lumber, rough and dressed	X	D	X	D
32191203	Hardwood cut stock and dimension, excluding furniture frames	X	D	X	D
32121201	Softwood plywood	X	95	X	200
32121101	Hardwood plywood	X	681	X	240
32121105	Hardwood veneer	X	D	X	D
32121903	Particleboard (wood)	X	721	X	145
32121907	Medium density fiberboard (MDF)	X	D	X	361
32121909	Hardboard	X	D	X	57
33721500	Furniture frames, wood	X	8 456	X	D
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	4 391	X	5 514
32552001	Adhesives and sealants	X	D	X	328
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	112 443	X	102 950
32610017	Plastics parts, components, sheets, and other shapes (excluding plastics resins)	X	8 268	X	5 217
32721101	Flat glass (plate, float, and sheet)	X	795	X	914
32721503	Mirrors, framed and unframed	X	D	X	54
31320027	Fabrics, all types	X	4 368	X	2 258
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	4 929	X	645
32221001	Paperboard containers, boxes, and corrugated paperboard	X	9 887	X	15 201
00970099	All other materials and components, parts, containers, and supplies	X	31 050	X	41 287
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	49 208	X	48 115
<b>337127, INSTITUTIONAL FURNITURE MFG</b>					
332000AC	Metal stampings	X	28 788	X	N
33200043	All other fabricated metal products (except castings and forgings)	X	26 737	X	N
33210001	Forgings	X	2 216	X	N
33100035	Castings (rough and semifinished)	X	15 101	X	N
33120017	Steel sheet and strip, including tin plate	X	142 453	X	N
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	69 100	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	18 599	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	40 699	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	3 797	X	N
32100025	Hardwood lumber, rough and dressed	X	126 520	X	N
32100031	Softwood lumber, rough and dressed	X	7 788	X	N
00190097	Hardwood dimension and parts, including wood furniture frames	X	27 289	X	N
32121105	Hardwood veneer	X	12 604	X	N
32121101	Hardwood plywood	X	41 997	X	N
32121201	Softwood plywood	X	11 107	X	N
32121903	Particleboard (wood)	X	34 052	X	N
32121907	Medium density fiberboard (MDF)	X	9 972	X	N
32121909	Hardboard	X	6 962	X	N
32613001	Plastics laminated sheets	X	53 948	X	N
32619909	Plastics furniture parts and components	X	81 085	X	N
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane)	X	25 035	X	N
31332007	Coated or laminated fabrics, including vinyl coated	X	22 367	X	N
31321019	Uncoated broadwoven fabrics for upholstery	X	18 501	X	N
32721101	Flat glass (plate, float, and sheet)	X	2 239	X	N
32552001	Adhesives and sealants	X	9 951	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	28 478	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	100 911	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	39 658	X	N
00970099	All other materials and components, parts, containers, and supplies	X	257 526	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	359 591	X	N
<b>337129, WOOD TELEVISION, RADIO, &amp; SEWING MACHINE CABINET MFG</b>					
32100025	Hardwood lumber, rough and dressed	X	14 465	X	12 264
32100031	Softwood lumber, rough and dressed	X	D	X	D
32191203	Hardwood cut stock and dimension, excluding furniture frames	X	5 130	X	D
32121201	Softwood plywood	X	383	X	521
32121101	Hardwood plywood	X	2 055	X	5 979
32121105	Hardwood veneer	X	11 839	X	1 204
32121903	Particleboard (wood)	X	10 741	X	16 459
32121907	Medium density fiberboard (MDF)	X	16 874	X	7 874
32121909	Hardboard	X	650	X	D
33721500	Furniture frames, wood	X	D	X	D
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	6 600	X	4 904
32552001	Adhesives and sealants	X	740	X	1 271
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	D	X	D
32610017	Plastics parts, components, sheets, and other shapes (excluding plastics resins)	X	3 276	X	4 154
32721101	Flat glass (plate, float, and sheet)	X	1 222	X	1 675
32721503	Mirrors, framed and unframed	X	28	X	D
31320027	Fabrics, all types	X	177	X	1 519
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	14 025	X	13 369
32221001	Paperboard containers, boxes, and corrugated paperboard	X	13 764	X	13 715
00970099	All other materials and components, parts, containers, and supplies	X	18 262	X	7 138
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	28 329	X	24 728

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>337211, WOOD OFFICE FURNITURE MFG</b>					
332000AC	Metal stampings	X	7 982	X	4 094
33200043	All other fabricated metal products (except castings and forgings)	X	9 918	X	9 864
33210001	Forgings	X	-	X	184
33100035	Castings (rough and semifinished)	X	2 213	X	350
33120017	Steel sheet and strip, including tin plate	X	24 238	X	4 035
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	20 321	X	4 983
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	962	X	Z
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	850
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
32100025	Hardwood lumber, rough and dressed	X	60 621	X	53 315
32100031	Softwood lumber, rough and dressed	X	3 667	X	5 263
00190097	Hardwood dimension and parts, including wood furniture frames	X	89 750	X	51 347
32121105	Hardwood veneer	X	36 168	X	33 544
32121101	Hardwood plywood	X	76 419	X	41 240
32121201	Softwood plywood	X	2 520	X	D
32121903	Particleboard (wood)	X	111 017	X	45 845
32121907	Medium density fiberboard (MDF)	X	24 626	X	5 850
32121909	Hardboard	X	26 893	X	8 542
32613001	Plastics laminated sheets	X	35 527	X	26 566
32619909	Plastics furniture parts and components	X	31 247	X	8 908
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane)	X	14 213	X	8 674
31332007	Coated or laminated fabrics, including vinyl coated	X	31 198	X	13 407
31321019	Uncoated broadwoven fabrics for upholstery	X	29 139	X	22 991
32721101	Flat glass (plate, float, and sheet)	X	1 196	X	1 233
32552001	Adhesives and sealants	X	7 374	X	3 123
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	34 045	X	17 163
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	104 847	X	60 258
32221001	Paperboard containers, boxes, and corrugated paperboard	X	51 992	X	26 930
00970099	All other materials and components, parts, containers, and supplies	X	104 205	X	60 645
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	230 946	X	174 398
<b>337212, CUSTOM ARCHITECTURAL WOODWORK &amp; MILLWORK MFG</b>					
332000AC	Metal stampings	X	648	X	N
33200043	All other fabricated metal products (except castings and forgings)	X	9 184	X	N
33210001	Forgings	X	D	X	N
33100035	Castings (rough and semifinished)	X	D	X	N
33120017	Steel sheet and strip, including tin plate	X	2 140	X	N
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	2 227	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	309	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	4 597	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	843	X	N
32100025	Hardwood lumber, rough and dressed	X	73 012	X	N
32100031	Softwood lumber, rough and dressed	X	7 761	X	N
00190097	Hardwood dimension and parts, including wood furniture frames	X	5 912	X	N
32121105	Hardwood veneer	X	16 936	X	N
32121101	Hardwood plywood	X	42 453	X	N
32121201	Softwood plywood	X	8 407	X	N
32121903	Particleboard (wood)	X	43 867	X	N
32121907	Medium density fiberboard (MDF)	X	28 976	X	N
32121909	Hardboard	X	5 264	X	N
32613001	Plastics laminated sheets	X	35 170	X	N
32619909	Plastics furniture parts and components	X	9 125	X	N
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane)	X	1 004	X	N
31332007	Coated or laminated fabrics, including vinyl coated	X	3 150	X	N
31321019	Uncoated broadwoven fabrics for upholstery	X	2 218	X	N
32721101	Flat glass (plate, float, and sheet)	X	11 965	X	N
32552001	Adhesives and sealants	X	4 114	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	10 901	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	32 711	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	5 712	X	N
00970099	All other materials and components, parts, containers, and supplies	X	124 212	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	169 610	X	N
<b>337214, OFFICE FURNITURE (EXCEPT WOOD) MFG</b>					
332000AC	Metal stampings	X	136 023	X	D
33200043	All other fabricated metal products (except castings and forgings)	X	116 539	X	41 228
33210001	Forgings	X	D	X	D
33100035	Castings (rough and semifinished)	X	24 280	X	17 388
33120017	Steel sheet and strip, including tin plate	X	478 243	X	323 420
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	72 954	X	62 987
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	15 138	X	10 150
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	44 872	X	31 526
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
32100025	Hardwood lumber, rough and dressed	X	26 837	X	26 002
32100031	Softwood lumber, rough and dressed	X	1 789	X	3 059
00190097	Hardwood dimension and parts, including wood furniture frames	X	D	X	121 205
32121105	Hardwood veneer	X	36 470	X	7 330
32121101	Hardwood plywood	X	8 787	X	8 870
32121201	Softwood plywood	X	3 923	X	4 354
32121903	Particleboard (wood)	X	107 028	X	23 639
32121907	Medium density fiberboard (MDF)	X	16 213	X	D
32121909	Hardboard	X	19 535	X	10 742
32613001	Plastics laminated sheets	X	79 980	X	28 196
32619909	Plastics furniture parts and components	X	274 528	X	100 227

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>337214, OFFICE FURNITURE (EXCEPT WOOD) MFG—Con.</b>					
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane) . . . . .	X	36 516	X	48 371
31332007	Coated or laminated fabrics, including vinyl coated . . . . .	X	121 921	X	189 753
31321019	Uncoated broadwoven fabrics for upholstery . . . . .	X	116 181	X	209 504
32721101	Flat glass (plate, float, and sheet) . . . . .	X	2 414	X	1 533
32552001	Adhesives and sealants . . . . .	X	19 589	X	8 263
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	87 048	X	62 975
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc. . . . .	X	236 081	X	147 691
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	141 866	X	84 958
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	366 164	X	221 867
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	354 967	X	277 905
<b>337215, SHOWCASE, PARTITION, SHELVING, &amp; LOCKER MFG</b>					
332000AC	Metal stampings . . . . .	X	66 362	X	N
33200043	All other fabricated metal products (except castings and forgings) . . . . .	X	133 538	X	N
33210001	Forgings . . . . .	X	4 587	X	N
33100035	Castings (rough and semifinished) . . . . .	X	5 089	X	N
33120017	Steel sheet and strip, including tin plate . . . . .	X	568 876	X	N
33120083	All other steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	150 831	X	N
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	35 808	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	36 687	X	N
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	4 543	X	N
32100025	Hardwood lumber, rough and dressed . . . . .	X	96 011	X	N
32100031	Softwood lumber, rough and dressed . . . . .	X	29 852	X	N
00190097	Hardwood dimension and parts, including wood furniture frames . . . . .	X	24 704	X	N
32121105	Hardwood veneer . . . . .	X	11 021	X	N
32121101	Hardwood plywood . . . . .	X	53 304	X	N
32121201	Softwood plywood . . . . .	X	23 274	X	N
32121903	Particleboard (wood) . . . . .	X	99 672	X	N
32121907	Medium density fiberboard (MDF) . . . . .	X	45 967	X	N
32121909	Hardboard . . . . .	X	23 608	X	N
32613001	Plastics laminated sheets . . . . .	X	75 517	X	N
32619909	Plastics furniture parts and components . . . . .	X	33 353	X	N
32615000	Formed and slab stock for pillows, cushions, seating, etc. (urethane) . . . . .	X	1 195	X	N
31332007	Coated or laminated fabrics, including vinyl coated . . . . .	X	3 081	X	N
31321019	Uncoated broadwoven fabrics for upholstery . . . . .	X	4 066	X	N
32721101	Flat glass (plate, float, and sheet) . . . . .	X	14 821	X	N
32552001	Adhesives and sealants . . . . .	X	10 737	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products . . . . .	X	81 968	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc. . . . .	X	73 811	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	90 811	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	404 084	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	752 857	X	N
<b>337910, MATTRESS MFG</b>					
00190097	Hardwood dimension and parts, including wood furniture frames . . . . .	X	75 787	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	35 925	X	N
33100001	Metal mill shapes and forms, including castings (steel, aluminum, etc.) . . . . .	X	18 433	X	N
33261200	Springs, innerspring units, and box spring constructions . . . . .	X	471 477	X	N
33251007	Constructions (sleeper mechanisms) for dual purpose sleep furniture . . . . .	X	7 479	X	N
32600001	Foam cores for mattresses, including latex, excluding topper pads . . . . .	X	63 718	X	N
31320011	Woven upholstery fabrics (cotton, nylon, polyester, rayon, etc.), excluding ticking . . . . .	X	43 326	X	N
31321005	Ticking (mattress) . . . . .	X	256 731	X	N
00190047	Cotton linters and cotton waste . . . . .	X	20 848	X	N
32600059	Padding, foam (except mattress cores) . . . . .	X	207 472	X	N
00190048	Cotton felt filling materials, purchased premade . . . . .	X	18 436	X	N
00190049	Insulators, all types, except cotton felt, purchased premade . . . . .	X	56 225	X	N
00190044	Other cushioning materials, purchased premade . . . . .	X	17 204	X	N
32220017	Paper and paperboard containers, including shipping sacks and other paper packaging supplies . . . . .	X	15 833	X	N
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	217 480	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	372 330	X	N
<b>337920, BLIND &amp; SHADE MFG</b>					
33200005	Fabricated metal products, including forgings . . . . .	X	64 794	X	43 805
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	39 264	X	44 631
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing . . . . .	X	47 818	X	D
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) . . . . .	X	66 218	X	57 267
31332003	Plastics coated fabrics and shade cloth . . . . .	X	173 461	X	92 747
31499100	Cordage . . . . .	X	18 121	X	D
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes . . . . .	X	101 557	X	43 219
32221001	Paperboard containers, boxes, and corrugated paperboard . . . . .	X	27 944	X	23 427
00970099	All other materials and components, parts, containers, and supplies . . . . .	X	196 377	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. . . . .	X	364 644	X	304 380
<b>339111, LABORATORY APPARATUS &amp; FURNITURE MFG</b>					
33441200	Printed circuit boards (without inserted components) for electronic circuitry . . . . .	X	6 784	X	14 771
001900C4	Printed circuit assemblies, loaded boards or modules (printed circuit boards with inserted electronic components) . . . . .	X	36 857	X	29 789
33441300	Semiconductors, including transistors, diodes, rectifiers, and integrated circuits for electronic circuitry . . . . .	X	12 032	X	7 538
33441400	Capacitors for electronic circuitry . . . . .	X	2 035	X	1 848
33441500	Resistors for electronic circuitry . . . . .	X	5 238	X	1 570
001900D3	Other components and accessories for electronic circuitry, n.e.c., except tubes . . . . .	X	12 007	X	8 817

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>339111, LABORATORY APPARATUS &amp; FURNITURE MFG—Con.</b>					
33593101	Current-carrying wiring devices .....	X	16 460	X	8 766
001900B1	Electrical transmission, distribution, and control equipment .....	X	6 934	X	1 618
33410001	Electronic computing equipment .....	X	5 310	X	4 280
33451501	Electrical instrument mechanisms and meter movements (including instrument relays) .....	X	7 463	X	3 573
33451503	Electrical measuring instruments and parts, not listed elsewhere .....	X	6 139	X	1 474
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	20 908	X	9 196
32610007	Fabricated plastics products (except gaskets, hoses, and belting) .....	X	18 333	X	11 755
332000A9	Sheet metal products, except stampings .....	X	49 375	X	49 142
332000AC	Metal stampings .....	X	4 108	X	1 348
332000AE	Other fabricated metal products (except forgings) .....	X	32 673	X	N
33210001	Forgings .....	X	4 462	X	D
33100035	Castings (rough and semifinished) .....	X	9 608	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products .....	X	15 972	X	N
32720003	Glass and glass products (excluding windows and mirrors) .....	X	15 656	X	8 742
00970099	All other materials and components, parts, containers, and supplies .....	X	248 365	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	197 630	X	D
<b>339112, SURGICAL &amp; MEDICAL INSTRUMENT MFG</b>					
33910000	Surgical and orthopedic supplies, including sutures and hypodermic needles for further manufacture or assembly .....	X	632 932	X	474 875
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components .....	X	265 140	X	178 783
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	65 515	X	64 822
33200095	Other fabricated metal products (except forgings) .....	X	345 810	X	135 696
33211101	Iron and steel forgings .....	X	15 426	X	16 633
33211201	Nonferrous forgings .....	X	3 084	X	2 083
33151001	Iron and steel castings (rough and semifinished) .....	X	5 651	X	18 356
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....	X	12 012	X	7 335
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	78 204	X	48 803
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	25 056	X	23 109
31323001	Nonwoven fabrics .....	X	17 445	X	5 505
31321025	Broadwoven fabrics .....	X	19 328	X	13 282
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	188 194	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	207 371	X	146 471
32610009	Fabricated plastics products .....	X	404 084	X	261 087
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets .....	X	58 965	X	56 250
32552001	Adhesives and sealants .....	X	9 313	X	5 620
32720007	Glass and glass products, except photographic and projection lenses and prisms .....	X	14 261	X	17 614
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	130 329	X	79 243
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	44 839	X	48 085
00970099	All other materials and components, parts, containers, and supplies .....	X	614 091	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	1 201 552	X	N
<b>339113, SURGICAL APPLIANCE &amp; SUPPLIES MFG</b>					
33910000	Surgical and orthopedic supplies, including sutures and hypodermic needles for further manufacture or assembly .....	X	568 409	X	N
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components .....	X	97 807	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	37 369	X	N
33200043	All other fabricated metal products (except castings and forgings) .....	X	153 553	X	N
33211101	Iron and steel forgings .....	X	12 968	X	N
33211201	Nonferrous forgings .....	X	14 629	X	N
33151001	Iron and steel castings (rough and semifinished) .....	X	69 906	X	N
33152011	Nonferrous (aluminum, copper, etc.) castings (rough and semifinished) .....	X	21 814	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	72 464	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	49 345	X	N
31323001	Nonwoven fabrics .....	X	328 109	X	N
31321025	Broadwoven fabrics .....	X	204 363	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	118 850	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	132 220	X	N
32610009	Fabricated plastics products .....	X	135 252	X	N
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets .....	X	25 606	X	N
32720007	Glass and glass products, except photographic and projection lenses and prisms .....	X	4 974	X	N
32552001	Adhesives and sealants .....	X	30 954	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	112 896	X	N
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	73 518	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	840 032	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	1 130 226	X	N
<b>339114, DENTAL EQUIPMENT &amp; SUPPLIES MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....	X	15 215	X	N
33210001	Forgings .....	X	1 802	X	N
33100035	Castings (rough and semifinished) .....	X	12 570	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	17 085	X	N
33200095	Other fabricated metal products (except forgings) .....	X	46 306	X	54 217
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	9 767	X	9 300



**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>339114, DENTAL EQUIPMENT &amp; SUPPLIES MFG—Con.</b>					
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc. ....	X	141 172	X	136 466
32500007	Chemicals, all types, except resins .....	X	54 138	X	31 614
001900B7	Resistors, capacitors, transformers, electron tubes, semiconductors, and other electronic components .....	X	29 659	X	8 770
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	11 407	X	10 981
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	13 606	X	10 933
32610011	Fabricated plastics products (except gaskets) .....	X	32 028	X	21 214
32720007	Glass and glass products, except photographic and projection lenses and prisms .....	X	14 341	X	15 083
32210015	Paper and paperboard products except paperboard boxes, containers, and corrugated paperboard .....	X	13 423	X	5 806
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	25 544	X	14 170
00970099	All other materials and components, parts, containers, and supplies .....	X	160 701	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	128 946	X	N
<b>339115, OPHTHALMIC GOODS MFG</b>					
32721211	Lens blanks, optical and ophthalmic .....	X	199 015	X	144 688
33331403	Lenses and prisms for optical instruments, and sighting and fire control equipment .....	X	D	X	11 728
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	62 254	X	55 026
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	51 800	X	47 997
32221001	Paperboard containers, boxes, and corrugated paperboard .....	X	D	X	12 479
00970099	All other materials and components, parts, containers, and supplies .....	X	230 083	X	153 214
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	238 347	X	123 805
<b>339911, JEWELRY (EXCEPT COSTUME) MFG</b>					
33200005	Fabricated metal products, including forgings .....	X	50 504	X	N
33100035	Castings (rough and semifinished) .....	X	D	X	N
32500067	Other chemicals and allied products .....	X	D	X	N
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc. ....	X	681 958	X	N
33100027	Other shapes and forms, including castings .....	X	92 727	X	N
33991303	Precious, semiprecious, and synthetic stones, and pearls; cut, polished, or drilled .....	X	497 539	X	N
33991301	Jewelers' findings, including joints, pins, clasps, chains, flat stock, etc. ....	X	94 358	X	N
33990000	Other jewelry, silverware, and plated ware .....	X	78 936	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	206 858	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	662 321	X	N
<b>339912, SILVERWARE &amp; PLATED WARE MFG</b>					
33100035	Castings (rough and semifinished) .....	X	3 924	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products .....	X	D	X	N
33200081	Fabricated metal products (except forgings) .....	X	24 054	X	N
33210001	Forgings .....	X	D	X	N
33100003	Metal shapes and forms (except precious metals, castings, forgings, and fabricated metal products) .....	X	D	X	N
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc. ....	X	59 236	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	108 044	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	20 969	X	N
<b>339913, JEWELERS' MATERIAL &amp; LAPIDARY WORK MFG</b>					
33200005	Fabricated metal products, including forgings .....	X	D	X	22 278
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc. ....	X	122 995	X	122 961
33100027	Other shapes and forms, including castings .....	X	D	X	5 913
33991303	Precious, semiprecious, and synthetic stones, and pearls; cut, polished, or drilled .....	X	94 843	X	127 352
33991301	Jewelers' findings, including joints, pins, clasps, chains, flat stock, etc. ....	X	31 807	X	18 003
33990000	Other jewelry, silverware, and plated ware .....	X	40 795	X	171
00970099	All other materials and components, parts, containers, and supplies .....	X	5 948	X	10 251
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	129 428	X	167 334
<b>339914, COSTUME JEWELRY &amp; NOVELTY MFG</b>					
33200005	Fabricated metal products, including forgings .....	X	28 507	X	N
33100035	Castings (rough and semifinished) .....	X	D	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33120017	Steel sheet and strip, including tin plate .....	X	D	X	N
33120021	Steel pipes (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33142135	Copper and copper-base alloy pipe and tube (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33142141	All other copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	D	X	N
33141901	Precious metals (gold, platinum, etc.), all forms, including ingot, sheet, strip, solder, plating, electrodes, etc. ....	X	24 373	X	N
33100027	Other shapes and forms, including castings .....	X	6 085	X	N
33991303	Precious, semiprecious, and synthetic stones, and pearls; cut, polished, or drilled .....	X	54 884	X	N
33991301	Jewelers' findings, including joints, pins, clasps, chains, flat stock, etc. ....	X	43 461	X	N
33990000	Other jewelry, silverware, and plated ware .....	X	39 097	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	65 646	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	118 044	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>339920, SPORTING &amp; ATHLETIC GOODS MFG</b>					
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	X	78 574	X	59 208
33200095	Other fabricated metal products (except forgings)	X	158 973	X	149 813
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished)	X	82 842	X	26 338
33152015	Other castings (rough and semifinished)	X	154 799	X	64 317
33210001	Forgings	X	3 608	X	2 251
33120017	Steel sheet and strip, including tin plate	X	96 470	X	54 668
33120027	All other steel shapes and forms (except castings, forgings, and fabricated metal products)	X	148 334	X	120 302
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing	X	22 833	X	52 123
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	56 615	X	14 739
33100077	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	20 234	X	25 920
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	52 525	X	33 409
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	176 452	X	174 907
32500051	All other chemicals and allied products	X	55 129	X	15 496
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	137 861	X	102 217
31320007	Cotton, wool, manmade fiber fabrics, etc.	X	98 397	X	76 459
31611001	Finished leather	X	15 285	X	17 387
32100019	Rough and dressed lumber	X	87 479	X	62 671
00190004	Parts specially designed for sporting goods	X	567 860	X	495 599
32221001	Paperboard containers, boxes, and corrugated paperboard	X	161 873	X	81 040
00970099	All other materials and components, parts, containers, and supplies	X	877 911	X	606 757
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	766 040	X	597 644
<b>339931, DOLL &amp; STUFFED TOY MFG</b>					
33200005	Fabricated metal products, including forgings	X	D	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	88	X	D
33100041	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	D
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	6 262	X	2 063
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	898	X	848
31321023	Broadwoven fabrics (piece goods)	X	15 297	X	6 927
32213001	Paperboard (including news, chip, pasted, tablet, check, binders' board), except for shipping	X	D	X	895
32221001	Paperboard containers, boxes, and corrugated paperboard	X	1 115	X	933
32200003	Other paper products	X	177	X	167
32100025	Hardwood lumber, rough and dressed	X	D	X	D
32100031	Softwood lumber, rough and dressed	X	D	X	N
32100005	Other wood products (except lumber)	X	186	X	D
001900B4	Electronic components and accessories, including circuit boards and recording heads	X	D	X	N
33993100	Doll parts	X	20 175	X	15 736
00970099	All other materials and components, parts, containers, and supplies	X	12 065	X	16 525
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	28 889	X	30 579
<b>339932, GAME, TOY, &amp; CHILDREN'S VEHICLE MFG</b>					
33200005	Fabricated metal products, including forgings	X	30 978	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	24 896	X	N
33100041	All other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	317 128	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	140 709	X	N
31321023	Broadwoven fabrics (piece goods)	X	22 686	X	N
32213001	Paperboard (including news, chip, pasted, tablet, check, binders' board), except for shipping	X	77 885	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	150 304	X	N
32200003	Other paper products	X	45 536	X	N
32100025	Hardwood lumber, rough and dressed	X	21 740	X	N
32100031	Softwood lumber, rough and dressed	X	11 267	X	N
32100005	Other wood products (except lumber)	X	13 596	X	N
001900B4	Electronic components and accessories, including circuit boards and recording heads	X	58 927	X	N
33993100	Doll parts	X	D	X	N
00970099	All other materials and components, parts, containers, and supplies	X	324 377	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	182 950	X	N
<b>339941, PEN &amp; MECHANICAL PENCIL MFG</b>					
32100001	Lumber and wood products, except furniture	X	D	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard	X	33 932	X	40 058
32513005	Pigments, lakes, and toners; organic and inorganic	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	2 574	X	D
32500059	Other chemicals and allied products	X	13 169	X	28 967
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	67 772	X	26 502
32700001	Stone, clay, glass, and concrete products	X	D	X	N
33200005	Fabricated metal products, including forgings	X	41 945	X	27 730
33994100	Parts for pens and mechanical pencils	X	177 326	X	156 554
00970099	All other materials and components, parts, containers, and supplies	X	107 303	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	31 605	X	12 633

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		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>339942, LEAD PENCIL &amp; ART GOOD MFG</b>					
33120017	Steel sheet and strip, including tin plate	X	6 983	X	N
33100055	All other aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	8 239	X	N
32100025	Hardwood lumber, rough and dressed	X	409	X	N
32100031	Softwood lumber, rough and dressed	X	655	X	N
32121903	Particleboard (wood)	X	1 845	X	N
32121907	Medium density fiberboard (MDF)	X	D	X	N
32121909	Hardboard	X	2 232	X	N
31321019	Uncoated broadwoven fabrics for upholstery	X	D	X	N
32721101	Flat glass (plate, float, and sheet)	X	665	X	N
32552001	Adhesives and sealants	X	1 204	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	4 287	X	N
33251001	Furniture and builders' hardware, including cabinet hardware, casters, glides, handles, hinges, locks, etc.	X	1 382	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	39 789	X	N
32100001	Lumber and wood products, except furniture	X	40 661	X	N
32513005	Pigments, lakes, and toners; organic and inorganic	X	28 451	X	N
32500059	Other chemicals and allied products	X	30 357	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	36 525	X	N
32700001	Stone, clay, glass, and concrete products	X	6 282	X	N
33200005	Fabricated metal products, including forgings	X	11 835	X	N
33994100	Parts for pens and mechanical pencils	X	4 796	X	N
00970099	All other materials and components, parts, containers, and supplies	X	109 858	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	71 917	X	N
<b>339943, MARKING DEVICE MFG</b>					
32100001	Lumber and wood products, except furniture	X	15 447	X	2 056
32221001	Paperboard containers, boxes, and corrugated paperboard	X	14 185	X	1 118
32513005	Pigments, lakes, and toners; organic and inorganic	X	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	2 088	X	D
32500059	Other chemicals and allied products	X	1 999	X	1 522
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	25 450	X	9 217
32700001	Stone, clay, glass, and concrete products	X	D	X	N
33200005	Fabricated metal products, including forgings	X	26 657	X	9 813
33994100	Parts for pens and mechanical pencils	X	D	X	D
00970099	All other materials and components, parts, containers, and supplies	X	66 462	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	29 457	X	56 886
<b>339944, CARBON PAPER &amp; INKED RIBBON MFG</b>					
31320003	Textile fabrics	X	12 259	X	N
32212005	Purchased (market) paper	X	27 731	X	42 610
32221001	Paperboard containers, boxes, and corrugated paperboard	X	32 371	X	20 408
32200009	Other paper and allied products	X	17 864	X	D
32518200	Carbon black	X	8 163	X	2 973
32591003	Printing ink	X	8 742	X	8 378
32500057	Other chemicals and allied products	X	63 726	X	29 481
00970099	All other materials and components, parts, containers, and supplies	X	160 993	X	110 246
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	45 167	X	37 792
<b>339950, SIGN MFG</b>					
32121001	Veneer and plywood	X	43 969	X	61 884
32200001	Paper and paperboard products including paperboard boxes, containers, and corrugated paperboard	X	157 618	X	154 589
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	43 839	X	41 891
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	32 007	X	34 010
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	262 370	X	178 961
33251005	Metal hardware, including hinges, handles, locks, casters, etc.	X	47 833	X	33 687
33200047	All other fabricated metal products (except castings and forgings)	X	132 092	X	89 607
33100035	Castings (rough and semifinished)	X	9 002	X	2 880
33210001	Forgings	X	2 377	X	465
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	35 239	X	31 589
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	38 668	X	38 581
33531100	Specialty transformers and fluorescent ballasts	X	59 286	X	51 327
32100043	Wood other than veneer and plywood	X	48 997	X	N
00190094	Manufactured products used for advertising specialties, such as pens, pencils, key chains, calendars, magnets, etc.	X	79 503	X	N
31300045	Textiles and fabrics	X	20 305	X	N
32591003	Printing ink	X	12 740	X	N
00970099	All other materials and components, parts, containers, and supplies	X	561 328	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	1 102 343	X	644 013
<b>339991, GASKET, PACKING, &amp; SEALING DEVICE MFG</b>					
32199901	Cork products	X	23 648	X	53 932
32212029	Building paper and board	X	52 926	X	59 683
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	130 979	X	52 380
32521205	Synthetic rubber	X	182 457	X	140 489
32520005	Other plastics materials and synthetic resins	X	78 032	X	93 659
11321001	Natural rubber	X	37 380	X	10 715
32600017	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	X	70 989	X	46 976
33290009	Fabricated metal wire products (including wire rope, cable, springs, etc.)	X	27 408	X	17 720
33200015	All other fabricated metal products (including forgings)	X	126 049	X	116 201
33120013	Steel tinplate, tin free steel, terneplate, and blackplate	X	21 380	X	13 800
33120077	All other steel shapes and forms (except forgings and fabricated metal products)	X	102 631	X	118 303
32799213	Natural graphite	X	29 593	X	N
32799901	Artificial graphite	X	1 818	X	N
32799201	Carbon, ground or treated	X	30 051	X	N

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NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
<b>339991, GASKET, PACKING, &amp; SEALING DEVICE MFG—Con.</b>					
00970099	All other materials and components, parts, containers, and supplies	X	600 324	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	237 074	X	130 741
<b>339992, MUSICAL INSTRUMENT MFG</b>					
32100019	Rough and dressed lumber	X	62 565	X	46 741
32221001	Paperboard containers, boxes, and corrugated paperboard	X	13 667	X	5 356
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	7 531	X	4 755
33431005	Loudspeakers, microphones, and tuners (all types)	X	4 887	X	4 126
001900A9	All other electronic and electrical equipment and components, except computer equipment	X	8 302	X	N
001900B4	Electronic components and accessories, including circuit boards and recording heads	X	33 649	X	44 648
33999200	Parts specially designed for musical instruments, including actions, strings, mouthpieces, etc.	X	100 119	X	100 313
00970099	All other materials and components, parts, containers, and supplies	X	118 230	X	76 700
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	54 818	X	48 655
<b>339993, FASTENER, BUTTON, NEEDLE, &amp; PIN MFG</b>					
33200005	Fabricated metal products, including forgings	X	20 467	X	21 759
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	15 042	X	17 227
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	12 535	X	5 350
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	52 600	X	46 826
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	2 687	X	5 570
31320005	Cotton and manmade fiber fabrics, broadwoven and narrow woven	X	38 866	X	46 836
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	25 233	X	17 609
33999301	Buttons, zippers, and slide fasteners	X	12 905	X	15 932
00970099	All other materials and components, parts, containers, and supplies	X	83 422	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	42 333	X	N
<b>339994, BROOM, BRUSH, &amp; MOP MFG</b>					
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes	X	85 035	X	N
33200081	Fabricated metal products (except forgings)	X	28 115	X	N
33100035	Castings (rough and semifinished)	X	1 350	X	503
33210001	Forgings	X	423	X	N
33100033	Metal shapes and forms, except castings, forgings, and fabricated metal products	X	22 010	X	N
11199800	Broomcorn	X	9 515	X	9 052
31300001	Yarns and textiles made of cotton, wool, silk, and manmade fibers	X	151 371	X	35 846
32100045	All other wood products except wood brush handles and backs and furniture	X	7 378	X	N
32199903	Wood brush handles and backs	X	56 002	X	30 047
32221001	Paperboard containers, boxes, and corrugated paperboard	X	60 050	X	29 363
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	X	75 459	X	47 680
33999900	Dressed hair (including bristle and horsehair)	X	26 827	X	16 348
00970099	All other materials and components, parts, containers, and supplies	X	270 196	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	41 641	X	N
<b>339995, BURIAL CASKET MFG</b>					
31320007	Cotton, wool, manmade fiber fabrics, etc.	X	52 343	X	55 148
32100019	Rough and dressed lumber	X	43 412	X	39 981
33251003	Metal casket and casket shell hardware	X	48 273	X	59 782
33200045	Other fabricated metal products (except castings and forgings)	X	12 380	X	11 754
33100035	Castings (rough and semifinished)	X	D	X	N
33210001	Forgings	X	D	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	83 389	X	68 991
331000AJ	Nonferrous shapes and forms (except castings, forgings, and fabricated metal products)	X	D	X	18 999
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	20 936	X	21 076
00970099	All other materials and components, parts, containers, and supplies	X	17 501	X	20 043
00971000	Materials, ingredients, containers, and supplies, n.s.k.	X	28 510	X	43 865
<b>339999, ALL OTHER MISCELLANEOUS MFG</b>					
11331015	Hardwood logs and bolts		mil bd ft Intl 1/4 in. scale..	X	N
32100023	Hardwood rough lumber	D	D	X	N
32100029	Softwood rough lumber	30.4	21 505	X	N
32100027	Hardwood dressed lumber	8.6	3 299	X	N
32100033	Softwood dressed lumber	S	26 638	X	N
32100007	Chips, slabs, edgings, shavings, sawdust, and other wood waste	35.1	20 973	X	N
32191203	Hardwood cut stock and dimension, excluding furniture frames	X	D	X	N
32121101	Hardwood plywood	X	7 036	X	N
32121201	Softwood plywood	D	D	X	N
32121901	Reconstituted wood products, including particleboard, oriented strandboard, medium density fiberboard, and hardboard	D	D	X	N
32551003	Paints, varnishes, lacquers, stains, shellacs, japans, enamels, and allied products	X	9 423	X	N
32721103	Glass (float, sheet and plate)	631.9	6 870	X	N
33200005	Fabricated metal products, including forgings	X	18 453	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard	X	3 271	X	N
33200081	Fabricated metal products (except forgings)	X	281 943	X	N
33100035	Castings (rough and semifinished)	X	260 394	X	N
33210001	Forgings	X	18 590	X	N
33120001	Steel shapes and forms (except castings, forgings, and fabricated metal products)	X	8 760	X	N
33142111	Copper and copper-base alloy shapes and forms (except castings, forgings, and fabricated metal products)	X	106 651	X	N
		X	15 313	X	N

**Table 1. Materials Consumed by Kind by Industry: 1997 and 1992—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

NAICS material code	Industry and materials consumed	1997		1992	
		Quantity	Delivered cost (\$1,000)	Quantity	Delivered cost (\$1,000)
	<b>339999, ALL OTHER MISCELLANEOUS MFG—Con.</b>				
33100039	Aluminum and aluminum-base alloy shapes and forms (except castings, forgings, and fabricated metal products) .....	X	29 104	X	N
33100083	Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products) .....	X	31 669	X	N
32610013	Plastics products consumed in the form of sheets, rods, tubes, film, and other shapes .....	X	145 229	X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....	X	113 365	X	N
32100019	Rough and dressed lumber .....	X	29 083	X	N
00970099	All other materials and components, parts, containers, and supplies .....	X	971 198	X	N
00971000	Materials, ingredients, containers, and supplies, n.s.k. ....	X	986 189	X	N

# Additional information is available for this item; see Appendix F.

# Appendix A.

## Explanation of Terms

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### **COST OF MATERIALS**

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are costs of parts, components, containers, etc., which includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.

### **Specific Materials Consumed**

In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. If less than \$25,000 of a listed material was consumed by an establishment, the cost data could be reported in the "Cost of all other materials..." Census material code 00970099. Also, the cost of materials for small establishments for which administrative records or short forms were used was imputed into the "Materials not specified by kind," Census materials code 00971000.

## Appendix B. NAICS Codes, Titles, and Descriptions

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Not applicable for this report.

# Appendix C.

## Coverage and Methodology

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### MAIL/NONMAIL UNIVERSE

The manufacturing universe includes about 400,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing, but not those industries leaving the manufacturing sector in the classification change. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures (ASM). The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

1. Small single-establishment companies not sent a report form.

Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and our ability to assign the correct six-digit NAICS industry classification to the establishment. For each four-digit Standard Industrial Classification (SIC) industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report which requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other Federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these

establishments but were included in the product and material “not specified by kind” (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a four-digit SIC industry and then erroneously re-coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit SIC group classification codes available in the files. For the 1997 Economic Census – Manufacturing, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other” industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

2. Establishments sent a report form.

The establishments covered in the mail canvass were divided into three groups:

- a. ASM sample establishments.

This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.



In an economic census year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A, Explanation of Terms for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 480 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in many cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

A wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

b. Large and medium establishments (non-ASM).

Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census – manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.

c. Small single-establishment companies (non-ASM).

This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the nsk categories.

## **INDUSTRY CLASSIFICATION OF ESTABLISHMENTS**

Each of the establishments covered in the 1997 Economic Census – Manufacturing was classified in 1 of 480 industries (473 manufacturing industries and 7 former manufacturing industries) in accordance with the industry definitions in the 1997 NAICS Manual. This is the first edition of the NAICS Manual and it is a major change from the 1987 SIC Manual that was used previously. Appendix A of the 1997 NAICS Manual notes the comparability between the 1987 SIC and 1997 NAICS classification systems. When applicable, Appendix G of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 1997, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). This represents an expansion of the four-digit SIC-based U.S. industries from 459 in 1987. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. In the new system, there are about 1,500 product classes (seven-digit codes), about 6,000 census products, and an additional 3,700 CIR products (ten-digit codes). The ten-digit products are considered the primary products of the industry with the same first six digits. These counts do not include the seven former manufacturing industries that are included in the 1997 Economic Census – Manufacturing.

For the 1997 Economic Census – Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 1997, there were no “resistance rules” or “frozen industries.”

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments which may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry’s output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

## **ESTABLISHMENT BASIS OF REPORTING**

The economic census – manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1997, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

The 1997 Economic Census – Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

## **DESCRIPTION OF THE ASM SURVEY SAMPLE**

The annual survey of manufactures (ASM) sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1994 survey year based on the 1992 Census of Manufactures. This sample will be in place through the 1998 ASM.

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In 1992, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the 1992 manufacturing population was partitioned into two components for developing estimates within the ASM; a mail stratum and a nonmail stratum.

**Mail stratum.** The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies that operate at more than one physical location). Approximately 230,000 of the 370,000 establishments in the 1992 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1994 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1992 census. Supplemental samples representing both 1993 and 1994 births (newly active establishments that were not included in the 1992 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 1998.

The 1994-98 ASM sample design is similar to the one used since 1984. Companies in the 1992 Census of Manufactures with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1994-98 sample, there are approximately 650 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. In addition, all establishments producing products in SIC 3571 (Electronic Computers) were defined as certainties. Across these three arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1992 Census of Manufactures.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1992 industry classification, its 1992 product class data, and the historical variability of the year-to-year estimates of the product class estimates. For each product class (1,755) and four-digit industry (459), a desired reliability

constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by our primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) which permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

**Nonmail component.** The initial nonmail component of the survey was comprised of approximately 140,000 small, single-establishment companies that were tabulated as administrative records in the 1992 Census of Manufactures. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

## DESCRIPTION OF THE ASM ESTIMATING PROCEDURE

Most of the ASM estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1992 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1993-1997 ASM estimates, the 1992 Census of Manufactures values serve as the base year. For the 1998 ASM, the base will be updated to be the 1997 Economic Census – Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference

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estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contains approximately 170,000 individual establishments in 1994, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication.

### **QUALIFICATIONS OF THE ASM DATA**

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.

From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

### **DATA FROM THE CURRENT INDUSTRIAL REPORTS (CIR)**

The CIR program provides product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. When detail product data are collected in the CIR, they are not also collected in the census. However, the annual CIR data are included in the census Product Summary report.

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 economic

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census – manufacturing. The economic census – manufacturing 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 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. While the CIR program includes both mandatory and voluntary surveys, the annual data are mandatory.

#### **DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS**

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

#### **VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS**

The 1997 Economic Census – Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

# Appendix D. Geographic Notes

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Not applicable for this report.

# Appendix E. Metropolitan Areas

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Not applicable for this report.

# Appendix F. Footnotes for Materials Consumed by Kind

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## Materials Statistics

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NAICS material code	Footnote
# 33100077 .....	Materials code 33100077, Other nonferrous shapes and forms (except castings, forgings, and fabricated metal products), includes all nonferrous shapes and forms, including aluminum, copper, etc.

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