

Manufactures

This section presents summary data for manufacturing as a whole and more detailed information for major industry groups and selected products. The types of measures shown at the different levels include data for establishments; employment and wages; raw materials, fuels, and electricity consumed; plant and equipment expenditures; value and quantity of production and shipments; value added by manufacture; inventories; and various indicators of financial status.

The principal sources of these data are Bureau of the Census reports of the censuses of manufactures conducted every 5 years; the *Annual Survey of Manufactures*; and the *Current Industrial Reports* series, which presents monthly, quarterly, or annual data on production, shipments, and stocks for particular commodities. Indexes of industrial production are presented monthly in the Federal Reserve Board's *Federal Reserve Bulletin*. Reports on current activities of industries, or current movements of individual commodities, are compiled by such government agencies as the Bureau of Labor Statistics; the Economic Research Service of the Department of Agriculture; the International Trade Administration; and by private research or trade associations such as The Conference Board, Inc., New York, NY, and the American Iron and Steel Institute, Washington, DC.

Data on financial aspects of manufacturing industries are collected by the Bureau of Economic Analysis (BEA) and the Bureau of the Census. Industry aggregates in the form of balance sheets, profit and loss statements, analyses of sales and expenses, lists of subsidiaries, and types and amounts of security issues are published for leading manufacturing corporations registered with the Securities and Exchange Commission. The BEA issues data on capital in manufacturing industries and capacity utilization rates in manufacturing. See also section 17, Business Enterprise.

Censuses and annual surveys—The first census of manufactures covered the year 1809. Between 1809 and 1963, a census was conducted at periodic intervals. Since 1967 it has been taken every

In Brief

Personal computer shipments topped 14.8 million units in 1993.

1-megabit DRAM chips:

	1993
<i>Revenue (millions)</i>	\$2,031
<i>Shipments (mil. units)</i>	601

5 years (for years ending in "2" and "7"). Census data, either direct reports or estimates from administrative records, are obtained for every manufacturing plant with one paid employee or more.

The *Annual Survey of Manufactures (ASM)*, conducted for the first time in 1949, collects data for the years between censuses for the more general measures of manufacturing activity covered in detail by the censuses. The annual survey data are estimates derived from a scientifically selected sample of establishments. The 1991 annual survey is based on a sample of about 55,000 establishments of an approximate total of 200,000. These establishments represent all manufacturing establishments of multiunit companies and all single-establishment manufacturing companies mailed schedules in the 1987 Census of Manufactures. The 1989 through 1993 ASM sample is similar to the previous sample. For the current panel, all establishments of companies with 1987 shipments in manufacturing in excess of \$500 million were included in the survey with certainty. For the remaining portion of the mail survey, the establishment was defined as the sampling unit. For this portion, all establishments with 250 employees or more and establishments with a very large value of shipments also were included. Therefore, of the 55,000 establishments included in the ASM panel, approximately 28,000 are selected with certainty. These establishments account for approximately 80 percent of total value of shipments in the 1987 census. Smaller establishments in the

remaining portion of the mail survey were selected by sample.

The basic statistical measures of manufacturing activity, such as employment, payrolls, value added, etc., are defined in essentially the same way for both the annual surveys and the census of manufactures. However, the bases for computing average employment vary for different years. For example, beginning with 1949, average employment was calculated from the figures reported for the pay periods ending nearest the 15th of March, May, August, and November; whereas, for 1947 such averages were based on 12 monthly employment figures. In 1967, the average employment calculation was revised to the pay periods which include the 12th of March, May, August, and November to provide data more comparable with other statistical series.

Establishments and classification—

The censuses of manufactures for 1947 through 1992 cover operating manufacturing establishments as defined in the *Standard Industrial Classification Manual (SIC)*, issued by the U.S. Office of Management and Budget (see text, section 13). The *Manual* is also used for classifying establishments in the annual surveys. The comparability of manufactures data over time is affected by changes in the official definitions of industries as presented in the *Manual*. It is important to note, therefore, that the 1987 edition of the *Manual* was used for the 1987 and 1992 censuses; and the 1972 edition of the *Manual* and the *1977 Supplement* were used for the 1972 through 1982 censuses. For the censuses from 1947 to 1963, reports were required from all establishments employing one or more persons at any time during the census year. Beginning with the 1967 census, an effort was made to relieve the very small establishments from the necessity of filing a census report. Approximately 150,000 small single-unit manufacturing firms identified as having less than 20 employees (cutoff varied by industry) benefited from this procedure. Data for these single-unit companies were estimated on the basis of government administrative records and industry averages. Each of the establishments tabulated was classified in 1 of the approximately 459

manufacturing industries as defined by the *SIC Manual* in 1987. The *Manual* defines an industry as a number of establishments producing a single product or a closely related group of products. In the main, an establishment is classified in a particular industry if its production of a product or product group exceeds in value added its production of any other product group. While some establishments produce only the products of the industry in which they are classified, few within an industry specialize to that extent. The statistics on employment, payrolls, value added, inventories, and expenditures, therefore, reflect both the primary and secondary activities of the establishments in that industry. For this reason, care should be exercised in relating such statistics to the total shipments figures of products primary to the industry.

The censuses for 1947 through 1992 were conducted on an establishment basis. The term "establishment" signifies a single physical plant site or factory. It is not necessarily identical to the business unit or company, which may consist of one or more establishments. A company operating establishments at more than one location is required to submit a separate report for each location. An establishment engaged in distinctly different lines of activity and maintaining separate payroll and inventory records is also required to submit separate reports.

Durable goods—Items with a normal life expectancy of 3 years or more. Automobiles, furniture, household appliances, and mobile homes are common examples.

Nondurable goods—Items which generally last for only a short time (3 years or less). Food, beverages, clothing, shoes, and gasoline are common examples.

Statistical reliability—For a discussion of statistical collection and estimation, sampling procedures and measures of statistical reliability applicable to Census Bureau data, see Appendix III.

Historical statistics—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

No. 1209. Gross Domestic Product in Manufacturing: 1980 to 1993

[In billions of dollars. 1980 and 1985 data are shown on the basis of the 1972 Standard Industrial Classification (SIC). Beginning 1988, data are based on the 1987 SIC. Data include nonfactor charges (capital consumption allowances, indirect business taxes, etc.) as well as factor charges against gross product; corporate profits and capital consumption allowances have been shifted from a company to an establishment basis]

ITEM	1972 SIC BASIS		1987 SIC BASIS					
	1980	1985	1988	1989	1990	1991	1992	1993
CURRENT DOLLARS								
Gross domestic product	2,708	4,039	4,900	5,251	5,546	5,725	6,020	6,343
Manufacturing	588	798	961	1,005	1,025	1,033	1,063	1,118
Durable goods	349	472	541	563	564	554	568	603
Lumber and wood products	19	24	32	33	31	29	31	35
Furniture and fixtures	8	14	16	16	16	16	17	18
Stone, clay, and glass products	18	24	24	25	25	23	25	26
Primary metal industries	44	36	43	46	44	42	40	42
Fabricated metal products	45	57	63	67	67	65	70	71
Machinery, exc. electrical	77	87	(X)	(X)	(X)	(X)	(X)	(X)
Industrial machinery and equipment	(X)	(X)	100	106	109	101	103	108
Electric and electronic equipment	55	84	(X)	(X)	(X)	(X)	(X)	(X)
Electronic and other electric equipment	(X)	(X)	81	87	86	88	86	93
Motor vehicles and equipment	27	58	59	53	46	45	57	68
Other transportation equipment	26	48	56	60	65	66	61	61
Instruments and related products	20	27	50	52	56	59	60	60
Misc. manufacturing industries	10	14	17	18	19	19	20	22
Nondurable goods	239	327	420	442	461	478	495	515
Food and kindred products	52	72	83	88	97	102	104	106
Tobacco manufactures	7	11	14	14	16	17	19	17
Textile mill products	15	17	20	21	22	22	24	25
Apparel and other textile products	17	21	24	25	25	26	27	28
Paper and allied products	23	33	44	47	46	46	46	47
Printing and publishing	33	52	65	71	72	73	77	80
Chemicals and allied products	48	67	94	100	104	107	111	117
Petroleum and coal products	24	24	41	38	40	44	43	48
Rubber and misc. plastics products	17	26	31	34	35	36	39	41
Leather and leather products	4	4	4	4	4	4	5	5
CONSTANT (1987) DOLLARS								
Gross domestic product	3,776	4,280	4,719	4,838	4,897	4,868	4,979	5,135
Manufacturing	725	811	924	932	929	911	925	971
Durable goods	424	468	536	543	537	526	534	573
Lumber and wood products	22	25	30	29	28	26	25	23
Furniture and fixtures	12	14	15	15	14	14	15	16
Stone, clay, and glass products	24	25	25	26	26	23	25	25
Primary metal industries	49	35	34	33	35	38	36	40
Fabricated metal products	55	58	62	61	60	57	60	64
Machinery, exc. electrical	81	78	(X)	(X)	(X)	(X)	(X)	(X)
Industrial machinery and equipment	(X)	(X)	97	102	102	101	108	125
Electric and electronic equipment	70	83	(X)	(X)	(X)	(X)	(X)	(X)
Electronic and other electric equipment	(X)	(X)	85	91	91	94	93	103
Motor vehicles and equipment	40	63	63	57	49	44	51	56
Other transportation equipment	38	47	58	61	64	61	54	52
Instruments and related products	24	27	50	50	50	51	50	50
Misc. manufacturing industries	10	14	17	17	17	17	17	19
Nondurable goods	301	342	387	389	392	385	391	398
Food and kindred products	64	75	82	79	84	83	83	84
Tobacco manufactures	20	14	12	10	9	9	8	8
Textile mill products	17	18	20	21	21	21	23	23
Apparel and other textile products	20	21	24	25	24	24	25	25
Paper and allied products	31	36	40	39	42	42	44	46
Printing and publishing	53	59	63	64	62	59	58	57
Chemicals and allied products	58	67	83	84	88	86	88	88
Petroleum and coal products	15	23	30	31	26	25	25	25
Rubber and misc. plastic products	19	26	30	32	32	33	35	37
Leather and leather products	5	4	4	4	4	4	4	4

X Not applicable.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, May and November 1993.

No. 1210. Manufactures—Summary: 1972 to 1994

[For establishment coverage, see text, section 27. For composition of regions, see table 26. See also, *Historical Statistics, Colonial Times to 1970*, series P 1-12]

ITEM	Unit	1972	1977	1982	1987	1992	1993 ¹	1994 ¹
ALL ESTABLISHMENTS								
Number of establishments ²	1,000 . .	321	360	358	369	382	(NA)	(NA)
With 20 or more employees	1,000 . .	114	119	123	126	125	(NA)	(NA)
Employee size-class:								
Establishments ³	1,000 . .	313	351	348	359	371	(NA)	(NA)
Under 20	1,000 . .	203	237	230	238	252	(NA)	(NA)
20 to 99	1,000 . .	76	78	84	86	85	(NA)	(NA)
100 to 249	1,000 . .	21	22	21	22	22	(NA)	(NA)
250 to 999	1,000 . .	11	12	11	11	11	(NA)	(NA)
1,000 and over	1,000 . .	3	2	2	2	2	(NA)	(NA)
Form of organization:								
Corporate	1,000 . .	233.2	284.2	283.2	287.4	304.0	(NA)	(NA)
Noncorporate	1,000 . .	87.5	75.7	74.0	81.5	77.7	(NA)	(NA)
Individual proprietorship	1,000 . .	42.5	52.3	45.6	35.4	40.9	(NA)	(NA)
Partnership	1,000 . .	17.7	18.3	15.0	13.2	10.3	(NA)	(NA)
All employees: ⁵								
Annual average ⁶	Million . .	19.0	19.6	19.1	18.9	18.2	18.2	18.3
Payroll	Bil. dol. .	174	264	380	476	559	573	594
Payroll per employee	\$1,000 . .	9.2	13.5	19.9	25.2	30.7	31.5	32.4
Production workers:								
Annual average	Million . .	13.5	13.7	12.4	12.2	11.6	11.7	11.9
Percent of all employees	Percent . .	71.1	69.9	64.9	64.6	63.8	64.3	65.1
Hours	Billion . .	26.7	26.7	23.5	24.3	23.6	23.8	24.5
Hours per worker	1,000 . .	2.0	1.9	1.9	2.0	2.0	2.0	2.1
Wages	Bil. dol. .	106	157	205	251	282	290	304
Percent of payroll for all employees	Percent . .	60.9	59.5	53.9	52.8	50.4	50.6	51.2
Wages per worker	\$1,000 . .	7.9	11.5	16.5	20.6	24.2	24.8	25.5
Wages per worker hour	Dollar . .	3.97	5.89	8.72	10.35	11.95	12.17	12.40
Value added by manufacture ⁷	Bil. dol. .	354	585	824	1,166	1,425	1,483	1,598
Per production worker	\$1,000 . .	26.2	42.7	66.5	95.5	122.6	126.5	133.9
Per production worker hour	Dollar . .	13.26	21.91	35.06	47.97	60.56	62.20	65.14
Per dollar of workers' wages	Dollar . .	3.34	3.73	4.02	4.64	5.07	5.11	5.25
Value added, percent distribution:								
Northeast	Percent . .	26.3	23.7	23.7	23.7	19.9	(NA)	(NA)
North Central	Percent . .	34.9	34.4	29.8	29.8	30.2	(NA)	(NA)
South	Percent . .	25.5	27.4	29.5	29.5	32.1	(NA)	(NA)
West	Percent . .	13.4	14.5	17.0	17.0	17.8	(NA)	(NA)
Cost of materials	Bil. dol. .	407	782	1,130	1,320	1,571	1,647	1,752
Value of shipments ⁸	Bil. dol. .	757	1,359	1,960	2,476	3,006	3,128	3,340
Per production worker	\$1,000 . .	56.1	99.2	158.1	203.0	258.0	266.7	279.7
End-of-year inventories	Bil. dol. .	108	188	307	333	374	383	397
New capital expenditures ⁹	Bil. dol. .	24.1	47.5	75.0	78.6	104.0	103.0	112.0
Gross book value of depreciable assets	Bil. dol. .	301	439	692	868	1,128	(NA)	(NA)
Machinery and equipment	Bil. dol. .	218	328	527	671	896	(NA)	(NA)
Assets per employee	\$1,000 . .	16.4	22.4	36.2	48.6	66.6	(NA)	(NA)
Operation ratios:								
Value added to shipments	Ratio . . .	46.7	42.9	42.0	47.1	47.9	47.4	47.9
Inventories to shipments	Ratio . . .	14.2	13.8	15.7	13.4	12.5	12.2	11.9
Payroll to value added	Ratio . . .	49.1	45.2	46.1	40.8	34.7	38.7	37.2
MULTIUNIT COMPANIES								
Establishments	1,000 . .	70.2	81.2	81.7	80.9	81.0	(NA)	(NA)
Employees	Million . .	14.3	15.0	14.3	13.8	13.1	(NA)	(NA)
Production workers	Million . .	9.8	10.1	8.8	8.5	8.0	(NA)	(NA)
Payroll	Bil. dol. .	138.8	214.2	307.5	377.3	436.0	(NA)	(NA)
Wages, production workers	Bil. dol. .	81.9	124.9	159.1	191.8	211.2	(NA)	(NA)
Value added by manufacture	Bil. dol. .	286.1	485.0	678.4	953.6	1,160	(NA)	(NA)
New capital expenditures	Bil. dol. .	20.0	41.0	65.2	66.5	87.8	(NA)	(NA)
SINGLE UNIT COMPANIES ¹⁰								
Establishments	1,000 . .	250.5	278.7	276.3	288.0	300.7	(NA)	(NA)
Employees	Million . .	4.8	4.6	4.8	5.1	5.1	(NA)	(NA)
Payroll	Bil. dol. .	35.4	49.8	72.1	98.3	123.1	(NA)	(NA)
Value added by manufacture	Bil. dol. .	67.9	100.1	145.7	212.1	265.0	(NA)	(NA)

NA Not available. ¹ Estimated data based on *Annual Survey of Manufactures*; see text, section 26. ² Includes administrative and auxiliary units. ³ Excludes administrative offices and auxiliary units. ⁴ Includes forms of organization not shown separately. ⁵ Includes data for employees of manufacturing establishments engaged in distribution and construction work.

⁶ Data are based on pay periods ending nearest 15th of March, May, August, and November. ⁷ Adjusted value added; takes into account (a) value added by merchandising operations (that is, difference between the sales value and cost of merchandise sold without further manufacture, processing, or assembly), plus (b) net change in finished goods and work-in-process inventories between beginning and end of year. ⁸ Includes extensive and unmeasurable duplication from shipments between establishments in the same industry classification. ⁹ Includes plants under construction and not yet in operation. ¹⁰ Beginning 1972, includes data obtained from Federal administrative records.

Source: Except as noted, U.S. Bureau of the Census, *Census of Manufactures, 1972, 1977, 1982, 1987 and 1992 and Annual Survey of Manufactures*.

No. 1211. Manufactures—Summary, by Industry: 1987 to 1994

[Data based on various editions of the *Standard Industrial Classification (SIC) Manual*, published by the Office of Management and Budget; see text, section 26. N.e.c.=Not elsewhere classified.
See also *Historical Statistics, Colonial Times to 1970*, series P 58-67]

INDUSTRY	SIC code	1987				1992				1994				
		Establishments	All employees		Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			Number ¹ (1,000)	Payroll (mil. dol.)			
All manufacturing establishments	(X)	358,952	17,718	428,480	1,165,741	16,949	494,109	11,641	1,424,700	18,344	594,104	11,941	1,598,464	3,340,223
Food and kindred products	20	20,624	1,449	30,268	122,073	1,503	36,772	1,100	157,260	1,512	38,492	1,112	171,988	430,994
Meat products	201	3,267	341	5,701	13,740	400	7,564	343	19,141	420	8,262	362	22,510	98,116
Dairy products	202	2,366	142	3,217	11,909	135	3,720	85	15,258	132	3,802	82	15,385	53,761
Preserved fruits and vegetables	203	1,912	209	3,784	17,272	216	4,825	179	23,644	213	4,997	178	24,609	50,239
Grain mill products	204	2,610	102	2,704	15,271	107	3,375	74	21,000	105	3,410	72	23,964	54,273
Bakery products	205	2,850	217	4,761	15,252	215	5,599	133	17,905	222	5,944	138	19,939	31,471
Sugar and confectionery products	206	1,094	90	1,991	8,927	91	2,402	71	10,950	90	2,546	70	11,252	23,913
Fats and oils	207	595	30	702	3,246	28	778	19	3,770	26	787	18	4,301	20,775
Beverages	208	2,214	161	4,521	22,694	144	4,786	74	29,260	139	4,873	71	31,409	61,347
Miscellaneous foods and kindred products	209	3,716	158	2,887	13,762	166	3,723	121	16,333	165	3,872	120	18,619	37,099
Tobacco products	21	138	45	1,486	14,261	38	1,524	27	27,207	34	1,441	24	22,131	30,021
Cigarettes	211	11	32	1,486	12,967	25	1,205	19	24,802	23	1,152	16	19,759	24,879
Cigars	212	20	3	36	106	3	53	2	190	3	55	2	193	291
Chewing and smoking tobacco	213	29	3	77	792	3	92	2	1,213	3	98	2	1,500	1,871
Tobacco stemming and redrying	214	78	7	139	395	7	174	5	1,002	6	137	4	678	2,980
Textile mill products	22	6,412	672	11,410	26,014	616	12,398	529	30,060	624	13,587	534	32,905	78,267
Broadwoven fabric mills, cotton	221	301	72	1,260	2,609	56	1,147	50	2,504	56	1,250	51	3,549	6,262
Broadwoven fabric mills, manmade	222	441	88	1,596	3,648	87	1,850	77	4,008	81	1,869	71	4,172	9,424
Broadwoven fabric mills, wool	223	119	14	236	494	14	279	12	691	15	337	13	729	1,810
Narrow fabric mills	224	277	19	296	612	17	323	14	706	18	358	14	834	1,470
Knitting mills	225	2,130	203	2,988	6,409	195	3,400	170	8,052	194	3,578	170	9,238	19,128
Textile finishing, except wool	226	971	56	1,036	2,364	51	1,143	41	2,786	55	1,359	45	3,216	7,855
Carpets and rugs	227	477	53	1,039	3,190	49	1,088	39	3,480	55	1,314	43	3,959	10,961
Yarn and thread mills	228	610	114	1,850	3,821	92	1,744	84	4,059	90	1,857	81	4,040	12,125
Miscellaneous textile goods	229	1,086	53	1,109	2,867	55	1,423	42	3,775	62	1,665	47	4,166	9,231
Apparel and other textile products	23	22,872	1,081	13,904	33,311	985	15,325	824	36,423	953	15,593	798	38,700	76,898
Men's and boys' suits and coats	231	347	55	779	1,964	44	723	37	1,375	34	604	29	1,431	2,362
Men's and boys' furnishings	232	2,195	280	3,246	8,675	261	3,649	228	9,864	243	3,561	213	9,764	18,224
Women's and misses' outerwear	233	10,290	349	4,297	10,000	306	4,597	256	10,836	309	4,740	259	11,141	22,734
Women's and children's undergarments	234	557	68	8,439	2,071	54	798	46	2,193	47	747	39	2,122	4,245

See footnotes at end of table.

No. 1211. Manufactures—Summary, by Industry: 1987 to 1994—Continued

[See headnote, page 733]

INDUSTRY	SIC code	1987				1992				1994				
		Establishments	All employees		Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			Number ¹ (1,000)	Payroll (mil. dol.)			
Apparel, other textile products—Con.														
Hats, caps, and millinery	235	461	17	204	361	19	280	16	572	18	296	14	573	990
Girls' and children's outerwear	236	834	72	826	1,967	53	775	44	1,667	48	791	39	2,190	3,926
Fur goods	237	380	2	48	137	1	21	1	68	1	16	1	55	137
Miscellaneous apparel and accessories	238	986	41	518	1,169	37	566	30	1,260	33	545	27	1,426	2,637
Miscellaneous fabricated textile products	239	6,822	198	3,143	6,969	211	3,918	169	8,586	221	4,295	178	9,998	21,645
Lumber and wood products														
Logging	241	11,952	86	1,518	4,164	83	1,689	69	5,017	87	1,820	72	5,948	16,818
Sawmills and planing mills	242	6,696	180	3,297	7,635	168	3,585	144	8,848	178	4,063	153	10,924	29,714
Millwork, plywood, and structural members	243	7,930	240	4,658	9,806	224	5,005	181	10,844	246	5,691	200	12,813	30,689
Wood containers	244	2,216	37	483	874	40	645	33	1,321	46	768	38	1,708	3,708
Wood buildings and mobile homes	245	1,077	65	1,215	2,453	56	1,234	44	2,531	70	1,654	56	3,618	9,787
Miscellaneous Wood Products	249	4,104	90	1,536	(NA)	84	1,725	69	4,593	92	1,905	76	5,679	12,927
Furniture and fixtures														
Household furniture	251	5,606	284	4,452	9,481	253	4,804	213	10,942	267	5,327	229	11,735	23,663
Office Furniture	252	986	81	1,790	(NA)	68	1,868	51	4,626	70	2,022	53	5,041	8,663
Public building and related furniture	253	484	22	397	844	30	732	23	1,736	34	840	26	1,905	5,641
Partitions and fixtures	254	2,455	74	1,552	3,094	75	1,818	55	3,633	76	1,930	56	3,912	7,238
Miscellaneous furniture and fixtures	259	2,084	50	892	2,062	45	1,005	31	2,353	49	1,166	35	2,593	4,834
Paper and allied products														
Pulp mills	261	6,342	611	16,860	49,726	626	20,492	479	60,174	621	21,547	479	63,347	143,762
Paper mills	262	39	14	535	2,247	16	689	12	2,554	12	570	9	1,926	4,424
Paper mills	262	281	129	4,597	13,694	131	5,421	100	14,848	123	5,519	95	15,012	35,071
Paperboard mills	263	199	52	1,859	7,002	52	2,136	39	8,195	55	2,392	41	8,894	18,749
Paperboard containers and boxes	265	2,796	194	4,618	9,815	199	5,722	151	12,406	202	6,212	156	13,706	36,124
Miscellaneous converted paper products	267	3,027	222	5,251	16,969	229	6,524	176	22,171	229	6,853	177	23,809	49,393
Printing and publishing														
Newspapers	271	9,079	434	9,022	24,300	414	10,437	134	26,920	410	10,585	134	28,818	35,837
Periodicals	272	4,017	110	2,983	11,802	115	4,077	20	15,880	116	4,274	18	15,821	21,723
Books	273	2,856	114	2,821	10,316	130	4,037	57	14,325	134	4,287	54	16,521	24,117
Miscellaneous publishing	274	2,376	70	1,513	5,514	65	1,720	24	8,473	71	1,982	25	9,523	12,332
Commercial printing	275	36,103	553	12,301	25,025	567	15,337	408	31,898	579	16,431	418	34,709	60,527
Manifold business forms	276	853	53	1,281	3,883	48	1,341	34	3,922	45	1,249	30	3,706	6,982
Greeting cards	277	162	22	471	2,197	23	584	12	3,389	23	628	13	3,660	4,507
Blankbooks and bookbinding	278	1,545	69	1,265	2,918	66	1,461	51	3,640	65	1,496	51	3,846	5,362
Printing trade services	279	4,783	69	1,784	3,253	65	2,142	46	3,999	58	2,058	42	3,929	4,994

See footnotes at end of table.

No. 1211. Manufactures—Summary, by Industry: 1987 to 1994—Continued

[See headnote, page 733]

INDUSTRY	SIC code	1987				1992				1994				
		Establishments	All employees		Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			Number ¹ (1,000)	Payroll (mil. dol.)			
Chemicals and allied products	28	12,109	814	25,016	121,242	849	32,502	479	164,346	824	33,811	471	181,189	333,259
Industrial inorganic chemicals	281	1,405	94	3,099	11,154	103	4,214	55	16,724	87	3,669	47	15,058	24,940
Plastics materials and synthetics	282	680	123	4,013	17,882	129	5,137	86	20,979	128	5,302	85	24,497	55,314
Drugs	283	1,356	172	5,304	28,176	194	7,840	93	48,602	206	8,935	102	55,528	76,238
Soap, cleaners, and toilet goods	284	2,399	119	3,099	21,620	123	3,927	75	26,182	118	3,960	71	27,767	46,314
Paints and allied products	285	1,431	55	1,492	6,238	51	1,710	26	7,154	50	1,911	27	8,501	17,544
Industrial organic chemicals	286	961	126	4,541	21,542	125	5,495	72	26,132	115	5,595	68	28,942	69,596
Agricultural chemicals	287	973	40	1,171	6,379	40	1,451	25	8,659	40	1,550	26	10,302	20,899
Miscellaneous chemical products	289	2,904	85	2,298	8,249	84	2,727	48	9,915	80	2,890	47	10,595	22,413
Petroleum and coal products	29	2,254	116	3,996	18,399	114	4,967	74	23,408	112	5,224	73	28,594	143,150
Petroleum refining	291	331	75	2,845	14,128	75	3,640	48	18,607	72	3,796	46	23,232	128,236
Asphalt paving and roofing materials	295	1,367	28	786	2,883	26	846	18	3,006	27	935	20	3,245	8,668
Miscellaneous petroleum and coal products	299	556	13	365	1,388	14	481	7	1,796	14	493	7	2,118	6,246
Rubber and misc. plastics products	30	14,515	831	17,581	44,293	907	23,156	698	58,652	972	25,851	762	69,613	134,553
Tires and inner tubes	301	164	65	2,070	5,561	65	2,499	53	6,504	64	2,589	53	7,202	12,883
Rubber and plastics footwear	302	66	11	153	325	14	216	11	464	11	198	9	476	961
Hose and belting and plastics and packing	305	693	52	1,159	2,756	52	1,411	38	3,290	57	1,650	42	4,072	7,222
Fabricated rubber products, n.e.c	306	1,573	104	2,245	4,680	105	2,617	79	6,024	112	2,799	87	7,132	12,949
Miscellaneous plastics products, n.e.c	308	12,019	599	11,955	30,971	671	16,413	516	42,370	728	18,616	571	50,731	100,538
Leather and leather products	31	2,193	129	1,831	4,275	101	1,806	83	4,527	92	1,712	78	4,623	9,545
Leather tanning and finishing	311	344	15	292	745	17	420	13	891	16	416	13	985	3,038
Footwear cut stock	313	128	5	70	142	4	63	3	149	3	62	3	143	319
Footwear, except rubber	314	479	71	913	2,106	49	762	41	2,060	47	759	40	2,191	3,923
Leather gloves and mittens	315	77	3	34	75	3	35	2	69	3	35	2	63	143
Luggage	316	241	11	196	467	10	191	8	509	9	174	7	549	991
Handbags and personal leather goods	317	529	17	232	519	11	202	9	470	8	142	7	416	697
Leather goods, n.e.c	319	395	7	95	221	8	133	6	304	7	123	6	276	434

See footnotes at end of table.

No. 1211. Manufactures—Summary, by Industry: 1987 to 1994—Continued

[See headnote, page 733]

INDUSTRY	SIC code	1987				1992				1994				
		Establishments	All employees		Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			Number ¹ (1,000)	Payroll (mil. dol.)			
Stone, clay, and glass products	32	16,166	524	12,349	33,076	469	13,113	357	34,641	485	14,145	374	39,557	71,227
Flat glass	321	81	15	507	1,618	12	451	10	1,311	11	503	9	1,651	2,600
Glass and glassware, pressed or blown	322	522	77	1,959	4,944	66	2,075	56	5,900	63	2,051	54	6,198	9,628
Products of purchased glass	323	1,432	51	1,060	2,847	55	1,369	42	3,757	58	1,535	46	4,254	7,935
Cement, hydraulic	324	215	19	599	2,284	17	595	13	2,149	17	629	12	2,800	4,808
Structural clay products	325	598	35	689	1,733	31	734	24	1,695	31	778	24	1,944	3,247
Pottery and related products	326	1,006	38	762	1,638	37	863	29	1,995	41	974	33	2,322	3,301
Concrete, gypsum, and plaster products	327	9,814	203	4,632	11,762	174	4,741	126	11,008	184	5,194	136	12,783	26,853
Cut stone and stone products	328	745	13	243	449	12	282	9	604	13	311	10	662	1,112
Miscellaneous nonmetallic mineral products	329	1,753	73	1,898	5,803	66	2,004	49	6,222	68	2,172	50	6,944	11,744
Primary metal industries²	33	6,771	701	19,777	46,471	662	22,202	508	52,027	664	23,974	516	61,554	160,771
Blast furnace and basic steel products	331	1,241	253	8,166	21,081	239	9,179	182	22,173	226	9,643	175	27,665	69,729
Iron and steel foundries	332	1,231	130	3,426	6,187	122	3,739	99	6,873	123	4,176	101	8,242	14,032
Primary nonferrous metals	333	169	32	996	2,975	35	1,334	27	3,391	34	1,275	26	4,198	14,546
Secondary nonferrous metals	334	397	13	312	947	13	407	9	1,233	14	466	11	1,955	7,152
Nonferrous rolling and drawing	335	1,066	163	4,298	10,140	147	4,635	109	12,335	153	5,076	116	14,762	41,854
Nonferrous foundries (castings)	336	1,687	80	1,805	3,382	75	1,942	59	3,927	82	2,251	67	4,899	8,672
Fabricated metal products	34	36,105	1,458	35,000	75,503	1,362	38,962	994	83,761	1,407	42,020	1,054	96,698	190,172
Metal cans and shipping containers	341	538	48	1,527	4,224	40	1,465	33	3,736	39	1,493	32	3,770	13,025
Cutlery, handtools, and hardware	342	2,327	145	3,389	8,055	134	3,648	99	9,044	139	3,955	106	10,560	18,277
Plumbing and heating, except electric	343	828	46	1,005	2,780	42	1,152	29	3,105	44	1,288	31	3,972	6,806
Fabricated structural metal products	344	12,579	407	9,042	18,798	389	10,362	275	21,256	401	11,069	289	24,314	51,452
Screw machine products, bolts, etc.	345	2,569	95	2,270	4,762	91	2,624	68	5,269	95	2,875	74	6,250	10,463
Metal forgings and stampings	346	4,062	255	7,235	13,223	234	7,749	185	14,913	247	8,882	200	17,897	36,747
Metal services, n.e.c.	347	5,251	113	2,167	4,730	108	2,652	83	5,679	119	3,026	92	6,966	12,314
Ordinance and accessories, n.e.c.	348	374	88	2,458	5,343	62	2,124	35	4,536	45	1,539	28	3,994	5,555
Miscellaneous fabricated metal products	349	7,577	262	5,906	13,589	263	7,185	186	16,224	278	7,893	203	18,975	35,532
Industrial machinery and equipment	35	52,135	1,844	50,553	119,214	1,739	57,231	1,086	132,923	1,827	62,947	1,176	161,200	314,423
Engines and turbines	351	87	2,906	7,018	83	3,135	52	7,738	81	3,382	55	10,239	21,754	
Farm and garden machinery	352	1,804	82	1,917	5,638	86	2,354	63	7,318	95	2,794	71	9,634	20,037
Construction and related machinery	353	3,467	188	5,272	11,331	176	5,664	108	12,489	185	6,264	118	15,303	33,989
Metalworking machinery	354	11,470	268	7,301	13,766	255	8,571	178	16,542	264	9,318	188	19,788	31,313
Special industry machinery	355	4,550	169	4,588	9,699	162	5,515	91	11,667	171	6,383	98	15,075	26,786
General industrial machinery	356	3,929	240	6,203	13,757	244	7,742	154	17,817	247	8,293	161	20,339	36,036
Computer and office equipment	357	2,134	328	10,668	33,167	251	10,143	89	29,229	250	10,403	88	34,181	79,573
Refrigeration and service machinery	358	2,129	190	4,752	11,622	179	5,264	125	13,597	190	5,895	138	15,878	33,537
Industrial machinery, n.e.c.	359	22,296	292	6,946	13,218	304	8,843	227	16,527	344	10,215	260	20,764	31,398

See footnotes at end of table.

No. 1211. Manufactures—Summary, by Industry: 1987 to 1994—Continued

[See headnote, page 733]

INDUSTRY	SIC code	1987				1992				1994				
		Establishments	All employees		Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			Number ¹ (1,000)	Payroll (mil. dol.)			
Electronics; other electric equip.	36	15,962	1,565	38,738	95,958	1,439	44,197	911	121,158	1,470	47,617	949	145,671	257,800
Electric distribution equipment	361	766	77	1,791	4,577	68	1,946	48	5,437	70	2,126	49	5,996	10,813
Electrical industrial apparatus	362	2,213	166	3,882	9,020	157	4,387	106	10,850	165	4,850	114	12,440	22,784
Household appliances	363	480	117	2,642	7,444	103	2,571	83	7,964	110	2,992	90	10,305	22,794
Electric lighting and wiring equipment	364	1,986	167	3,732	10,314	148	3,974	107	11,307	154	4,336	113	12,487	22,204
Household audio and video equipment	365	854	44	850	3,004	47	1,123	35	3,486	47	1,241	37	4,279	12,628
Communications equipment	366	1,437	260	7,537	19,804	239	9,111	114	26,522	230	9,159	108	29,031	48,052
Electronic components and accessories	367	5,911	546	13,623	30,635	530	16,752	317	44,305	546	18,297	336	58,357	93,635
Misc. electrical equipment and supplies	369	2,315	188	4,682	11,160	147	4,332	100	11,287	146	4,617	102	12,775	24,891
Transportation equipment.	37	10,500	1,817	58,790	135,783	1,647	12,734	1,080	158,326	1,554	64,061	1,062	173,940	452,363
Motor vehicles and equipment	371	4,422	751	23,910	65,778	703	26,213	565	80,935	776	31,935	636	102,049	314,440
Aircraft and parts	372	1,618	596	20,590	40,189	548	22,647	281	47,661	424	19,446	205	43,610	84,287
Ship and boat building and repairing	373	2,766	177	4,266	7,657	163	4,634	122	8,560	150	4,408	114	8,049	15,289
Railroad equipment	374	173	22	631	1,285	28	900	21	2,015	30	1,076	22	2,535	6,569
Motorcycles, bicycles, and parts	375	246	7	158	368	13	343	10	891	16	483	12	1,149	2,632
Guided missiles, space vehicles, parts	376	156	214	8,114	18,152	146	6,780	50	15,246	111	5,453	38	13,351	20,715
Miscellaneous transportation equipment	379	1,119	49	1,122	2,354	46	1,218	33	3,018	48	1,261	35	3,197	8,430
Instruments and related products	38	10,326	982	28,778	71,487	907	33,067	460	89,394	830	31,941	430	92,880	138,798
Search and navigation equipment	381	1,137	369	12,368	24,648	253	10,962	103	24,299	199	9,396	80	21,900	30,103
Measuring and controlling devices	382	4,240	285	7,807	17,326	276	9,632	138	21,775	264	9,782	138	24,427	38,800
Medical instruments and supplies	384	3,443	204	5,027	14,865	264	8,522	154	26,082	266	9,143	154	27,945	42,776
Ophthalmic goods	385	494	24	475	1,094	29	714	20	1,938	28	719	19	2,096	2,929
Photographic equipment and supplies	386	791	88	2,878	13,059	77	3,061	39	14,862	65	2,717	35	16,057	23,368
Watches, clocks, watchcases and parts	387	221	12	223	496	8	177	6	438	7	185	5	456	823
Misc. manufacturing industries	39	16,544	374	6,884	17,432	366	8,417	255	21,975	383	9,070	272	24,466	44,156
Jewelry, silverware, and plated ware	391	2,978	50	941	2,487	46	1,068	32	2,501	44	1,070	29	2,723	6,095
Musical instruments	393	425	12	218	518	12	273	9	589	12	281	10	638	1,062
Toys and sporting goods	394	2,711	89	1,512	4,868	98	2,133	71	6,816	103	2,345	77	7,372	13,489
Pens, pencils, office, and art supplies	395	1,013	29	540	1,431	30	684	21	2,030	32	749	23	2,282	3,985
Costume jewelry and notions	396	1,020	32	498	1,155	27	557	19	1,366	27	569	20	1,502	2,526
Miscellaneous manufactures	399	8,397	163	3,174	6,972	153	3,702	103	8,674	165	4,055	114	9,951	16,999
Administrative and auxiliary	(X)	9,480		1,234	47,202	-	-	-	-	1,265	70,898	-	-	-

Manufactures

- Represents zero. NA Not available. X Not applicable. ¹ Represents the average of production workers plus all other employees for the payroll period ended nearest the 15th of March. ² Includes other industries not shown separately. ³ Manufacturing concerns often reported separately for central offices or auxiliaries which serve the manufacturing establishment of a company, rather than the general public. Separate reports were obtained from such units if at a different location or if they serviced more than one establishment.

Source: U.S. Bureau of the Census, 1992 Census of Manufactures and Annual Survey of Manufactures.

No. 1212. Manufactures—Summary, by Industry; Selected Based on Value Added: 1987 to 1994

[Data based on various editions of the *Standard Industrial Classification (SIC) Manual*, published by the Office of Management and Budget; see text, section 26. N.e.c.=Not elsewhere classified.
See also *Historical Statistics, Colonial Times to 1970*, series P 58-67]

INDUSTRY	SIC code	1987			1992			1994					
		Establishments	All employees		Value of shipments (mil. dol.)	All employees		Value of shipments (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			
Meat packing plants	2011	1,434	113.2	2,141	44,991	121.2	2,441	50,167	119.5	2,597	102.2	8,350	50,444
Sausages and other prepared meats	2013	1,344	79.1	1,619	16,623	85.4	2,023	19,940	84.8	2,059	67.0	5,836	20,257
Poultry slaughtering and processing	2015	463	147.7	1,919	14,912	193.8	3,100	23,965	216.0	3,605	193.2	8,324	27,415
Fluid milk	2026	946	72.4	1,681	20,591	63.4	1,840	21,926	61.6	1,850	30.9	6,088	22,474
Canned fruits and vegetables	2033	647	65.6	1,163	11,890	63.6	1,465	15,071	60.1	1,438	50.6	6,424	14,481
Frozen specialties, n.e.c.	2038	288	37.5	669.1	5,625	46.7	972	7,886	46.1	991	38.4	4,540	8,864
Cereal breakfast foods	2043	53	16.0	599	6,566	16.1	745	9,737	17.1	765	14.1	8,721	11,507
Bread, cake, and related products	2051	2,357	161.6	3,556	16,202	154.9	4,059	18,130	159.0	4,263	88.6	12,177	19,329
Cookies and crackers	2052	380	45.4	1,010	6,309	47.0	1,247	8,668	48.7	1,335	37.7	6,630	10,094
Candy and other confectionery products	2064	685	45.8	900	6,980	51.5	1,261	10,202	51.2	1,347	40.7	6,504	10,911
Malt beverages	2082	134	31.9	1,355	13,619	34.5	1,567	17,340	33.5	1,566	23.6	9,847	16,795
Bottled and canned soft drinks	2086	1,190	95.6	2,277	22,006	77.1	2,163	25,423	73.4	2,213	29.0	11,647	28,334
Flavoring extracts and syrups, n.e.c.	2087	280	9.1	258	4,665	10.3	342	6,923	11.0	372	6.4	5,517	7,440
Food preparations, n.e.c.	2099	1,658	57.9	1,110	9,787	61.4	1,413	12,165	64.3	1,547	45.7	6,530	13,315
Cigarettes	2111	12	32.0	1,234	17,372	25.4	1,205	29,746	23.0	1,152	16.4	19,759	24,879
Logging	2411	11,936	85.7	1,516	10,880	83.2	1,689	13,592	87.2	1,820	71.7	9,948	16,818
Sawmills and planing mills, general	2421	5,742	148.2	2,817	17,357	137.6	3,040	21,061	142.2	3,413	121.8	9,476	26,761
Wood household furniture	2511	2,948	135.8	2,017	7,980	121.1	2,174	8,730	125.4	2,363	110.6	5,248	9,919
Paper mills	2621	282	129.1	4,597	28,916	130.6	5,421	32,786	122.8	5,519	94.9	15,012	35,071
Paperboard mills	2631	205	52.3	1,859	13,730	51.5	2,136	16,140	54.9	2,392	41.4	8,894	18,749
Corrugated and solid fiber boxes	2653	1,601	105.8	2,610	16,107	112.3	3,276	19,834	119.1	3,713	89.1	7,766	22,802
Sanitary paper products	2676	133	38.4	1,155	11,698	40.6	1,454	15,647	39.7	1,470	32.6	8,859	16,200
Newspapers	2711	9,091	434.6	9,025	31,849	413.9	10,437	33,782	410.1	10,585	133.7	28,818	35,837
Periodicals	2721	4,020	110.0	2,983	17,329	115.1	4,077	22,104	116.4	4,274	18.3	15,821	21,723
Book publishing	2731	2,298	70.1	1,860	12,620	79.0	2,676	16,698	87.1	2,936	18.7	13,681	19,419
Miscellaneous publishing	2741	2,369	69.4	1,513	7,810	65.1	1,720	10,908	71.2	1,982	25.3	9,523	12,332
Commercial printing, lithographic	2752	24,980	403.0	9,132	32,698	438.2	12,016	43,352	439.8	12,618	319.3	26,474	45,847
Commercial printing, n.e.c.	2759	10,796	126.2	2,490	8,973	107.4	2,588	9,265	117.1	3,052	79.8	6,454	10,973
Manufacture business forms	2761	853	53.2	1,276	7,359	47.9	1,341	7,429	45.1	1,249	29.6	3,706	6,982
Industrial inorganic chemicals, n.e.c.	2819	662	72.2	2,425	13,212	78.9	3,266	18,129	64.6	2,752	32.7	9,766	16,033
Plastics materials and resins	2821	480	56.3	2,006	26,246	61.2	2,698	31,601	69.2	3,150	40.6	15,117	36,965
Organic fibers, noncellulosic	2824	72	45.7	1,347	10,112	44.4	1,545	11,113	40.7	1,417	31.6	6,437	12,213
Pharmaceutical preparations	2834	732	131.6	4,168	32,094	122.9	4,958	50,415	134.2	5,754	68.6	42,615	56,961
Soap and other detergents	2841	764	31.7	956	11,559	32.8	1,171	14,729	31.3	1,167	18.5	7,377	14,528
Polishes and sanitation goods	2842	726	20.6	500	5,594	22.0	662	6,659	21.2	649	12.9	5,468	8,372
Toilet preparations	2844	694	58.5	1,353	14,593	59.8	1,774	18,629	57.6	1,797	35.3	13,327	19,736
Paints and allied products	2851	1,426	55.2	1,491	12,701	51.1	1,710	14,973	50.1	1,911	27.0	8,501	17,544
Industrial organic chemicals, n.e.c.	2869	699	100.3	3,696	42,189	99.8	4,494	54,103	89.3	4,501	52.6	24,329	57,671
Agricultural chemicals, n.e.c.	2879	277	16.1	518	6,300	16.8	669	9,142	15.3	700	8.8	5,898	9,636
Chemical preparations, n.e.c.	2899	1,529	37.9	1,021	8,024	37.1	1,233	9,927	36.5	1,365	20.1	5,724	11,370

See footnotes at end of table.

INDUSTRY	SIC code	1987				1992			1994				
		Establishments	All employees		Value of shipments (mil. dol.)	All employees		Value of shipments (mil. dol.)	All employees		Production workers (1,000)	Value added by manufacture (mil. dol.)	Value of shipments (mil. dol.)
			Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)		Number ¹ (1,000)	Payroll (mil. dol.)			
Petroleum refining	2911	309	74.6	2,846	118,216	74.9	3,640	136,551	71.7	3,796	46.3	23,232	105,723
Tires and inner tubes	3011	163	65.4	2,070	10,427	64.6	2,499	11,814	63.7	2,589	52.7	7,202	12,883
Unsupported plastics film and sheet	3081	594	48.4	1,256	8,140	54.7	1,680	10,619	56.3	1,822	41.7	6,103	12,562
Plastics products, n.e.c.	3089	8,571	384.7	7,286	33,774	427.8	9,998	45,376	470.7	11,443	372.8	29,248	54,297
Ready-mixed concrete	3273	5,321	96.9	2,289	12,975	82.4	2,293	12,015	87.2	2,551	67.6	6,168	13,831
Blast furnaces and steel mills	3312	342	188.9	6,451	38,663	170.1	7,022	42,154	156.1	7,272	121.7	20,693	50,634
Nonferrous wiredrawing and insulating	3357	487	64.9	1,504	10,827	60.6	1,724	13,044	64.3	1,952	48.2	6,019	15,347
Hardware, n.e.c.	3429	1,240	85.6	2,056	8,175	75.4	2,063	8,806	79.1	2,259	60.2	5,585	10,518
Fabricated structural metal	3441	2,454	80.9	1,881	8,667	72.0	1,964	8,919	71.3	2,009	51.5	4,242	9,832
Fabricated plate work (boiler shops).	3443	1,740	74.6	1,842	6,795	78.4	2,312	8,975	80.4	2,426	57.8	5,263	10,079
Sheet metal work	3444	4,297	100.3	2,237	9,700	103.9	2,834	11,299	108.0	3,049	79.9	6,760	13,163
Automotive stampings	3465	713	119.8	3,977	15,252	105.1	4,094	15,803	114.0	4,882	95.4	9,075	19,653
Metal stampings, n.e.c.	3469	2,815	95.5	2,132	8,331	91.8	2,470	9,559	97.7	2,765	76.9	6,020	11,362
Internal combustion engines, n.e.c.	3519	278	64.0	2,043	11,123	55.5	2,029	11,707	54.2	2,145	39.9	6,292	14,953
Farm machinery and equipment	3523	1,634	57.0	1,416	6,880	61.5	1,786	9,620	67.1	2,111	48.1	6,855	13,218
Construction machinery	3531	955	81.2	2,429	12,773	74.6	2,458	13,139	77.9	2,706	52.9	7,674	17,697
Special dies, tools, jigs, and fixtures	3544	7,317	114.4	3,164	7,550	110.8	3,883	9,265	119.5	4,353	92.4	8,090	11,195
Special industry machinery, n.e.c.	3559	2,531	83.3	2,286	8,275	83.3	2,947	11,479	87.7	3,473	49.1	8,748	15,192
Electronic computers	3571	974	151.9	4,953	33,627	110.6	4,849	38,202	109.4	5,074	30.4	21,066	48,547
Refrigeration and heating equipment	3585	892	133.3	3,355	17,027	120.7	3,594	19,739	130.6	4,103	99.1	11,286	24,397
Industrial machinery, n.e.c.	3599	21,545	228.4	5,119	13,692	248.9	7,040	19,117	288.8	8,286	221.2	16,488	23,955
Motors and generators	3621	462	74.6	1,664	6,753	67.9	1,762	8,168	74.0	1,914	58.1	4,777	9,429
Relays and industrial controls	3625	1,168	66.6	1,631	6,101	62.5	1,864	7,741	64.8	2,122	37.6	5,560	9,473
Telephone and telegraph apparatus	3661	469	112.3	3,178	17,583	41.2	3,739	20,510	86.1	3,577	41.2	14,436	23,472
Radio and TV communications equip.	3663	655	126.0	3,776	14,229	124.9	4,721	19,521	120.2	4,837	55.0	12,354	20,877
Semiconductors and related devices	3674	853	184.6	5,495	19,795	172.0	6,884	32,191	173.6	7,464	89.1	32,084	42,252
Electronic components, n.e.c.	3679	2,900	162.6	3,891	15,439	180.2	5,119	23,670	196.5	5,965	118.9	14,922	31,610
Motor vehicles and car bodies	3711	413	284.4	10,376	133,346	227.8	10,434	151,682	234.0	12,438	202.5	52,918	197,554
Motor vehicle parts and accessories	3714	2,807	389.1	11,947	62,007	400.0	13,955	75,058	454.1	17,229	364.1	43,598	100,983
Aircraft	3721	155	268.2	9,680	39,093	264.6	11,493	62,940	217.9	10,312	92.8	23,606	50,944
Aircraft engines and engine parts	3724	453	139.6	4,814	20,262	120.4	4,966	22,408	86.9	3,786	46.4	7,957	16,664
Aircraft parts and equipment, n.e.c.	3728	1,013	187.7	6,088	17,923	163.1	6,187	19,511	119.5	5,348	65.4	12,047	16,679
Ship building and repairing	3731	590	120.2	3,218	8,504	118.2	3,631	10,601	101.5	3,311	75.6	5,760	9,864
Guided missiles and space vehicles	3761	40	166.7	6,415	21,566	97.7	4,637	19,423	76.8	3,806	25.0	10,121	15,397
Search and navigation equipment	3812	1,084	369.4	12,373	36,267	253.0	10,962	35,039	199.4	9,396	79.7	21,900	30,103
Instruments to measure electricity	3825	930	85.2	2,477	7,703	68.5	2,544	8,826	62.6	2,547	31.8	6,661	10,098
Surgical and medical instruments	3841	1,136	73.1	1,786	7,780	98.2	3,099	13,396	100.5	3,404	60.0	10,272	14,812
Surgical appliances and supplies	3842	1,500	78.5	1,786	8,533	96.4	2,846	13,801	96.1	3,000	59.4	9,366	14,573
Photographic equipment and supplies	3861	787	88.0	2,878	19,241	77.3	3,061	22,119	64.8	2,717	34.8	16,057	23,368

¹ Represents the average of production workers plus all other employees for the payroll period ended nearest the 15th of the month.

Source: U.S. Bureau of the Census, 1992 *Census of Manufactures and Annual Survey of Manufactures*.

No. 1213. Manufactures Summary: 1992

[Sum of State totals may not add to U.S. total because U.S. and State figures were independently derived]

REGION, DIVISION, AND STATE	Estab- lish- ments ¹	ALL EMPLOYEES ²			PRODUCTION WORKERS ²		Value added by manu- facture ³ (mil. dol.)	Value of ship- ments ⁴ (mil. dol.)
		Number (1,000)	Payroll (mil. dol.)	Payroll per em- ployee (dol.)	Total (1,000)	Wages (mil. dol.)		
U.S.	381,870	18,253	560,485	30,706	11,654	281,737	1,428,707	3,006,275
Northeast	82,967	3,699	122,862	33,215	2,162	53,564	283,865	525,662
N.E.	24,967	1,124	37,791	33,622	660	16,765	81,692	145,315
ME	2,200	91	2,447	26,890	67	1,589	5,458	11,611
NH	2,332	94	2,820	30,000	60	1,470	6,493	11,260
VT	1,343	45	1,289	28,644	30	659	3,379	6,386
MA	10,145	480	16,421	34,210	273	7,085	36,519	65,702
RI	2,664	88	2,403	27,307	59	1,229	5,166	9,578
CT	6,283	326	12,411	38,071	171	4,733	24,677	40,778
M.A.	58,000	2,575	85,071	33,037	1,502	36,799	202,173	380,347
NY	26,617	1,049	35,225	33,580	592	14,354	86,349	154,211
NJ	13,281	574	20,616	35,916	301	7,676	46,091	86,885
PA	18,102	952	29,230	30,704	609	14,769	69,733	139,251
Midwest	73,020	5,470	175,883	32,154	3,525	94,148	432,051	942,160
E.N.C.	72,979	4,098	135,913	33,166	2,646	73,551	323,581	697,113
OH	18,292	1,046	34,904	33,369	681	19,317	86,161	184,637
IN	9,285	619	19,114	30,879	435	11,662	49,660	104,871
IL	18,784	970	31,605	32,582	588	14,977	74,862	158,129
MI	16,531	917	34,207	37,303	574	18,452	71,724	161,409
WI	10,087	546	16,083	29,456	368	9,143	41,174	88,067
W.N.C.	26,740	1,372	39,970	29,133	879	20,597	108,470	245,047
MN	7,934	394	12,664	32,142	225	5,391	27,175	57,324
IA	3,913	227	6,484	28,564	158	3,852	20,502	46,432
MO	7,846	408	11,868	29,088	260	6,049	33,995	73,746
ND	666	19	438	23,053	13	257	1,423	3,678
SD	889	35	739	21,114	25	448	2,267	5,956
NE	2,028	100	2,516	25,160	72	1,555	7,952	21,816
KS	3,464	189	5,261	27,836	126	3,045	15,156	36,095
South	112,543	5,908	158,853	26,888	4,095	88,503	458,531	1,019,572
S.A.	56,717	2,989	80,393	26,896	2,052	43,314	228,773	461,046
DE	736	67	2,770	41,343	31	850	4,881	13,000
MD	4,337	195	6,291	32,261	114	3,005	15,588	31,047
DC	458	13	553	42,538	4	116	1,570	2,008
VA	6,521	408	11,265	27,610	283	6,400	35,933	65,860
WV	1,786	78	2,337	29,962	56	1,457	6,511	13,217
NC	11,877	831	20,456	24,616	609	11,842	65,446	128,599
SC	4,839	367	9,425	25,681	272	5,689	24,725	51,996
GA	9,767	556	14,278	25,680	394	8,159	41,038	90,999
FL	16,396	474	13,018	27,464	289	5,796	33,081	64,320
E.S.C.	22,123	1,399	34,389	24,581	1,045	21,746	98,705	221,601
KY	4,310	277	7,524	27,162	203	4,691	25,265	60,029
TN	7,610	504	12,618	25,036	370	7,755	35,799	76,209
AL	6,436	380	9,217	24,255	284	5,934	23,653	52,708
MS	3,767	238	5,030	21,134	188	3,366	13,988	32,655
W.S.C.	33,703	1,520	44,071	28,994	998	23,443	131,053	336,925
AR	3,913	227	4,878	21,489	179	3,353	14,204	34,050
LA	4,048	179	5,460	30,503	126	3,308	20,509	60,940
OK	4,064	157	4,282	27,274	109	2,611	13,808	30,287
TX	21,678	957	29,451	30,774	584	14,171	82,532	211,648
West.	86,641	3,183	102,889	32,325	1,873	45,520	254,261	518,884
Mountain	19,211	631	18,453	29,244	387	8,975	50,939	100,596
MT	1,375	22	544	24,727	16	364	1,421	4,137
ID	1,838	66	1,769	26,803	46	1,022	4,465	10,557
WY	577	9	225	25,000	6	146	856	2,385
CO	5,295	184	5,926	32,207	107	2,773	15,300	29,220
NM	1,594	39	965	24,744	27	564	4,946	9,492
AZ	4,758	177	5,420	30,621	99	2,244	14,960	25,767
UT	2,525	106	2,860	26,981	68	1,477	7,271	15,750
NV	1,249	28	744	26,571	18	385	1,720	3,288
Pacific	67,430	2,552	84,436	33,086	1,486	36,545	203,322	418,288
WA	8,521	342	11,612	33,953	200	5,531	27,765	72,800
OR	6,865	213	6,076	28,526	144	3,453	14,444	32,215
CA	50,513	1,960	65,766	33,554	1,117	26,955	158,240	305,805
AK	513	16	426	26,625	12	313	1,347	3,678
HI	1,018	21	556	26,476	13	293	1,526	3,790

¹ Includes central administrative offices and auxiliary units. ² Includes employment and payroll at administrative offices and auxiliary units. All employees represents the average of production workers plus all other employees for the payroll period ended nearest the 12th of March. Production workers represents the average of the employment for the payroll periods ended nearest the 12th of March, May, August, and November. ³ Adjusted value added; takes into account (a) value added by merchandising operations (that is, difference between the sales value and cost of merchandise sold without further manufacture, processing, or assembly), plus (b) net change in finished goods and work-in-process inventories between beginning and end of year. ⁴ Includes extensive and unmeasurable duplication from shipments between establishments in the same industry classification.

Source: U.S. Bureau of the Census, 1992 *Census of Manufactures*.

**No. 1214. Average Hourly Earnings of Production Workers in Manufacturing Industries,
by State: 1980 to 1995**

[In dollars]

DIVISION AND STATE	1980	1985	1989	1990	1991	1992	1993	1994	1995
United States	7.27	9.54	10.48	10.83	11.18	11.46	11.74	12.06	12.35
New England:									
Maine	6.00	8.40	9.92	10.59	11.08	11.40	11.63	11.91	12.39
New Hampshire	5.87	8.39	10.37	10.83	10.84	11.22	11.62	11.74	11.93
Vermont	6.14	8.41	9.99	10.52	11.00	11.52	11.82	11.96	12.21
Massachusetts	6.51	9.00	10.87	11.39	11.81	12.15	12.36	12.59	12.79
Rhode Island	5.59	7.59	9.06	9.45	9.73	9.92	10.20	10.35	10.62
Connecticut	7.08	9.57	11.21	11.53	11.99	12.46	13.01	13.53	13.72
Middle Atlantic:									
New York	7.18	9.67	10.67	11.11	11.43	11.72	11.97	12.19	12.50
New Jersey	7.31	9.86	11.17	11.76	12.17	12.57	12.98	13.36	13.56
Pennsylvania	7.59	9.57	10.66	11.04	11.46	11.78	12.11	12.49	12.81
East North Central:									
Ohio	8.57	11.38	12.26	12.64	13.12	13.49	14.05	14.40	14.42
Indiana	8.49	(NA)	11.70	12.03	12.43	12.79	13.17	13.55	13.92
Illinois	8.02	10.37	11.21	11.44	11.68	11.84	12.04	12.25	12.63
Michigan	9.52	12.64	13.51	13.86	14.52	14.81	15.36	16.13	16.31
Wisconsin	8.03	10.26	10.77	11.11	11.47	11.85	12.17	12.41	12.76
West North Central:									
Minnesota	7.61	10.05	10.95	11.23	11.52	11.92	12.23	12.58	12.80
Iowa	8.67	10.32	10.82	11.27	11.62	11.92	12.22	12.45	12.73
Missouri	7.26	9.57	10.49	10.74	10.86	11.24	11.55	11.77	12.18
North Dakota	6.56	8.05	8.80	9.27	9.25	9.60	9.86	10.19	10.75
South Dakota	6.50	7.43	8.30	8.48	8.79	8.84	8.89	9.19	9.56
Nebraska	7.38	9.02	9.53	9.66	9.84	10.22	10.46	10.94	11.20
Kansas	7.37	9.45	10.68	10.94	11.24	11.60	11.99	12.15	12.40
South Atlantic:									
Delaware	7.58	9.86	12.36	12.39	12.20	12.35	13.29	13.92	14.17
Maryland	7.61	9.73	11.19	11.57	11.92	12.50	12.83	13.15	13.50
District of Columbia	8.46	10.48	11.79	12.51	13.05	13.17	13.18	13.46	(NA)
Virginia	6.22	8.51	9.69	10.07	10.43	10.62	10.85	11.24	11.73
West Virginia	8.08	10.24	11.17	11.53	11.77	12.11	12.27	12.60	12.64
North Carolina	5.37	7.29	8.42	8.79	9.19	9.49	9.81	10.19	10.57
South Carolina	5.59	7.61	8.54	8.84	9.17	9.48	9.80	10.00	10.15
Georgia	5.77	8.10	8.87	9.17	9.56	9.86	10.09	10.34	10.71
Florida	5.98	7.86	8.67	8.98	9.30	9.59	9.76	9.97	10.19
East South Central:									
Kentucky	7.34	9.53	10.37	10.70	11.00	11.28	11.47	11.81	12.22
Tennessee	6.08	8.29	9.22	9.55	9.92	10.13	10.33	10.50	10.77
Alabama	6.49	8.48	9.10	9.39	9.72	9.99	10.35	10.75	11.14
Mississippi	5.44	7.22	8.03	8.37	8.67	8.91	9.16	9.41	9.74
West South Central:									
Arkansas	5.71	7.57	8.26	8.51	8.81	9.05	9.36	9.65	10.05
Louisiana	7.74	10.43	11.13	11.61	11.86	12.19	12.66	13.11	13.43
Oklahoma	7.36	9.86	10.48	10.73	11.09	11.38	11.42	11.42	11.51
Texas	7.15	9.41	10.25	10.47	10.84	10.92	11.02	11.13	11.47
Mountain:									
Montana	8.78	10.95	11.15	11.51	11.57	12.18	12.40	12.49	12.92
Idaho	7.55	9.41	10.21	10.60	11.11	11.42	11.88	11.88	11.46
Wyoming	7.01	9.64	10.58	10.83	10.98	11.10	11.53	11.79	11.97
Colorado	7.63	9.52	10.44	10.94	11.33	11.32	12.01	12.26	12.52
New Mexico	5.79	8.41	8.74	9.04	9.40	9.68	9.74	10.13	10.70
Arizona	7.29	9.48	9.92	10.21	10.70	10.96	11.06	11.17	11.19
Utah	7.02	9.64	10.14	10.32	10.77	11.09	11.10	11.28	11.63
Nevada	7.72	9.15	10.33	11.05	11.04	11.55	11.65	11.83	12.62
Pacific:									
Washington	(NA)	11.63	12.12	12.61	13.13	13.59	14.01	14.86	13.68
Oregon	8.65	10.50	10.81	11.15	11.53	11.97	12.18	12.31	12.76
California	7.70	10.12	11.16	11.48	11.87	12.19	12.38	12.44	12.54
Alaska	10.22	12.19	12.01	12.46	11.40	10.75	11.14	10.96	11.00
Hawaii	6.83	8.65	10.37	10.99	11.39	11.61	11.98	12.22	12.82

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly.

No. 1215. Capital in Manufacturing Establishments: 1980 to 1994

[In billions of dollars, except percent. Data refer to privately owned manufacturing establishments and are based on the capital expenditures data from the Census of Manufactures, the *Annual Survey of Manufactures*, and the inventory investment component of GNP. For details, see source]

ITEM	CURRENT DOLLARS						CONSTANT (1987) DOLLARS					
	1980	1985	1990	1992	1993	1994	1980	1985	1990	1992	1993	1994
Purchases of equipment and structures	80	98	128	121	135	157	103	102	118	111	126	147
Percent equipment	71	65	66	69	73	75	69	65	67	70	76	78
Depreciation (straight line)	54	78	101	109	113	119	72	83	93	98	102	107
Percent equipment	76	74	73	73	73	73	76	74	74	74	74	75
Net investment ²	26	20	27	12	22	38	31	19	25	12	25	40
Net stock, end of year ¹	976	1,238	1,576	1,615	1,665	1,756	1,222	1,285	1,403	1,421	1,447	1,494
Equipment and structures	666	898	1,153	1,219	1,270	1,343	860	950	1,026	1,061	1,087	1,130
Percent equipment	62	58	57	56	56	56	61	58	57	56	57	58
Inventories	310	340	424	397	395	413	361	336	377	360	360	364

¹ Depreciation and net stock estimates for equipment and structures are derived using the perpetual inventory method and the straight-line depreciation formula. ² Represents the difference between purchases and depreciation.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, to be published in late 1996*, and *Survey of Current Business*, January/February 1996; and *Fixed Reproducible Tangible Wealth in the United States, 1925-89*.

No. 1216. Manufacturers' Shipments, Inventories, and Orders: 1950 to 1995

[In billions of dollars, except ratio. See also *Historical Statistics, Colonial Times to 1970*, series P 74-92]

YEAR	Shipments	Inventories (Dec. 31) ¹	Ratio of inventories to shipments ²	New orders	Unfilled orders (Dec. 31)	YEAR	Shipments	Inventories (Dec. 31) ¹	Ratio of inventories to shipments ²	New orders	Unfilled orders (Dec. 31)
1950	224	32	1.41	242	41	1973	875	124	1.63	913	158
1951	261	39	1.78	287	67	1974	1,018	158	1.86	1,047	187
1952	270	42	1.71	279	76	1975	1,039	160	1.77	1,023	171
1953	298	44	1.90	283	60	1976	1,186	175	1.66	1,194	180
1954	280	42	1.71	268	48	1977	1,358	188	1.58	1,381	202
1955	318	45	1.63	330	60	1978	1,523	209	1.55	1,580	259
1956	333	51	1.74	340	68	1979	1,727	239	1.61	1,771	303
1957	345	52	1.90	331	53	1980	1,853	262	1.61	1,876	326
1958	327	50	1.75	324	47	1981	2,018	280	1.74	2,015	323
1959	363	53	1.68	369	52	1982	1,960	307	1.91	1,947	309
1960	371	54	1.79	363	45	1983	2,071	308	1.80	2,105	343
1961	371	55	1.67	373	47	1984	2,288	334	1.78	2,315	370
1962	400	58	1.76	401	48	1985	2,334	330	1.72	2,348	384
1963	421	60	1.66	426	53	1986	2,336	318	1.66	2,342	390
1964	448	63	1.62	460	65	1987	2,476	333	1.64	2,513	427
1965	492	68	1.58	505	79	1988	2,682	361	1.64	2,724	469
1966	538	78	1.70	557	97	1989	2,793	380	1.66	2,831	507
1967	558	84	1.71	565	104	1990	2,874	392	1.66	2,888	522
1968	603	90	1.76	608	110	1991	2,826	380	1.64	2,812	508
1969	642	98	1.81	647	115	1992	2,934	373	1.55	2,899	472
1970	634	101	1.91	625	106	1993	3,102	370	1.46	3,068	438
1971	671	102	1.76	672	107	1994	3,370	384	1.40	3,383	452
1972	756	108	1.58	770	120	1995	3,599	409	1.40	3,609	461

¹ Beginning in 1982, inventories are stated at current cost and are not comparable to the book value estimates for prior years. ² Ratio based on December seasonally adjusted data.

Source: U.S. Bureau of the Census, *Current Industrial Reports, Manufacturers' Shipments, Inventories, and Orders: 1982-1992*, series M3; and monthly press releases.

No. 1217. Value of Manufactures Shipments and Inventories, by Industry: 1985 to 1995

[In billions of dollars. Based on 1987 Standard Industrial Classification (SIC). See also *Historical Statistics, Colonial Times to 1970*, series P 74-79]

INDUSTRY	SIC code	1985	1990	1991	1992	1993	1994	1995
Shipments	(X)	2,334.5	2,912.2	2,878.2	3,004.7	3,127.6	3,343.8	3,566.9
Durable goods ¹	(X)	1,215.4	1,485.3	1,452.0	1,541.9	1,630.6	1,787.0	1,910.6
Stone, clay, and glass prods.	32	55.8	63.7	60.0	62.5	65.6	71.2	75.5
Primary metals	33	112.3	148.8	136.4	138.3	142.7	160.8	184.5
Fabricated metal products	34	143.3	165.1	159.8	166.5	175.1	190.2	198.7
Industrial machinery and equip.	35	218.4	259.4	247.5	258.7	278.1	314.4	353.6
Engines and turbines	351	15.1	17.0	17.2	17.6	18.8	21.8	21.2
Construction, mining ²	353	27.6	30.8	27.9	27.2	30.6	34.0	39.9
Computer and office equipment	357	60.4	65.3	60.4	66.7	69.2	79.6	93.4
Electronic and other	36	164.0	195.9	199.3	216.8	233.6	261.4	300.6
Elec. transmission/distrib.	361-2	23.8	27.7	26.7	29.1	31.4	33.6	36.9
Household appliances	363	16.1	17.7	17.2	18.6	20.4	22.8	23.3
Household audio and video equip.	365	11.5	9.3	9.8	10.6	11.1	12.6	14.1
Communications equipment	366	35.4	38.6	38.1	43.0	45.5	51.7	63.2
Electronic components	367	42.2	62.6	67.5	73.6	81.0	93.6	116.3
Transportation equipment ¹	37	307.4	370.3	367.2	399.3	414.7	452.4	451.3
Motor vehicles and parts	371	193.4	217.3	209.2	238.4	267.4	314.4	314.0
Aircraft, missiles, and parts	372, 6	91.3	125.8	132.2	131.4	116.3	105.0	102.3
Instruments and related prod. ¹	38	96.2	128.0	132.8	134.9	137.4	138.8	145.1
Measuring/controlling devices	382	25.9	32.2	33.3	34.7	35.4	38.8	44.3
Nondurable goods ¹	(X)	1,119.1	1,426.9	1,426.2	1,462.9	1,497.0	1,556.8	1,656.3
Food and kindred products ¹	20	308.6	391.7	397.9	407.0	422.2	431.0	440.9
Beverages	208	43.7	53.4	56.3	58.0	58.6	61.3	63.6
Tobacco products	21	18.6	29.9	31.9	35.2	28.4	30.0	31.9
Textile mill products	22	54.6	65.5	65.4	70.8	74.0	78.3	78.8
Paper and allied products ¹	26	94.7	132.4	130.1	133.2	133.3	143.8	171.8
Paper/pulp/paperboard mill prod.	261-3,6	39.1	57.6	53.7	54.4	52.6	58.2	75.8
Paperboard containers and boxes	265	23.2	30.6	30.7	32.7	33.5	36.1	43.6
Chemicals and allied prods. ¹	28	204.8	292.8	298.5	305.4	314.9	333.3	358.5
Industrial chemicals	281,2,6,8,9	114.7	158.4	155.4	157.6	158.8	168.9	186.7
Drugs, soaps, toiletries	283-4	61.3	98.4	107.1	110.7	117.9	122.6	126.9
Petroleum and coal products	29	176.6	173.4	159.1	150.2	144.8	143.1	154.1
Rubber and plastics products	30	75.6	105.3	105.8	113.6	122.8	134.6	143.3
Inventories (Dec. 31)	(X)	329.6	397.9	383.5	374.9	382.5	397.4	422.6
Durable goods ¹	(X)	214.0	257.4	244.1	232.3	237.4	248.4	263.5
Stone, clay, and glass products	32	6.9	8.1	7.8	7.8	7.6	7.7	8.2
Primary metals	33	19.8	22.6	20.7	20.0	20.0	22.5	23.6
Fabricated metal products	34	22.5	24.6	23.5	23.4	23.5	25.1	25.7
Industrial machinery and equip.	35	45.6	48.4	46.5	45.7	47.3	51.3	56.5
Engines and turbines	351	2.7	3.3	3.2	3.0	3.2	3.7	3.7
Construction, mining ²	353	7.8	6.9	6.4	6.1	6.3	6.6	6.9
Computer and office equip.	357	11.5	10.7	10.7	10.4	10.6	10.6	12.7
Electronic and other	36	29.8	31.9	30.0	29.7	31.6	34.1	39.5
Elec. transmission and distrib.	361-2	4.7	4.7	4.5	4.5	4.5	4.9	5.0
Household appliances	363	2.5	2.8	2.3	2.1	2.3	2.5	2.5
Household audio and video equip.	365	1.3	1.1	1.1	1.0	1.0	1.1	1.4
Communications equipment	366	8.0	7.0	6.5	6.7	7.3	8.2	10.2
Electronic components	367	7.5	9.8	9.8	9.8	10.6	11.2	13.7
Transportation equipment ¹	37	51.5	75.7	71.1	61.5	61.2	61.5	61.6
Motor vehicles and parts	371	11.8	13.4	13.0	12.9	13.5	15.3	15.0
Aircraft, missiles, and parts	372, 6	36.2	57.9	53.5	44.2	43.2	41.7	41.8
Instruments and related products ¹	38	21.0	25.7	25.0	23.9	23.3	22.2	23.2
Measuring and controlling devices	382	6.2	7.2	7.0	6.8	6.6	6.7	7.4
Nondurable goods ¹	(X)	115.6	140.5	139.4	142.6	145.1	149.0	159.1
Food and kindred products ¹	20	24.4	30.2	30.5	31.4	32.2	32.7	33.3
Beverages	208	4.7	5.3	5.4	5.7	5.8	5.9	6.1
Tobacco products	21	6.3	6.1	6.5	6.8	6.5	6.1	5.9
Textile mill products	22	7.2	8.3	8.1	8.3	8.8	9.3	9.9
Paper and allied products ¹	26	10.1	13.5	13.7	13.8	14.0	14.2	17.4
Paper, pulp, paperboard mill prod.	261-3,6	3.8	5.2	5.5	5.7	5.7	5.4	7.1
Paperboard containers and boxes	265	2.5	3.3	3.4	3.5	3.4	3.7	4.6
Chemicals and allied products ¹	28	26.0	33.8	34.3	35.5	36.1	36.8	38.3
Industrial chemicals	281,2,6,8,9	14.0	17.8	17.4	17.5	17.6	17.7	19.0
Drugs, soaps, toiletries	283-4	7.8	11.4	12.5	13.5	13.9	14.5	14.6
Petroleum and coal products	29	13.7	13.1	11.3	11.0	9.9	10.8	11.3
Rubber and plastics products	30	9.1	12.3	12.1	12.5	13.1	14.2	15.1

X Not applicable. ¹ Includes industries not shown separately. ² Also includes material handling industries.Source: U.S. Bureau of the Census, Current Industrial Reports, *Manufactures' Shipments, Inventories, and Orders: 1982-1995*, and monthly press releases.

No. 1218. Industrial Production Indexes, by Industry: 1970 to 1995

[1987=100. Beginning 1990, data based on 1987 Standard Industrial Classification (SIC), earlier years based on 1977 SIC; see text, section 26. See also *Historical Statistics, Colonial Times to 1970*, series P 13 and P 18-39]

INDUSTRY	SIC code	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995
Total index	(X)	61.4	66.3	84.1	94.4	106.0	104.2	107.7	111.5	118.1	121.9
Manufacturing	(X)	56.4	61.1	78.8	91.6	106.1	103.8	108.2	112.3	119.7	123.9
Durable goods	(X)	53.3	56.7	75.7	91.8	107.4	104.1	109.3	115.6	125.8	132.5
Lumber and products	24	66.7	66.5	76.9	88.0	97.1	90.2	95.2	97.1	104.0	104.5
Furniture and fixtures	25	55.6	59.4	78.5	88.1	100.1	94.1	99.2	104.8	111.1	111.6
Stone, clay, and glass products	32	71.1	77.8	92.0	93.6	100.3	92.8	95.3	97.7	102.3	104.1
Primary metals	33	115.2	107.2	110.8	101.8	106.5	98.6	101.9	107.7	116.4	119.2
Fabricated metal products	34	75.9	76.7	92.5	94.5	99.5	94.5	99.0	103.1	110.5	113.9
Industrial, commercial machinery	35	32.8	38.1	60.6	86.8	117.6	114.7	124.0	138.1	157.7	177.8
Electrical machinery	36	40.5	45.1	73.3	93.1	111.4	113.9	123.5	134.1	154.3	174.9
Transportation equipment	37	55.5	59.7	72.3	91.8	107.0	101.1	104.8	109.2	115.3	113.3
Instruments	38	38.8	52.4	78.8	95.7	104.9	106.2	106.3	106.8	109.1	110.7
Nondurable goods	(X)	61.1	67.7	83.1	91.5	104.4	103.4	106.7	108.6	113.0	114.3
Food	20	64.0	71.4	84.6	94.9	103.7	105.3	106.9	109.5	113.2	115.3
Tobacco products	21	90.6	97.8	103.6	97.3	100.8	94.7	95.8	81.8	88.1	90.0
Textile mill products	22	74.4	77.7	92.1	89.7	97.1	96.5	104.0	109.9	113.5	112.6
Paper and products	26	62.9	65.9	83.1	92.2	105.6	106.5	110.0	114.9	119.2	119.8
Printing and publishing	27	52.7	53.7	70.3	87.6	100.8	97.0	98.1	98.8	100.1	99.4
Chemicals and products	28	55.9	69.1	87.8	91.4	111.8	110.5	114.4	115.4	121.3	125.0
Petroleum products	29	83.9	91.5	99.0	92.6	103.3	101.7	102.6	105.7	106.7	108.3
Rubber and plastics products	30	37.6	47.4	61.7	85.8	107.2	105.5	116.2	123.9	135.9	139.4
Leather and products	31	208.0	182.5	161.7	112.5	96.0	87.5	89.0	89.9	87.5	81.3
Mining	(X)	100.4	98.0	110.0	109.0	102.0	100.2	98.9	98.0	100.3	99.9
Utilities	(X)	72.9	84.3	95.9	99.5	109.9	112.3	111.9	116.3	117.9	122.0

X Not applicable. ¹ Includes computer equipment.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

No. 1219. Index of Manufacturing Capacity: 1950 to 1995

[1987 output=100. Annual figures are averages of quarterly data. Capacity represents estimated quantity of output relative to output in 1967 which the *current* stock of plant and equipment in manufacturing industries was capable of producing. Primary processing industries comprise textiles, lumber, paper and pulp, petroleum, rubber, stone, clay, glass, primary metals, fabricated metals, and a portion of chemicals. Advanced processing industries comprise chemical products, food, beverages, tobacco, apparel, furniture, printing and publishing, leather, machinery, transportation equipment, instruments, ordnance, and miscellaneous industry groups]

YEAR	Index of capacity	RELATION OF OUTPUT TO CAPACITY (percent)			YEAR	Index of capacity	RELATION OF OUTPUT TO CAPACITY (percent)		
		All manufacturing	Primary processing	Advanced processing			All manufacturing	Primary processing	Advanced processing
1950	29	83	88	80	1986	119	79	81	78
1955	36	87	92	84	1987	123	82	85	80
1960	44	80	80	80	1988	125	84	87	82
1965	54	90	91	89	1989	128	83	86	82
1970	71	80	80	79	1990	131	81	84	80
1975	84	73	73	74	1991	133	78	80	77
1980	98	80	78	81	1992	136	80	82	78
1982	105	73	69	75	1993	140	81	84	81
1983	108	75	75	75	1994	144	83	88	81
1984	111	80	80	80	1995	150	83	87	81
1985	115	80	80	79					

Source: Board of Governors of the Federal Reserve System, *Capacity Utilization In Manufacturing, Mining, Utilities, and Industrial Materials*, G.3., monthly. (Based on data from Federal Reserve Board, U.S. Department of Commerce, U.S. Bureau of Labor Statistics, and McGraw-Hill Information Systems Company, New York, NY, and other sources.)

No. 1220. Finances of Manufacturing Corporations: 1970 to 1995

[In billions of dollars. Beginning 1986, data exclude estimates for corporations with less than \$250,000 in assets at time of sample selection. Prior years include estimates for corporations in this size category. See table 871 for individual industry data]

ITEM	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Net sales	709	1,897	2,331	2,221	2,378	2,596	2,745	2,811	2,761	2,890	3,015	3,261	3,519
Net operating profit	50	129	138	125	159	190	182	173	133	151	180	241	270
Net profit:													
Before taxes	48	145	137	129	173	216	189	160	100	33	119	244	279
After taxes	29	92	88	83	116	155	136	112	68	23	84	175	201
Cash dividends	15	36	46	46	50	57	65	62	60	63	67	70	81
Net income retained in business	14	58	42	37	66	98	71	49	7	-40	17	105	120

Source: 1970 and 1980, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations*.

No. 1221. Manufacturing Technology—Percent of Establishments Using and Planning to Use: 1993

[Based on the Survey of Manufacturing Technology, which surveyed companies in SIC groups 34 to 38 and establishments of 20 or more employees]

ESTABLISHMENT CHARACTERISTIC	ESTABLISHMENTS USING SELECTED TECHNOLOGIES						PLANNING TO USE WITHIN 2 YEARS							
	Computer aided design (CAD) or computer aided engineering	Numerically controlled machines	Automated storage and retrieval	Automated sensor based inspection or testing	Communication and control			Computer aided design (CAD) or computer aided engineering	Numerically controlled machines	Automated storage and retrieval	Automated sensor based inspection or testing	Communication and control		
					Program-mable controllers	Computer control on factory floor	Inter-company computer network					Program-mable controllers	Computer control on factory floor	Inter-company computer network
Major SIC ¹ group:														
34, Fabricated metal products. . .	46.5	40.4	1.2	9.6	30.2	20.2	16.7	5.1	2.5	0.9	4.1	3.2	9.2	8.0
35, Industrial mach. and equip. . .	64.1	61.9	2.3	10.6	29.0	28.1	15.4	4.1	2.1	0.9	4.0	4.3	9.1	7.5
36, Electronic and other.	64.2	34.5	3.8	17.5	30.7	33.2	21.9	4.2	2.4	1.7	5.1	3.5	9.9	9.8
37, Transportation equip.	53.9	44.1	3.8	16.2	30.7	26.8	23.4	5.3	2.9	0.8	4.4	3.2	8.2	7.0
38, Instruments, related prod. . . .	65.5	35.1	4.8	14.7	29.8	29.0	15.3	3.3	2.3	1.6	4.4	4.4	8.7	10.2
Employment size:														
20 to 99.	49.5	41.4	0.6	7.9	20.5	18.8	12.0	4.7	2.4	0.4	3.8	3.6	9.0	6.7
100 to 499.	76.4	56.5	4.1	20.0	49.1	41.8	28.4	4.5	2.1	2.5	5.7	4.5	10.1	12.4
500 and over.	87.2	67.1	23.6	38.8	69.8	62.8	47.1	1.0	2.3	3.1	4.5	2.4	5.6	11.1
Age of plant (years):														
Less than 5.	63.5	38.4	2.5	11.0	25.6	27.5	15.0	5.7	3.8	1.5	6.7	4.6	13.1	9.7
5 to 15.	62.0	47.9	2.5	13.3	30.4	28.2	18.0	5.2	2.5	1.0	4.6	4.1	10.7	8.9
16 to 30.	64.4	53.7	2.5	13.3	33.1	29.4	20.5	4.8	2.9	1.0	4.5	3.6	8.9	9.4
Over 30.	63.1	57.3	4.0	15.6	39.1	30.7	22.0	4.1	6.5	1.3	3.7	4.3	8.2	8.3
Manufacturing process:														
Fabrication/machining.	51.5	57.1	2.1	13.1	29.5	26.6	16.3	4.5	3.4	0.6	5.2	3.4	10.0	7.7
Assembly.	67.3	14.6	1.8	15.7	25.1	28.5	20.7	4.4	1.9	1.8	4.3	3.8	9.4	9.9
Both.	69.0	62.7	2.8	13.5	36.0	30.8	20.5	5.3	2.7	1.0	4.9	4.6	10.6	9.5
Neither.	29.3	12.8	1.1	10.5	29.8	20.9	12.3	3.4	0.7	1.4	2.2	1.3	4.9	6.2
Market for most products:														
Consumer.	48.2	33.9	2.7	12.6	35.3	25.2	20.6	4.8	2.6	1.4	4.6	3.6	10.8	9.8
Commercial.	66.3	44.4	3.0	11.6	30.2	32.2	18.7	2.8	1.9	1.8	4.2	5.2	10.4	10.8
Industrial.	64.3	55.6	2.4	12.2	32.2	27.4	18.2	5.4	2.8	0.9	3.8	4.0	9.5	9.0
Transportation.	64.3	54.9	3.5	21.1	44.3	34.2	32.2	6.2	2.4	0.7	7.8	3.6	11.4	6.8
Government.	74.1	62.9	6.3	18.4	29.3	33.6	15.7	1.4	1.5	1.0	5.7	4.2	9.4	7.8
Other.	63.7	42.2	2.4	12.7	24.1	26.9	13.6	5.8	3.2	1.3	5.8	3.3	8.2	8.6
Market price for most products:														
Less than \$5.	46.3	39.4	2.1	18.1	45.1	30.4	26.1	7.4	3.4	1.4	7.5	3.5	10.9	11.3
\$5 to \$100.	53.6	51.1	1.9	13.3	36.1	29.8	22.3	5.4	2.9	1.5	4.9	4.6	10.9	10.2
\$101 to \$1,000.	63.6	54.6	3.0	13.8	30.6	28.1	16.4	4.1	2.0	0.7	4.7	4.0	10.3	8.4
\$1,001 to \$2,000.	68.3	43.7	3.9	13.6	23.5	26.3	16.2	3.7	3.2	1.6	3.5	3.8	8.7	6.2
\$2,001 to \$10,000.	73.5	54.9	2.5	9.7	24.5	27.3	14.9	5.8	1.5	1.1	4.3	4.5	10.0	6.9
Over \$10,000.	83.3	54.2	4.8	12.7	30.0	30.1	18.5	2.9	2.6	1.2	3.2	4.0	8.8	8.8

¹ Standard Industrial Classification; see text, section 13.

Source: U.S. Bureau of the Census, *Current Industrial Reports, Manufacturing Technology, series SMT(93)-3*.

No. 1222. Employment Related to Manufactured Exports, by Industry: 1985 to 1991

[Total employment related to manufactured exports is the sum of employment directly calculated for the plants shipping the exported product, the supplying industries and service organizations, and the central offices and auxiliaries. For manufacturing industries, employment is limited to paid employees in manufacturing plants, while for nonmanufacturing it includes an estimate for working proprietors and partners.]

INDUSTRY	EMPLOYMENT RELATED TO MANUFACTURED EXPORTS						CIVILIAN EMPLOYMENT (1,000)		
	Employees (1,000)			Percent of civilian employment			1985	1990	1991
	1985	1990	1991	1985	1990	1991			
Total	4,413	5,729	6,092	4.0	4.8	5.1	100,260	119,943	120,040
Manufacturing	2,295	3,212	3,363	12.2	17.1	18.6	20,647	18,840	18,062
Nonmanufacturing	2,118	2,516	2,730	2.3	2.5	2.7	79,613	101,103	101,978
Trade	949	1,211	1,427	4.3	5.1	6.0	19,737	23,718	23,780
Business services	227	256	268	1.1	1.0	1.0	17,245	25,611	26,206
Transportation ¹	282	401	397	4.6	6.2	6.0	6,369	6,500	6,641
Agriculture	127	139	139	3.7	4.1	4.0	3,225	3,382	3,470
Mining	50	68	78	4.9	9.2	10.2	947	738	767
Other	483	442	421	1.3	1.1	1.0	32,090	41,154	41,114

¹ Includes communications and utilities.

No. 1223. Manufacturing Establishments—Export-Related Shipments and Employment, 1977 to 1990, and by Industry, 1991

[The export-related employment data do not include the jobs involved in the export of nonmanufactured goods and various services sold to foreign buyers. Thus, jobs in the manufacturing sector that relate to the export of nonmanufactured goods are excluded from the estimates. In addition, all of the indirect exports being reported are domestically produced; that is, they exclude imports. See source for further details on methodology.]

INDUSTRY	SIC code ¹	MANUFACTURER'S SHIPMENT VALUE				MANUFACTURING EMPLOYMENT			
		Total ² (bil. dol.)	Export related		Export related as percent of shipments	Total (1,000)	Export related		Export related as percent of total employment
			Total (bil. dol.)	Direct exports ³ (bil. dol.)			Total (1,000)	Direct exports ⁴ (1,000)	
1977	(X)	1,358.4	142.4	85.8	10.4	19,590	1,990	1,106	10.2
1980	(X)	1,852.7	249.8	151.2	13.5	20,647	2,639	1,486	12.8
1981	(X)	2,017.5	271.7	164.3	13.4	20,264	2,604	1,486	12.9
1983	(X)	2,055.3	246.4	141.6	12.0	18,737	2,173	1,118	11.6
1984	(X)	2,253.8	268.3	151.0	11.9	19,141	2,179	1,083	11.4
1985	(X)	2,278.9	286.7	156.9	12.6	18,788	2,295	1,083	12.2
1986	(X)	2,260.3	294.3	159.4	13.0	18,371	2,318	1,061	12.6
1987	(X)	2,475.9	378.8	193.6	15.3	18,900	2,771	1,185	14.7
1988	(X)	2,684.7	395.3	242.9	14.7	19,147	2,638	1,412	13.8
1989	(X)	2,793.0	460.5	287.4	16.5	19,042	2,948	1,610	15.5
1990	(X)	2,873.5	515.0	293.7	17.9	18,840	3,214	1,614	17.1
1991, total	(X)	2,826.2	546.9	314.1	19.4	18,062	3,363	1,697	18.6
Food and kindred products	20	387.6	26.5	17.6	6.8	1,475	91	63	6.2
Tobacco products	21	32.0	6.5	4.7	20.2	40	9	7	23.1
Textile mill products	22	65.7	10.0	4.2	15.2	598	85	32	14.3
Apparel, other textile products	23	65.3	4.8	3.6	7.4	960	61	45	6.3
Lumber and wood products	24	70.6	14.1	6.2	20.0	631	105	41	16.6
Furniture and fixtures	25	40.0	2.1	1.4	5.3	466	24	16	5.2
Paper and allied products	26	128.4	19.8	8.0	15.4	621	87	31	14.0
Printing and publishing	27	156.7	13.0	3.1	8.3	1,488	123	23	8.3
Chemical and allied products	28	292.3	76.2	38.6	26.1	846	221	117	26.2
Petroleum and coal products	29	158.1	15.7	5.7	9.9	113	11	5	10.1
Rubber, misc. plastics products	30	100.7	19.4	6.8	19.3	840	160	53	19.0
Leather, leather products	31	9.1	1.9	1.5	20.9	106	15	11	13.7
Stone, clay, glass products	32	59.6	6.8	3.0	11.5	476	51	22	10.7
Primary metal industries	33	132.8	39.5	10.5	29.8	677	198	43	29.3
Fabricated metal products	34	157.1	28.5	9.9	18.2	1,359	256	83	18.8
Machinery, except electric	35	243.5	79.2	53.9	32.5	1,774	512	323	28.8
Electric, electronic equipment	36	197.9	61.2	39.5	30.9	1,427	484	321	33.9
Transportation equipment	37	364.0	89.7	72.2	24.6	1,634	377	293	23.1
Instruments and related products	38	127.2	26.3	19.7	20.7	901	183	137	20.3
Misc. manufacturing	39	37.1	5.6	3.9	15.0	363	49	33	13.6
Administrative and auxiliary	(X)	(X)	(X)	(X)	(X)	1,269	261	(X)	20.5

X Not applicable. ¹ Standard Industrial Classification; see text, section 13. ² Includes total domestic and export shipments for all manufacturing establishments. ³ Includes only the value of manufactured products exported by the producing plants. ⁴ Employment is limited to paid employees in manufacturing plants producing the export product. The number of employees related to export shipments was calculated for each establishment, aggregated by industry and by States, and inflated to a level comparable to the plant value of exports reported in the official foreign trade statistics at port value.

Source of tables 1222 and 1223: U.S. Bureau of the Census, *Annual Survey of Manufactures, 1987 and 1992 Census of Manufactures; and Exports from Manufacturing Establishments*, series AR91-1.

No. 1224. Export-Related Shipments and Employment of Manufacturing Establishments, by State: 1991

[Export-related figures exclude jobs in the manufacturing sector that are involved in the export of nonmanufactured goods and various services sold to foreign buyers. In addition, all of the indirect exports being reported are domestically produced, that is they exclude imports. Includes central administration and auxiliary office employees]

REGION, DIVISION, AND STATE	MANUFACTURES SHIPMENT VALUE					MANUFACTURING EMPLOYMENT				
	Total (bil. dol.)	Export related			Export related shipments, percent of total	Total (1,000)	Export related			Export related employment, percent of total
		Total (bil. dol.)	Direct exports (bil. dol.)	Sup- porting exports (bil. dol.)			Total (1,000)	Direct exports (1,000)	Sup- porting exports (1,000)	
United States	2,826.2	546.9	314.1	232.8	19.4	18,061.7	3,362.5	1,697.2	1,665.3	18.6
Northeast	506.8	95.7	54.5	41.2	18.9	3,757.2	715.4	352.9	362.5	18.8
New England	138.6	32.5	20.6	11.9	23.4	1,150.3	254.1	141.5	112.6	22.1
Maine	11.6	2.4	1.3	1.2	20.9	98.8	17.9	9.7	8.2	18.1
New Hampshire	9.8	2.2	1.3	0.9	22.1	85.8	18.2	9.0	9.2	21.2
Vermont	5.8	1.2	0.5	0.7	20.6	42.8	7.9	3.7	4.2	18.5
Massachusetts	61.9	14.4	9.5	4.9	23.4	489.7	111.0	63.9	47.1	22.7
Rhode Island	9.6	1.9	1.0	0.9	19.4	94.6	17.0	8.2	8.8	18.0
Connecticut	40.0	10.4	7.0	3.3	25.9	338.6	82.1	47.0	35.1	24.2
Middle Atlantic	368.1	63.2	33.9	29.3	17.1	2,606.9	461.3	211.4	249.9	17.7
New York	148.4	27.6	16.5	11.1	18.6	1,054.0	189.5	98.8	90.7	18.0
New Jersey	85.7	13.0	6.4	6.5	15.2	590.9	102.0	39.0	63.0	17.3
Pennsylvania	134.0	22.6	10.9	11.7	16.8	962.0	169.8	73.6	96.2	17.7
Midwest	877.2	155.4	86.2	69.4	17.7	5,351.7	979.3	450.5	528.8	18.3
East North Central	647.2	121.1	67.1	53.9	18.7	4,068.8	764.8	348.7	416.1	19.1
Ohio	174.9	35.9	20.4	15.5	20.5	1,045.4	209.5	96.4	113.1	20.0
Indiana	97.3	17.6	8.9	8.7	18.1	594.1	105.9	47.9	58.0	17.8
Illinois	151.9	27.4	14.4	12.9	18.0	976.1	181.9	80.9	101.0	18.6
Michigan	143.1	27.3	16.5	10.8	19.1	858.2	175.4	81.9	93.5	20.4
Wisconsin	80.0	12.9	6.9	6.0	16.2	533.0	92.1	41.6	50.5	17.3
West North Central	230.0	34.3	19.1	15.5	14.9	1,344.9	214.5	101.8	112.7	16.1
Minnesota	53.3	8.8	4.9	3.9	16.4	384.5	69.4	32.9	36.5	18.0
Iowa	45.0	6.6	3.6	3.0	14.6	224.0	33.3	16.6	17.7	14.9
Missouri	66.4	10.0	5.5	4.6	15.1	401.4	61.6	27.5	34.1	15.3
North Dakota	3.1	0.4	0.3	0.2	14.4	17.2	2.1	1.1	1.0	12.2
South Dakota	4.5	0.6	0.3	0.3	13.7	30.3	5.0	2.6	2.4	16.5
Nebraska	21.0	2.7	1.6	1.2	13.1	100.5	13.8	6.6	7.2	13.7
Kansas	36.7	5.2	2.9	2.3	14.3	187.0	29.3	14.5	14.8	15.7
South	955.1	177.1	92.6	84.4	18.5	5,788.2	988.7	492.5	496.2	17.1
South Atlantic	425.5	76.8	41.9	34.8	18.0	2,935.5	469.2	218.8	250.4	16.0
Delaware	11.9	2.0	1.2	0.9	17.1	62.4	12.4	3.3	9.1	19.9
Maryland	29.6	4.9	2.8	2.1	16.7	200.6	31.3	14.4	16.9	15.6
District of Columbia	2.1	0.2	0.1	0.1	10.4	13.3	1.2	0.2	1.0	9.0
Virginia	61.6	10.6	6.1	4.5	17.2	408.4	57.2	26.3	30.9	14.0
West Virginia	12.5	3.3	1.4	1.9	26.2	78.1	15.8	5.5	10.3	20.2
North Carolina	118.2	20.7	10.6	10.1	17.5	801.9	122.2	54.9	67.3	15.2
South Carolina	47.5	10.2	5.2	4.9	21.4	352.6	63.4	27.8	35.6	18.0
Georgia	82.8	13.0	6.8	6.2	15.7	545.1	80.9	37.7	43.2	14.8
Florida	59.3	11.9	7.7	4.1	20.0	473.1	84.8	48.7	36.1	17.9
East South Central	202.7	35.8	18.0	17.7	17.7	1,364.9	209.7	98.6	111.1	15.4
Kentucky	53.5	9.3	5.0	4.3	17.4	272.9	45.2	22.0	23.2	16.6
Tennessee	69.5	12.0	6.1	5.8	17.2	493.0	77.5	37.2	40.3	15.7
Alabama	48.5	9.3	4.1	5.2	19.1	363.3	56.5	24.1	32.4	15.6
Mississippi	31.2	5.2	2.8	2.4	16.6	237.2	30.5	15.3	15.2	12.9
West South Central	326.9	64.5	32.7	31.9	19.7	1,486.3	309.8	175.1	134.7	20.8
Arkansas	31.1	5.0	2.4	2.6	16.0	220.2	32.3	15.2	17.1	14.7
Louisiana	63.4	12.2	5.5	6.6	19.2	174.8	29.8	13.7	16.1	17.0
Oklahoma	28.4	4.2	2.0	2.3	14.9	168.6	26.9	12.3	14.6	16.0
Texas	204.0	43.1	22.8	20.4	21.1	922.7	220.8	133.9	86.9	23.9
West	487.1	118.9	80.7	38.0	24.4	3,165.1	679.2	401.4	277.8	21.5
Mountain	91.4	18.2	10.0	8.0	19.9	607.4	113.4	57.4	56.0	18.7
Montana	3.8	0.6	0.1	0.4	15.1	19.8	2.8	0.6	2.2	14.1
Idaho	9.8	2.8	2.0	0.8	28.8	60.5	13.3	7.7	5.6	22.0
Wyoming	2.7	0.4	0.1	0.3	13.3	9.8	1.4	0.4	1.0	14.3
Colorado	26.8	4.5	2.6	1.9	16.9	176.3	32.0	17.3	14.7	18.2
New Mexico	8.0	1.7	0.6	1.0	20.7	40.7	5.9	2.5	3.4	14.5
Arizona	23.0	5.3	3.1	2.2	23.0	173.5	36.1	17.7	18.4	20.8
Utah	14.5	2.5	1.3	1.2	17.2	101.8	18.0	9.4	8.6	17.7
Nevada	2.8	0.4	0.2	0.2	15.6	25.6	3.9	1.8	2.1	15.2
Pacific	395.7	100.7	70.7	30.0	25.4	2,557.7	565.8	344.0	221.8	22.1
Washington	68.0	29.6	25.3	4.3	43.6	353.8	110.4	81.2	29.2	31.2
Oregon	30.7	7.1	4.1	3.0	23.1	208.4	43.6	24.0	19.6	20.9
California	289.6	61.6	39.3	22.3	21.3	1,961.8	402.0	230.7	171.3	20.5
Alaska	3.6	1.8	1.6	0.2	49.7	14.4	7.1	6.3	0.8	49.3
Hawaii	3.8	0.6	0.4	0.2	16.3	19.3	7.1	1.8	0.9	14.0

Source: U.S. Bureau of the Census, *Exports from Manufacturing Establishments AR91-1*.

No. 1225. U.S. Exports of Manufactures, Origin of World Exports of Manufacture: 1975 to 1994

[In millions of dollars, except percents]

ITEM	1975-79	1980-84	1985-89	1990	1991	1992	1993	1994
Manufactures export value	88	143	185	281	305	327	339	381
Machinery & transport equipment	56	91	120	174	190	203	211	233
Chemicals	12	21	28	39	40	44	45	52
Other	20	31	38	68	75	80	83	97
Origin of world exports of manu. (percent):								
United States ¹	12.4	12.8	10.7	11.3	12.0	11.8	12.7	(NA)
Machinery & transport equip.	16.9	17.3	14.2	14.4	15.1	14.9	(NA)	(NA)
Chemicals	13.8	15.2	13.0	13.1	13.3	13.1	(NA)	(NA)
Other	6.9	6.9	5.6	7.0	7.6	7.4	(NA)	(NA)
Germany ²	15.4	13.7	14.4	14.6	14.2	14.0	12.5	(NA)
Japan	10.9	12.8	13.0	11.2	11.9	11.8	13.0	(NA)
Other G-7 countries ³	23.5	22.1	21.3	22.0	21.6	21.0	20.8	(NA)
East Asian NICs ⁴	4.1	6.0	7.7	7.6	8.2	8.1	9.3	(NA)

NA Not available. ¹ U.S. exports are domestic exports only. ² Prior to 1991, data for are for former West Germany only. ³ Other Group of Seven (G-7) Countries: Canada, France, Italy, United Kingdom. ⁴ East Asian newly industrialized countries (NICs): Hong Kong, S. Korea, Singapore, Taiwan.

Source: U.S. Dept. of Commerce, International Trade Administration, Office of Trade and Economic Analysis. Based on United Nations Commodity Trade Statistics, *Statistical Yearbook of the Republic of China*, and unpublished data.

No. 1226. Foreign Direct Investment Position in the United States—Manufacturing: 1993 and 1994

[In millions of dollars. Book value at year end. Covers U.S. firms in which foreign interest or ownership was 10% or more. Minus sign (-) indicates a negative position]

AREA OR COUNTRY	TOTAL ¹		FOOD AND KINDRED PRODUCTS		CHEMICALS AND ALLIED PRODUCTS		PRIMARY AND FABRICATED METALS		MACHINERY	
	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994
All countries ²	166,397	184,484	22,997	20,880	58,316	67,303	12,034	14,325	29,677	31,856
Canada	15,306	16,911	(D)	5,431	(D)	1,018	2,032	2,420	2,617	2,365
Europe	124,454	135,804	16,058	13,423	52,376	59,668	8,025	9,580	20,726	21,948
Latin America	4,273	6,466	288	647	1,138	2,327	198	229	-73	-45
Asia and Pacific	21,694	23,433	(D)	1,376	(D)	3,992	1,791	2,084	6,038	7,173

D Data withheld to avoid disclosure of individual companies. ¹ Includes other manufacturing industries not shown separately. ² Includes other countries not shown separately.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, August 1995.

No. 1227. Alcoholic Beverages—Summary: 1980 to 1994

[For 1980-1985, stocks on hand for years ending June 30; later data for years ending September 30. All other items for fiscal years ending in year shown; see text, section 9. Includes Puerto Rico. Excludes imports. See *Historical Statistics, Colonial Times to 1970*, series P 235 for beer and P 236a for distilled spirits]

ITEM	Unit	1980	1985	1989	1990	1991	1992	1993	1994
Beer: Breweries operated	Number ²	86	103	245	286	333	392	480	619
Production ¹	Mil. bbl.	193	194	198	202	204	202	202	203
Value of shipments ³	Mil. dol.	9,362	12,216	14,321	15,186	15,925	17,302	16,629	16,714
Tax-paid withdrawals	Mil. bbl.	172	175	179	182	183	182	180	180
Stocks on hand	Mil. bbl.	15	14	14	14	14	13.4	13.7	13.4
Distilled spirits:									
Production facilities operated	Number	143	117	140	143	145	143	132	150
Production ⁴	Mil. tax gal.	236	117	135	122	129	110	111	99
Tax-paid withdrawals ⁵	Mil. tax gal.	330	306	251	251	242	246	240	229
Stocks on hand ⁶	Mil. tax gal.	696	588	456	451	459	365	420	410
Whiskey: Production	Mil. tax gal.	87	65	75	77	75	62	59	59
Stocks on hand	Mil. tax gal.	566	467	361	365	368	309	361	354
Still wines: Production ⁷	Mil. wine gal.	982	622	611	577	478	484	417	438
Tax-paid withdrawals ⁸	Mil. wine gal.	340	414	464	468	387	387	354	356
Stocks on hand ⁹	Mil. wine gal.	486	602	558	562	539	525	520	477
Effervescent wines ¹⁰ : Prod. ¹¹	Mil. wine gal.	26.8	32.0	30.9	26.9	22.8	24.7	27.7	23.7
Tax-paid withdrawals	Mil. wine gal.	24.1	30.9	27.0	26.2	24.6	24.1	24.4	23.7
Stocks on hand	Mil. wine gal.	11.9	21.3	19.4	22.1	20.4	18.8	19.5	16.5

NA Not available. ¹ Production represents total amount removed from fermenters, including distilling material, and includes increase after fermentation (by amelioration, sweetening, and addition of wine spirits). ² Barrels of 31 wine gallons. ³ Source: U.S. Bureau of the Census, *Census of Manufactures, and Annual Survey of Manufactures*. ⁴ Excludes alcohol produced for industrial use. Also excludes vodka and gin production. ⁵ For spirits of 100 proof or over, a tax gallon is equivalent to the proof gallon; for spirits of less than 100 proof, the tax gallon is equivalent to the wine gallon. A proof gallon is the alcoholic equivalent of a U.S. gallon at 60 degrees F, containing 50 percent of ethyl alcohol by volume. ⁶ Includes ethyl alcohol. ⁷ A wine gallon is the U.S. gallon equivalent to the volume of 231 cubic inches. ⁸ Includes special natural wines. ⁹ Excludes distilling materials. ¹⁰ Includes champagne, other effervescent wines, and artificially carbonated wines.

Source: Except as noted, through 1982, U.S. Bureau of Alcohol, Tobacco, and Firearms, *Alcohol and Tobacco Summary Statistics*, annual; thereafter, *Statistical Release*, No. 76.

No. 1228. Tobacco Products—Production, Consumption, and Expenditures: 1970 to 1994

[Production data are for calendar years. Excludes cigars produced in customs bonded manufacturing warehouses. See also *Historical Statistics, Colonial Times to 1970*, series P 239-241]

ITEM	Unit	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
PRODUCTION													
Cigarettes	Billions .	583	714	669	665	658	689	695	677	710	695	719	661
Cigars	Billions .	8	4	4	3	3	2	2	2	2	2	2	2
Tobacco ¹	Mil. lb.	165	163	163	158	147	143	142	141	142	142	141	133
Consumption per person ²	Lb. ³ . . .	10	8	7	7	7	6	6	6	6	5	5	5
Cigarettes	1,000 . . .	4	4	3	3	3	3	3	3	3	3	3	3
Cigars ⁴	Number.	60	24	20	18	17	15	14	14	13	12	12	11
Consumer expenditures	Bil. dol .	11.5	21.0	30.7	32.2	33.7	35.4	37.8	40.9	43.8	47.4	48.4	49.0
Cigarettes	Bil. dol .	10.4	19.4	28.8	30.3	31.8	33.6	35.9	38.3	41.6	45.2	45.8	46.2
Cigars	Bil. dol .	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.7
Other	Bil. dol .	0.4	0.9	1.2	1.2	1.2	1.3	1.4	1.4	1.5	1.8	2.0	2.1

¹ Smoking and chewing tobaccos and snuff output. ² Based on estimated population 18 years old and over, as of July 1, including Armed Forces abroad. ³ Unstemmed processing weight equivalent. ⁴ Weighing over 3 pounds per 1,000.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Tobacco Situation and Outlook*, quarterly.

No. 1229. Cotton, Wool, and Manmade Fibers—Consumption, by End-Use: 1990 to 1993

[Represents products manufactured by U.S. mills. Excludes glass fiber]

YEAR	Total (mil. lb.)	COTTON		WOOL		MAN-MADE FIBERS							
		Total (mil. lb.)	Percent of end- use	Total (mil. lb.)	Percent of end- use	Total (mil. lb.)	Percent of end- use	Cellulosic ¹		Noncellulosic ²			
								Total (mil. lb.)	Percent of end- use	Total (mil. lb.)	Percent of end- use		
Total:													
1990	14,011	4,699	33.5	185	1.3	9,127	65.2	599	4.3	8,528		60.9	
1993	16,177	5,656	34.9	236	1.5	10,285	63.6	594	3.7	9,691		59.9	
Apparel:													
1990	5,204	2,897	55.7	118	2.3	2,189	42.0	287	5.5	1,902		36.5	
1993	6,193	3,489	56.4	151	2.4	2,553	41.2	287	4.6	2,266		36.6	
Home furnishings:													
1990	2,235	1,325	59.3	14	0.6	896	40.1	104	4.7	792		35.4	
1993	2,606	1,632	62.6	16	0.6	958	36.8	104	4.0	854		32.8	
Floor coverings:													
1990	3,075	18	0.6	21	0.7	3,036	98.7	-	-	3,036		98.7	
1993	3,508	24	0.6	30	0.9	3,454	98.5	-	-	3,454		98.5	
Exports of domestic products:													
1990	532	146	27.4	22	4.1	364	68.5	29	5.5	335		63.0	
1993	657	174	26.5	24	3.7	459	69.8	37	5.6	422		64.2	
Industrial: ³													
1990	2,965	313	10.6	10	0.3	2,642	88.1	179	6.0	2,463		83.1	
1993	3,213	337	10.4	15	0.5	2,861	89.1	166	5.2	2,695		83.9	

- Represents or rounds to zero. ¹ Rayon and acetate. ² Nylon, polyester, acrylic, and olefin. ³ Includes consumer-type products.

Source: Fiber Economics Bureau, Inc., Roseland, NJ, *Textile Organon*, monthly, (copyright).

No. 1230. Textiles and Apparel Products—U.S. Exports and Imports: 1992 to 1994

[In millions of dollars. Excludes glass fibers, rubber and leather apparel, and clothing donated for charity. Minus sign (-) indicates deficit]

PRODUCT	EXPORTS			GENERAL IMPORTS			MERCHANDISE TRADE BALANCE		
	1992	1993	1994	1992	1993	1994	1992	1993	1994
Total	10,120	10,977	12,208	39,070	42,225	45,952	-28,950	-31,248	-33,744
Textile yarn fabrics	5,911	6,025	6,592	7,844	8,438	9,208	-1,933	-2,413	-2,616
Textile yarn	1,179	1,045	1,213	955	1,146	1,335	-224	-101	-122
Cotton fabric, woven	591	641	725	1,493	1,552	1,498	-902	-911	-773
Woven fabric of manmade textiles	825	883	925	1,206	1,261	1,291	-381	-378	-366
Woven fabric of textile material	185	210	236	666	662	695	-481	-452	-459
Special yarns	1,335	1,418	1,588	797	878	977	-538	-540	-611
Other	1,796	1,828	1,905	2,727	2,939	3,412	-931	-1,111	-1,507
Apparel	4,209	4,952	5,616	31,226	33,787	36,744	-27,017	-28,835	-31,128

Source: U.S. Bureau of the Census, *U.S. Merchandise Trade: Exports, General Imports, and Imports for Consumption*, Report FT925, monthly.

No. 1231. Iron and Steel Industry—Summary: 1980 to 1995

[For financial data, the universe in 1992 consists of the companies that produced 68 percent of the total reported raw steel production. The financial data represent the operations of the steel segment of the companies. Minus sign (-) indicates net loss]

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992	1993	1994	1995
Steel mill products, apparent supply . . .	Mil. tons ¹	95.2	96.4	102.7	96.8	97.8	88.3	95.0	104.6	121.3	114.8
Net shipments	Mil. tons	83.9	73.0	83.8	84.1	85.0	78.8	82.2	89.0	95.1	97.5
Exports	Mil. tons	4.1	1.0	2.1	4.6	4.3	6.3	4.3	4.0	3.8	7.1
Imports	Mil. tons	15.5	24.3	20.9	17.3	17.2	15.8	17.1	19.5	30.1	24.4
Scrap consumed	Mil. tons	66.6	53.2	56.3	51.7	50.1	50.5	51.9	58.5	60.0	(NA)
Scrap inventory	Mil. tons	6.9	4.0	3.5	3.5	3.6	3.7	3.3	3.6	4.0	(NA)
Iron and steel products: Exports	Mil. tons	5.1	1.6	2.8	5.4	5.3	7.4	5.3	4.7	4.9	8.2
Imports	Mil. tons	17.9	27.6	25.7	22.1	21.9	20.2	21.9	21.8	32.7	27.3
Capacity by steelmaking process	Mil. net tons	153.7	133.6	112.0	115.9	116.7	117.6	113.1	109.9	108.2	112.5
Revenue	Bil. dol.	37.7	28.4	32.7	31.8	30.9	27.1	26.9	29.5	33.5	(NA)
Net income	Bil. dol.	0.7	-1.8	-0.6	1.6	0.1	-2.0	-4.1	1.9	1.3	(NA)
Stockholders' equity	Bil. dol.	14.5	6.9	2.2	2.1	4.3	2.8	-0.6	3.7	7.1	(NA)
Total assets	Bil. dol.	30.8	24.0	24.2	24.6	28.3	27.4	28.8	30.6	32.0	(NA)
Capital expenditures	Bil. dol.	2.7	1.6	1.8	2.3	2.6	2.3	1.8	1.5	2.2	(NA)
Working capital ratio ²	Ratio	1.6	1.3	1.7	1.6	1.6	1.4	1.4	1.3	1.6	(NA)
Inventories	Bil. dol.	4.7	3.5	3.8	4.0	4.7	4.4	4.5	4.6	4.9	(NA)
Average employment	1,000	399	208	169	169	164	146	140	127	126	123
Hours worked	Million	758	419	363	360	350	304	293	274	273	269
Producer price indexes: ³											
Iron and steel, total	1982=100	90.0	104.8	115.7	119.1	117.2	114.1	116.0	121.9	(NA)	(NA)
Steel mill products	1982=100	86.6	104.7	110.7	114.5	112.1	109.5	108.2	113.4	(NA)	(NA)
Blast and electric furnace products	1982=100	97.1	95.6	119.6	129.4	120.1	116.9	115.7	116.6	(NA)	(NA)
Iron ore	1982=100	87.8	97.5	82.8	82.8	83.3	83.6	82.7	82.8	(NA)	(NA)
Scrap, iron and steel	1982=100	140.9	112.6	177.1	173.7	166.0	147.6	172.5	192.5	(NA)	(NA)
Foundry and forge shop products	1982=100	89.7	105.2	109.6	114.6	117.0	119.0	121.3	123.8	(NA)	(NA)

NA Not available. ¹ In millions of short tons. ² Current assets to current liabilities. ³ Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

No. 1232. Raw Steel, Pig Iron, and Ferroalloys Production: 1970 to 1995

[In millions, except percent. See also *Historical Statistics, Colonial Times to 1970*, series P 265-269]

ITEM	1970	1980	1985	1988	1989	1990	1991	1992	1993	1994	1995
Raw steel (net tons):											
World production	654.2	790.4	792.9	859.2	865.3	848.8	811.1	810.2	814.6	800.1	(NA)
U.S. production	131.5	111.8	88.3	99.9	97.9	98.9	87.9	92.9	97.9	100.6	104.9
Percent of world	20	14	11	12	11	12	11	12	12	13	(NA)
Basic oxygen process	63.3	67.6	51.9	58.0	58.3	58.5	52.7	57.6	59.3	61.0	62.5
Electric	20.2	31.2	29.9	36.8	35.2	36.9	33.8	35.3	38.5	39.6	42.4
Open hearth	48.0	13.0	6.4	5.1	4.4	3.5	1.4	-	-	-	-
Carbon	117.4	94.7	76.7	86.8	86.2	86.6	77.9	82.5	86.9	89.5	92.7
Alloy and stainless	14.1	17.1	11.6	13.1	11.7	12.3	10.0	10.4	11.0	11.1	12.3
Pig iron and ferroalloys, production (sh. tons) ¹	93.5	68.7	50.4	55.7	55.9	54.8	48.6	52.2	53.1	54.4	56.1

- Represents or rounds to zero. NA Not available. ¹ For 1970, excludes blast furnace ferroalloys.

No. 1233. Steel Products—Net Shipments, by Market Classes: 1970 to 1994

[In thousands of short tons. Comprises carbon, alloy, and stainless steel]

MARKET CLASS	1970	1980	1985	1989	1990	1991	1992	1993	1994
Total ¹	90,798	83,853	73,043	84,100	84,981	78,846	82,241	89,022	95,084
Automotive	14,475	12,124	12,950	11,763	11,100	10,015	11,092	12,719	14,753
Steel service centers, distributors	16,025	16,172	18,439	20,769	21,111	19,464	21,328	23,714	24,153
Construction, incl. maintenance	8,913	8,742	7,900	8,318	9,245	9,161	9,536	13,429	10,935
Containers, packaging, shipping	7,775	5,551	4,089	4,459	4,474	4,278	3,974	4,355	4,495
Machinery, industrial equipment, tools	5,169	4,543	2,271	2,409	2,388	1,982	1,951	2,191	2,427
Steel for converting and processing	3,443	4,117	5,484	8,235	9,441	8,265	9,226	9,451	10,502
Rail transportation	3,098	3,155	1,061	1,229	1,080	999	1,052	1,223	1,248
Contractors' products	4,440	3,148	3,330	3,182	2,870	2,306	2,694	2,913	3,348
Oil and gas industries	3,550	5,371	2,044	1,203	1,892	1,425	1,454	1,526	1,703
Electrical equipment	2,694	2,441	1,869	2,449	2,453	2,102	2,136	2,213	2,299
Appliances, utensils, and cutlery	2,160	1,725	1,466	1,721	1,540	1,388	1,503	1,592	1,736

¹ Includes nonclassified shipments and other classes not shown separately.

Source of tables 1231-1233: American Iron and Steel Institute, Washington, DC, *Annual Statistical Report* (copyright).

No. 1234. Computer Shipments and Revenues: 1991 to 1993

[Revenue is in if-sold, end-user dollars]

ITEM	FACTORY REVENUE (mil. dol.)			SHIPMENTS (units)		
	1991	1992	1993	1991	1992	1993
United States:						
Supercomputer	876	938	701	558	571	405
Mainframe	9,713	7,453	4,643	3,227	2,421	1,929
Midrange	7,967	8,534	6,705	151,574	124,745	107,034
Workstation	3,458	3,719	4,375	210,541	237,730	262,869
Personal computer	24,589	25,858	29,695	10,903,000	12,544,374	14,775,000
Canada:						
Supercomputer	22	37	38	17	26	29
Mainframe	671	623	243	204	156	123
Midrange	485	618	509	10,117	9,094	6,794
Workstation	188	185	181	8,017	11,806	10,687
Personal computer	2,077	2,405	2,730	926,000	1,175,000	1,415,000
Western Europe:						
Supercomputer	529	479	448	241	269	213
Mainframe	9,629	7,490	5,782	4,088	2,455	1,963
Midrange	9,699	6,727	7,157	198,780	155,142	145,353
Workstation	2,540	2,604	2,828	154,581	175,762	171,744
Personal computer	17,517	18,872	17,999	8,406,937	9,495,441	10,323,974
Japan:						
Supercomputer	494	450	558	140	108	122
Mainframe	6,252	5,367	5,569	5,631	3,630	4,191
Midrange	5,673	4,916	4,808	286,626	233,967	194,385
Workstation	1,885	1,883	2,143	124,712	124,073	133,750
Personal computer	4,586	4,750	5,885	2,354,300	2,223,810	2,464,093
Asia/Pacific:						
Supercomputer	54	83	82	44	63	58
Mainframe	544	642	568	257	238	265
Midrange	263	522	784	3,978	8,757	12,883
Workstation	256	327	351	15,871	23,842	20,374
Personal computer	4,574	5,219	7,053	2,235,000	3,031,398	3,935,135
Rest of world:						
Supercomputer	16	67	31	13	50	18
Mainframe	382	584	473	158	200	246
Midrange	476	506	625	15,063	13,209	18,862
Workstation	373	340	408	15,808	24,038	24,006
Personal computer	4,237	6,991	10,256	2,140,763	3,940,777	5,929,798

No. 1235. Microcontrollers and Chip Shipments: 1990 to 1993

ITEM	REVENUE (mil. dol.)				SHIPMENTS (millions of units)			
	1990	1991	1992	1993	1990	1991	1992	1993
Microcontrollers, worldwide	3,667	4,519	4,613	5,813	1,365	1,562	1,895	2,155
8-bit	2,079	2,618	(NA)	3,612	567	729	844	1,096
4-bit	1,394	1,598	(NA)	1,705	781	801	1,003	999
16-bit	194	303	(NA)	496	17	32	48	60
32-bit processors	1,402	2,456	4,363	8,427	26	44	61	77
RISC ¹	175	270	305	642	1	1	3	7
CISC ²	1,227	2,186	4,057	7,785	25	42	27	70
256K DRAM ³ chips	1,322	622	270	162	620	299	193	105
1-Megabit DRAM chips	4,229	3,776	2,644	2,031	665	835	821	601

NA Not available. ¹ RISC=Reduced Instruction Set Computer. ² CISC=Complex Instruction Set Computer.
³ DRAM=Dynamic Random Access Memory.

Source of tables 1234 and 1235: Dataquest, Inc., San Jose, CA, Consolidate Data Base, January 1994, and unpublished data.

No. 1236. Computers and Industrial Electronics—Shipments: 1985 to 1994

[In millions of dollars]

ITEM	1985	1987	1988	1989	1990	1991	1992	1993	1994
Total	43,993	48,275	49,797	51,339	50,793	50,121	51,932	54,821	63,478
Computer and peripheral equipment:									
Computers	21,107	24,410	24,354	25,610	25,973	26,691	29,036	30,002	38,423
Peripheral equipment	22,887	23,865	25,443	25,729	24,820	23,430	22,896	24,819	25,005
Total	20,121	21,325	22,100	24,799	26,183	26,126	26,778	27,250	29,757
Industrial electronics:									
Controlling, processing equipment	8,719	9,193	9,861	11,992	12,728	12,633	12,881	13,961	15,077
Testing, measuring equipment	6,008	6,009	5,807	5,953	6,859	7,492	7,484	7,332	8,121
Nuclear electronic equipment	519	601	616	606	567	571	533	519	521
Robots, accessories, and components	345	284	229	256	275	294	(NA)	(NA)	(NA)
Other electronic equipment	4,530	5,238	5,588	5,992	5,754	5,137	5,880	5,438	6,038

NA Not available.

Source: Electronic Industries Association, Washington, DC, *Electronic Market Data Book*, annual (copyright).

No. 1237. Factory Sales of Consumer Electronics (including imports), and Electronic Components in the United States: 1985 to 1995

[In millions of dollars]

CATEGORY	1985	1988	1989	1990	1991	1992	1993	1994	1995
Total	22,940	32,236	33,373	43,033	42,668	46,165	51,215	56,292	61,693
Television sets:									
Direct-view color TV	5,514	6,247	6,490	6,197	5,979	6,591	7,316	7,225	6,798
LCD color TV	7	30	40	50	66	60	60	60	60
Projection TV	488	529	478	626	683	714	841	1,117	1,417
TV/VCR combinations	(NA)	(NA)	(NA)	178	266	376	699	710	723
Monochrome TV	308	196	116	99	61	47	40	38	34
LCD Monochrome TV	(NA)	40	40	33	31	32	33	32	31
Other video:									
VCR decks	4,173	2,848	2,625	2,439	2,454	2,947	2,851	2,869	2,767
Camcorders	793	1,972	2,007	2,260	2,013	1,841	1,958	1,985	2,135
Laserdisc players	23	34	50	72	81	93	123	122	108
Home satellite earth stations	(NA)	331	365	421	370	379	408	900	1,265
Videocassette players	(NA)	57	63	65	71	49	61	64	69
Audio:									
Audio systems	1,372	1,225	1,217	1,270	1,264	1,370	1,464	1,703	1,623
Separate audio components	1,132	1,854	1,871	1,935	1,805	1,586	1,635	1,686	1,911
Home radios	379	377	379	360	310	324	307	306	284
Portable audio equipment	1,140	1,547	1,595	1,645	1,780	2,096	2,187	2,495	2,506
Aftermarket autosound equipment	961	1,187	1,125	1,192	1,232	1,467	1,604	1,898	1,931
Factory installed autosound	1,800	2,750	3,000	3,100	2,875	2,990	3,199	3,225	3,585
Pagers	(NA)	(NA)	(NA)	118	139	168	198	230	300
Vehicle security	(NA)	(NA)	(NA)	190	210	240	294	401	485
Home information:									
Cordless telephones	280	681	830	842	1,125	1,091	1,046	1,106	1,377
Corded telephones	630	441	532	638	605	575	617	610	557
Telephone answering devices	325	755	838	827	1,000	934	1,026	1,153	1,077
Cellular telephones	115	430	653	1,133	962	1,146	1,257	1,275	1,431
Home computers	2,175	3,340	3,711	4,187	4,287	5,573	6,921	8,070	10,920
Computer peripherals	(NA)	(NA)	(NA)	1,980	2,060	2,220	2,450	3,100	3,850
Computer software (inc.CDROM)	(NA)	(NA)	(NA)	971	1,045	1,250	1,600	2,500	2,500
Personal Wordprocessors	(NA)	650	688	666	600	555	558	504	451
Home fax machines	(NA)	(NA)	(NA)	920	869	826	888	964	919
Home security systems	(NA)	900	1,000	1,440	1,030	830	940	1,110	1,130
Electronic Gaming Hardware	(NA)	(NA)	(NA)	975	1,275	1,575	1,650	1,575	1,500
Electronic Gaming Software	(NA)	(NA)	(NA)	2,400	2,325	2,400	2,625	2,925	3,000
Blank media:									
Blank audio cassettes	270	354	367	376	373	376	362	353	334
Blank videocassettes	1,055	936	923	948	980	872	779	730	708
Blank floppy diskettes	(NA)	258	297	314	308	320	345	353	373
Accessories:									
Electronic accessories	(NA)	847	829	793	721	715	759	936	944
Total primary batteries	(NA)	1,420	1,244	1,383	1,424	1,538	2,215	2,412	2,600
U.S. electronic component ship	44,064	55,287	59,120	61,303	61,998	65,295	71,480	83,593	(NA)
Electron tubes	2,068	2,299	2,586	2,646	2,586	2,655	3,038	3,457	(NA)
Solid State products	14,651	19,790	22,246	23,543	26,238	27,292	31,534	39,500	(NA)
Passive and other components	27,345	33,197	34,288	35,114	32,874	35,349	36,909	40,635	(NA)

NA Not available.

Source: Electronic Industries Association, Washington, DC, *Electronic Market Data Book*, annual (copyright).

No. 1238. Machine Tools—New Orders and Shipments: 1970 to 1994

[In millions of dollars. Data represents total industry volume based on reports from over 200 manufacturers]

YEAR	METAL CUTTING TOOLS					METAL FORMING TOOLS				
	New orders (net)		Shipments		Order backlog, end of period	New orders (net)		Shipments		Order backlog, end of period
	Total	Domestic	Total	Domestic		Total	Domestic	Total	Domestic	
1970	651	507	993	827	471	261	227	450	412	235
1975	916	781	1,879	1,548	1,062	361	284	573	485	388
1980	3,885	3,496	3,681	3,206	4,750	870	744	1,011	879	701
1984	1,916	1,700	1,607	1,484	1,132	1,000	932	679	609	542
1985	1,853	1,652	1,742	1,549	1,243	675	610	803	743	414
1986	1,544	1,377	1,890	1,685	897	581	507	688	621	307
1987	1,451	1,294	1,677	1,499	672	667	536	647	538	327
1988	2,708	2,316	1,575	1,400	1,806	883	749	825	702	386
1989	1,977	1,723	2,359	2,059	1,423	832	719	837	704	380
1990	2,070	1,772	2,330	2,004	1,164	894	761	970	851	304
1991	1,894	1,549	1,872	1,595	1,186	748	546	802	625	251
1992	1,756	1,532	1,918	1,605	1,025	726	609	678	547	299
1993	2,322	2,177	2,160	1,955	1,187	971	825	1,044	881	225
1994	2,914	2,775	2,515	2,333	1,587	1,527	1,382	1,184	1,038	568

Source: The Association For Manufacturing Technology, McLean, VA, *The Economic Handbook of The Machine Tool Industry*, annual, (copyright); and Bureau of Economic Analysis, *Survey of Current Business*, monthly.

No. 1239. Semiconductors and Related Devices: 1980 to 1993

[In millions of dollars, except percent. Semiconductors and related devices represent SIC 3674]

ITEM	1980	1985	1988	1989	1990	1991	1992	1993
Consumption, North American market ¹	6,053	9,420	15,844	17,070	16,540	16,990	20,426	27,998
Revenues (North American companies)	8,062	11,051	18,586	19,515	21,047	22,940	27,105	37,453
Capital expenditures (North America) ²	1,438	2,629	3,434	3,642	3,855	4,077	4,296	5,809
Percent of sales	17.8	23.8	18.5	18.7	18.3	17.8	15.9	15.5
Japan capital expend. as a percent of revenues	11.0	11.4	14.9	15.5	20.5	20.4	22.2	16.2
R&D (North America)	423	1,159	3,873	4,269	5,172	5,652	6,122	5,587
Imports, total³	2,223	4,870	9,502	10,758	(NA)	(NA)	(NA)	(NA)
Shipments ⁴	9,455	15,253	20,332	23,488	23,978	26,302	25,964	30,425
Integrated microcircuits	6,768	10,872	14,857	16,682	16,372	19,151	20,065	24,084
Semiconductor devices, n.e.c. ⁵	1,398	2,569	3,337	4,875	5,584	5,761	5,899	6,341
Assets, beginning of year	4,014	12,200	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. ¹ Source: Dataquest Inc., San Jose, CA, unpublished data. Revenue from shipments by all companies into Canada and the United States. ² Capital expenditures by all companies in Canada and the United States. ³ Imports for consumption. Includes imports not shown separately. ⁴ Includes items not shown separately. ⁵ N.e.c.=Not elsewhere classified.

Source: Except as noted, U.S. Bureau of the Census, *Current Industrial Reports*, series MA-36Q; *U.S. Imports, FT 210, 1980-1988; Import CD-ROM Disc 1989; and Annual Survey of Manufactures*.

No. 1240. Fiber, Rugs, Carpeting, and Sheets—Shipments: 1989 to 1995

PRODUCT	Unit	1989	1990	1991	1992	1993	1994	1995
All fibers ¹	Mil. lbs.	743	812	837	926	1,008	1,036	953
Raw wool ^{2,3}	Mil. lbs.	135	133	152	151	157	153	142
Noils, and fiber ⁴	Mil. lbs.	24	20	21	21	23	19	20
Other fibers	Mil. lbs.	584	659	664	754	829	864	792
Knit fabric production	Mil. lbs.	1,935	1,901	1,963	2,179	2,188	2,230	(NA)
Rugs, carpet and carpeting	Mil. dol.	8,431	8,527	7,980	8,749	9,283	9,895	(NA)
Sheets	1,000 doz	15,663	15,408	14,001	15,198	16,331	16,190	15,210
Pillow cases	1,000 doz	13,089	12,665	11,301	12,523	14,464	14,622	14,199
Terry towels	1,000 doz	62,741	42,376	43,158	48,789	47,161	48,348	47,933

NA Not available. ¹ Includes man-made fiber top converted from tow without combing. A number of companies were added for 1990 based on information in the 1987 Census of Manufactures. Data were received from these companies for 1990; therefore, the information shown for years prior to 1990 may not be directly comparable. These changes represent approximately 20 percent of the total fibers consumed on the woolen system and worsted combing. ² Data are shown on a scoured basis for greasy wool. ³ Shorn and pulled wool of sheep excludes raw wool consumed in cotton system spinning to avoid disclosing figures for individual companies. ⁴ Includes reprocessed and reused wool, mohair, alpaca, vicuna, and other specialty fibers as well as tops and noils consumed in woolen spinning and mohair consumed in worsted combing. Does not include wool tops consumed in cotton system spinning.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA22K, MA22Q, and MQ23X, annual.

No. 1241. Glass Containers, Clay Construction Products, and Refractories—Shipments: 1989 to 1995

[In millions of dollars]

PRODUCT	1989	1990	1991	1992	1993	1994	1995
Glass container shipments	286	285	279	283	290	285	269
Brick shipments ¹	1,088	1,014	883	920	1,006	1,103	1,040
Clay tile shipments ²	698	687	639	646	701	723	680
Clay pipe and fittings shipments	63	60	51	38	32	33	38
Refractory shipments	2,011	2,003	1,947	1,956	1,930	1,997	(NA)
Clay	823	771	784	786	773	851	(NA)
Nonclay	1,188	1,232	1,163	1,170	1,157	1,146	(NA)

NA Not available. ¹ Building or common and face bricks. ² Floor and wall tile including quarry tile.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, M32G, MQ32D, and MA32C, annual.

No. 1242. Mining and Mineral Processing Equipment—Shipments: 1993 and 1994

PRODUCT	Product code	Number of companies 1993	QUANTITY (units)		VALUE (mil. dol.)	
			1993	1994	1993	1994
Portable crushing, screening, washing, and combination plants	3531K	16	574	605	75	83
Underground mining machinery ¹	35325	33	3,312	(NA)	338	356
Mineral processing and beneficiation equip. ¹	35326	(NA)	(NA)	(NA)	(NA)	(NA)
Crushing/pulverizing/screening machinery ²	35327	47	3,297	4,010	229	278

NA Not available. ¹ Excludes parts. ² Excludes portables and parts.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA35F, annual.

No. 1243. Inorganic Materials and Pharmaceutical Preparations: 1990 to 1994

PRODUCT	Product code	Unit	1990	1992	1993	1994
INORGANIC FERTILIZERS						
Ammonia, synthetic anhydrous:	28731 31					
Total production		1,000 sh. tons	17,003	17,924	17,195	17,256
Shipments		1,000 sh. tons	10,382	10,642	10,436	10,411
Shipments value		Mil. dol.	1,072	1,095	1,174	1,509
Ammonium nitrate, original solution:	28731 50					
Total production		1,000 sh. tons	7,714	7,981	8,281	8,517
Ammonium sulfate:	28731 57					
Total production		1,000 sh. tons	2,519	2,391	2,432	2,588
Shipments		1,000 sh. tons	2,529	2,239	2,417	2,489
Shipments value		Mil. dol.	130	140	150	165
Urea (100%):	28732					
Total production		1,000 sh. tons	8,217	8,766	8,330	7,952
Shipments		1,000 sh. tons	5,362	5,343	5,255	5,099
Shipments value		Mil. dol.	640	696	630	657
Nitric acid (100%):	28731 11					
Total production		1,000 sh. tons	7,931	8,136	8,254	8,611
Shipments		1,000 sh. tons	647	672	678	964
Shipments value		Mil. dol.	81	85	89	118
Phosphoric acid (100% P2O5):	28741 81					
Total production	28741 85	1,000 sh. tons	12,035	12,826	11,515	12,792
Shipments		1,000 sh. tons	4,170	4,375	3,688	4,228
Shipments value		Mil. dol.	1,226	1,182	969	1,085
Sulfuric acid, gross (100%):	28193					
Total production		1,000 sh. tons	44,327	44,524	39,839	44,813
Shipments		1,000 sh. tons	11,879	10,950	11,362	11,916
Shipments value		Mil. dol.	589	529	516	488
Superphosphates and other fertilizer materials (100% P2O5):	28742					
Total production		1,000 sh. tons	8,982	9,696	8,801	10,024
Shipments		1,000 sh. tons	9,016	9,666	8,814	9,973
Shipments value		Mil. dol.	2,711	2,530	2,057	2,830
INORGANIC CHEMICAL SHIPMENTS						
Alkalies and chlorine	2812	Mil. dol.	3,187	2,761	2,278	2,281
Chlorine (100% Cl)	28121	Mil. dol.	478	194	546	840
Sodium hydroxide (caustic soda)	28123	Mil. dol.	2,341	2,206	1,370	1,053
Other alkalies	28125	Mil. dol.	361	353	355	381
Alkalies and chlorine n.s.k.	28120 00	Mil. dol.	7	7	7	7
Inorganic color pigments	2816	Mil. dol.	2,261	2,428	2,391	2,471
Titanium dioxide (composite and pure) (commodity weight)	28161 00	Mil. dol.	2,131	2,316	2,253	2,318
Inorganic chemicals n.e.c.	2819	Mil. dol.	13,612	12,838	11,860	12,442
Sulfuric acid, gross (new and fortified)	28193	Mil. dol.	589	529	516	487
Inorganic acids, except nitric, phosphoric and sulfuric	28194	Mil. dol.	603	505	506	578
Aluminum oxide, except natural alumina	28195	Mil. dol.	1,499	947	920	813
Aluminum compounds	28196	Mil. dol.	665	595	574	598
Potassium and sodium compounds (except bleaches, alkalies, and alums)	28197	Mil. dol.	1,956	1,932	1,884	1,866
Chemical catalytic preparations	28198	Mil. dol.	1,221	1,350	1,380	1,422
Other inorganic chemicals n.e.c.	28199	Mil. dol.	6,846	6,533	5,883	6,467
Industrial inorganic chemicals n.s.k.	28190 00	Mil. dol.	232	220	197	211
Household bleaching compounds	28422 00	Mil. dol.	724	920	915	950
PHARMACEUTICAL PREP. SHIPMENTS						
Affecting neoplasms, endocrine systems, and metabolic disease	28341	Mil. dol.	2,743	3,318	3,820	4,132
Acting on the central nervous system and sense organs	28342	Mil. dol.	7,219	8,319	8,927	9,065
Acting on the cardiovascular system	28343	Mil. dol.	4,815	4,909	5,234	5,547
Acting on the respiratory system	28344	Mil. dol.	3,724	5,277	5,510	5,675
Acting on the digestive system	28345	Mil. dol.	4,840	7,111	7,996	8,227
Acting on the skin	28346	Mil. dol.	1,558	1,760	1,980	2,219
Vitamin, nutrient, and hematonic preps.	28347	Mil. dol.	2,588	2,924	3,560	4,408
Affecting parasitic and infective disease	28348	Mil. dol.	5,411	7,018	7,234	8,189
Pharmaceutical preps. for veterinary use	28349	Mil. dol.	1,057	1,327	1,353	1,315

Source: U.S. Bureau of the Census. *Current Industrial Reports*, MA28A, MA28B, and MA28G, annual.

No. 1244. Engines, Refrigeration and Heating Equipment, and Pumps and Compressors—Shipments: 1992 to 1994

PRODUCT	Product code	Unit	1992	1993	1994
Internal combustion engines produced.	(X)	1,000	18,868	21,342	24,178
Gasoline (except outboard, aircraft, and auto)	35191	1,000	18,217	20,561	23,287
Nonautomotive diesel (except aircraft)	35193	1,000	178	197	220
Automotive diesel	35194	1,000	469	608	661
Natural gas and LPG	35196	1,000	4	6	9
Air-conditioning, heating equipment shipments:					
Heat transfer equipment	35851	Mil. dol. . . .	4,118	4,951	5,509
Unitary air-conditioners	35852	Mil. dol. . . .	3,913	3,937	4,339
Commercial refrigeration equipment	35853 pt	Mil. dol. . . .	(D)	183	220
Compressors and compressor units	35854	Mil. dol. . . .	2,931	3,101	3,717
Condensing units, refrigeration (complete)	35855	Mil. dol. . . .	203	240	277
Room air-conditioners and dehumidifiers	35856	Mil. dol. . . .	774	824	1,106
Nonelectric warm air furnaces and humidifiers	3585C pt	Mil. dol. . . .	1,216	1,334	1,426
Pumps and compressors¹	(X)	Mil. dol. . . .	5,916	6,216	6,563
Industrial pumps	35611	Mil. dol. . . .	2,465	2,571	2,638
Hydraulic fluid power pumps and motors	35617,8	Mil. dol. . . .	(NA)	(NA)	(NA)
Domestic water systems	35613	Mil. dol. . . .	331	330	339
Oil well, oilfield, and other pumps (including laboratory pumps)	35615	Mil. dol. . . .	805	916	907
Compressors and vacuum pumps	35631	Mil. dol. . . .	2,315	2,400	2,680

D Data withheld to avoid disclosure of company data. NA Not available. X Not applicable. ¹ Excludes hand pumps, automotive circulating pumps, compressors for icemaking and refrigeration equipment, air conditioning units, and replacements and repair parts for pumps and compressors.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA35L, MA35M, and MA35P, annual.

No. 1245. Computers and Office and Accounting Machines—Shipments: 1993 and 1994

PRODUCT	Product code	Number of companies, 1994	QUANTITY (number)		VALUE (mil. dol.)	
			1993	1994	1993	1994
Electronic computers (automatic data processors)	3571	207	(X)	(X)	29,659	38,132
Large-scale processing equipment	35713	27	31	(NA)	4,104	4,459
Medium- and small-scale processing equipment ²	35714	45	190	(NA)	2,442	3,089
Personal computers and workstations	35715	90	13,383	(NA)	18,889	24,494
Portable computers	35716	31	2,694	(NA)	2,576	4,560
Computer storage devices and equipment	35721	103	12,537	(NA)	5,731	5,512
Parts for computer storage devices and subassemblies	35722	23	(X)	(X)	1,496	1,955
Computer terminals	35751	68	4,360	(NA)	1,531	1,240
Parts for computer terminals	35752	14	(X)	(X)	276	(³)
Computer peripheral equipment, n.e.c. ³	35771	277	(X)	(X)	9,810	10,412
Calculating and accounting machines	35784	46	(X)	(X)	1,454	1,464
Automatic typing and word processing machines	35792	5	1,717	(NA)	343	290
Mailing, letter handling, addressing machines	35795	32	1,258	(NA)	1,268	967
Other office machines, n.e.c. ³	35799	44	(X)	(X)	(D)	570
Magnetic and optical recording media	36950	64	(X)	(X)	4,483	4,782

D Data withheld to avoid disclosure of company data. NA Not available. X Not applicable. ¹ ⁶⁴ megabytes in MINIMUM main memory configuration. ² Up to 64 megabytes in MINIMUM main memory configuration. ³ N.e.c. = Not elsewhere classified.

Source: U.S. Bureau of the Census, *Current Industrial Report*, MA35R, annual.

No. 1246. Metalworking Machinery—Shipments: 1988 to 1994

[In millions of dollars]

PRODUCT	Product code	1988	1989	1990	1991	1992	1993	1994
Metalworking machinery	(X)	2,858	3,514	3,426	3,172	3,074	3,222	3,780
Metal cutting type	(X)	1,735	2,429	2,371	2,139	2,000	2,085	2,463
Machining centers ¹	3541A	334	442	437	362	378	485	552
Station type machines	3541B	225	563	502	450	435	375	455
Other metal cutting machine tools ²	3541C	165	174	142	196	167	166	200
Metal forming type	(X)	1,123	1,086	1,065	1,033	1,074	1,140	1,277

X Not applicable. ¹ Multi-function numerically controlled machines. ² Excludes those designed primarily for home workshops, labs, etc.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MQ35W, annual.

No. 1247. Switchgear, Switchboard Apparatus, Relays, and Industrial Controls—Shipments: 1990 to 1994

[In millions of dollars]

PRODUCT	Product code	Com-panies, 1994 (number)	1990	1991	1992	1993	1994
Power circuit breakers	36132	26	388	368	481	516	531
Low volt panelboards & dist. boards ¹	36133	130	1,722	1,643	1,531	1,681	1,744
Fuses and fuse equipment ²	36134	21	419	409	413	320	332
Molded case circuit breakers, 1,000 volts and under	36135	32	959	917	955	1,010	1,107
Duct ³	36136	25	194	184	189	200	228
Switchgear, except ducts	36139	128	1,324	1,398	1,615	1,581	1,636
General purpose and other relays	36251	116	805	772	782	751	676
Specific purpose industrial controls	36252	244	2,020	1,993	1,916	2,322	2,732
General purpose industrial controls	36253	272	2,912	2,879	2,778	3,326	3,699
Motor controller accessories ⁴	36254	123	452	434	448	476	502

¹ Includes other switching and interruption devices, 1,000 volts and below. ² Under 2,300 volts, except power distribution cutouts. ³ Includes plug-in units and accessories, 1,000 volts and under, consisting of enclosed sectionalized prefabricated bus bars rated 20 amperes or more, associated structures and fittings. ⁴ Includes parts for industrial controls.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA36A, annual.

No. 1248. Selected Industrial Air Pollution Control Equipment—Shipments: 1994

[Quantity in number of units, value in thousands of dollars]

PRODUCT	Product code	Number of companies	NEW ORDERS		SHIPMENTS		BACKLOG (Dec. 31)	
			Quantity	Value	Quantity	Value	Quantity	Value
Selected indus. air pollution control equip.	35646	110	69,532	630,689	67,927	711,390	7,738	408,655
Particulate emissions collectors	(X)	90	56,392	477,873	54,744	453,261	6,987	226,340
Electrostatic precipitators	35646 51	19	530	161,817	552	136,763	100	104,802
Fabric filters	35646 54	59	48,551	207,221	47,213	211,340	5,772	50,085
Mechanical collectors	35646 55	39	5,999	63,511	5,692	68,028	844	22,907
Wet scrubbers	35646 58	31	1,312	45,324	1,287	37,130	271	48,546
Gaseous emissions control devices	(X)	38	1,198	103,822	1,169	206,546	356	153,402
Catalytic oxidation systems	35646 70	10	145	30,363	(S)	28,267	(S)	15,501
Thermal and direct oxidation systems	35646 72	14	300	34,419	272	30,878	48	12,084
Scrubbers (gas absorber)	35646 73	11	687	14,441	658	13,997	181	4,163
Dry flue gas desulfurization systems	35646 75	9	(D)	(D)	(S)	117,354	(S)	(S)
Gas absorbers	35646 76	9	51	7,968	(D)	(D)	27	4,562
Other	35646 79	19	11,942	48,994	12,014	51,583	395	28,913

D Data withheld to avoid disclosure of company data. S Figure does not meet publication standards. X Not applicable.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA35J, annual.

No. 1249. Fluid Power Products—Shipments: 1989 to 1994

[In millions of dollars. Includes aerospace]

PRODUCT	Product code	1989	1990	1991	1992	1993	1994
Fluid power products, incl. aerospace	(X)	6,915	7,207	6,475	6,330	6,742	7,738
Hydraulic valves, nonaerospace type	34921	629	663	606	583	64	765
Pneumatic valves, nonaerospace type	34922	463	458	434	458	418	525
Aerospace type hydraulic & pneumatic valves	34923	451	498	527	443	356	284
Fittings for metal and plastic tubing ¹	34924	505	500	471	516	518	604
Hydraulic and pneumatic fittings and couplings for hose (nonaerospace)	34925	625	620	552	630	489	652
Hydraulic and pneumatic hose or tube end fitting and assemblies (aerospace)	34926	(X)	336	394	386	354	304
Parts for hydraulic & pneumatic valves	34927	206	209	161	151	151	188
Filters for hydraulic and pneumatic fluid power systems	35692	352	385	409	395	381	391
Hydraulic and pneumatic cylinders etc.:							
Nonaerospace	35931	909	941	800	864	1,075	1,254
Aerospace	35932	646	636	510	479	464	388
Parts for hydraulic and pneumatic cylinders ²	35933	281	264	269	171	197	202
Hydraulic fluid power pumps and motors	35941	1,180	1,240	997	974	1,014	(NA)
Parts for pumps and motors	35942	333	399	354	312	321	347

NA Not available. X Not applicable. ¹ Used in fluid and power transfer systems (nonaerospace). ² Includes parts for actuators, accumulators, cushions, and nonvehicular shock absorbers.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA35N, annual.

No. 1250. Selected Instruments and Related Products—Shipments: 1988 to 1994

[In millions of dollars]

PRODUCT	Product code	1988	1989	1990	1991	1992	1993	1994
Automatic regulating and control valves	34918	1,262	1,331	1,418	1,537	1,579	1,648	1,802
Solenoid-operated valves (except nuclear and fluid power transfer)	34919	338	374	346	360	405	406	419
Aeronautical, nautical, and navigational instruments	38121	2,365	2,521	2,518	2,672	2,517	2,121	1,998
Search & detection, navigation & guidance systems and equipment	38122	31,145	30,840	32,420	31,774	31,311	28,604	25,762
Laboratory apparatus and laboratory furniture ¹	38210	1,565	1,698	1,675	1,612	1,715	1,598	1,655
Controls for monitoring residential and commercial environments and appliance	38220	2,207	2,224	1,982	1,982	2,197	2,310	2,462
Process control instruments	38230	4,348	4,743	5,224	5,230	5,731	5,935	6,165
Integrating and totalizing meters for gas and liquids	38242	610	647	725	698	727	777	854
Counting devices	38243	193	206	210	226	273	285	340
Motor vehicle instruments ²	38244	682	637	1,457	1,330	1,576	1,768	2,188
Integrating instruments, electrical	38251	388	401	396	390	439	461	486
Test equipment for testing electrical, radio and communication circuits, and motors	38252	6,248	6,134	6,156	6,525	6,493	6,572	7,228
Instruments to measure electricity	38253	663	620	586	584	558	526	551
Analytical, scientific instruments (except optical). Sighting, tracking, and fire-control equipment, optical type	38260	3,442	4,042	4,412	4,519	4,886	4,766	4,923
Optical instruments and lenses ³	38271	609	595	581	547	771	769	652
Aircraft engine instruments (except flight)	38274	1,270	1,274	1,252	1,292	1,322	1,456	1,559
Physical properties and kinematic testing equip..	38291	505	508	579	682	590	552	491
Nuclear radiation detection and monitoring instruments	38292	894	946	1,012	1,024	1,149	1,175	1,237
Commercial, geophysical, meteorological, and general purpose instruments	38295	654	606	567	570	533	519	522
Surveying and drafting instruments	38296	1,072	1,035	1,140	1,335	1,361	1,271	1,276
		270	270	274	235	255	301	318

¹ Beginning 1987, includes laboratory furniture. Prior to 1987, laboratory furniture was included in product class 38296.

² Beginning 1990, includes some data previously classified in product class 37149, "Other motor vehicle parts and accessories, new, n.e.c." ³ Beginning 1992, product classes 38272, "Binoculars and astronomical instruments," and 38273, "Other optical instruments and lenses" were combined into product class 38274; prior years have been restated to reflect revision.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA38B, annual.

No. 1251. Robots—Shipments: 1987 to 1989

[Based on a survey of all known manufacturers of robots, robot accessories, and components. Shipment value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges and returns. A robot is a reprogrammable multifunctional manipulator designed to move materials, parts, tools, or specialized devices through variable programmed motions for the performance of a variety of tasks]

ROBOTS, ACCESSORIES, AND COMPONENTS	QUANTITY (number)			VALUE (mil. dol.)		
	1987	1988	1989	1987	1988	1989
Robots, robot accessories, and components	(X)	(X)	(X)	284	238	256
Robots, complete	6,037	4,603	2,217	220	164	151
Servo-controlled robots	2,677	2,072	1,840	203	138	136
Point-to-point type:						
Welding, etc.	675	304	273	65	32	29
Foundry, forging, and/or heat treating ¹	28	31	34	3	3	9
Assembly for nonelectronic/elec. prods.	535	296	238	20	8	8
Material handling and/or parts transfer	726	247	162	48	27	26
Continuous-path type:						
Welding, etc.	110	79	31	9	4	2
Spraying, painting, gluing, and/or sealing	297	292	254	41	30	35
Fettling/grinding/polishing, and/or deburring ²	306	823	848	17	33	26
Non servo-controlled robots	215	336	377	8	17	15
Other robots	3,145	2,195	(³)	9	9	(³)
Robot accessories, subassemblies, etc	(X)	(X)	(X)	65	74	105
Miscellaneous receipts	(X)	(X)	(X)	8	6	3

X Not applicable.

¹ Includes all point-to-point robots, except assembly, material handling, and/or parts transfer. ² Includes other continuous-path type, not elsewhere classified. ³ Beginning 1989, data no longer available for other robots which included education hobby, experimental, and nonindustrial robots.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA35X(89-1).