

Electronic Capacitor Manufacturing: 2002

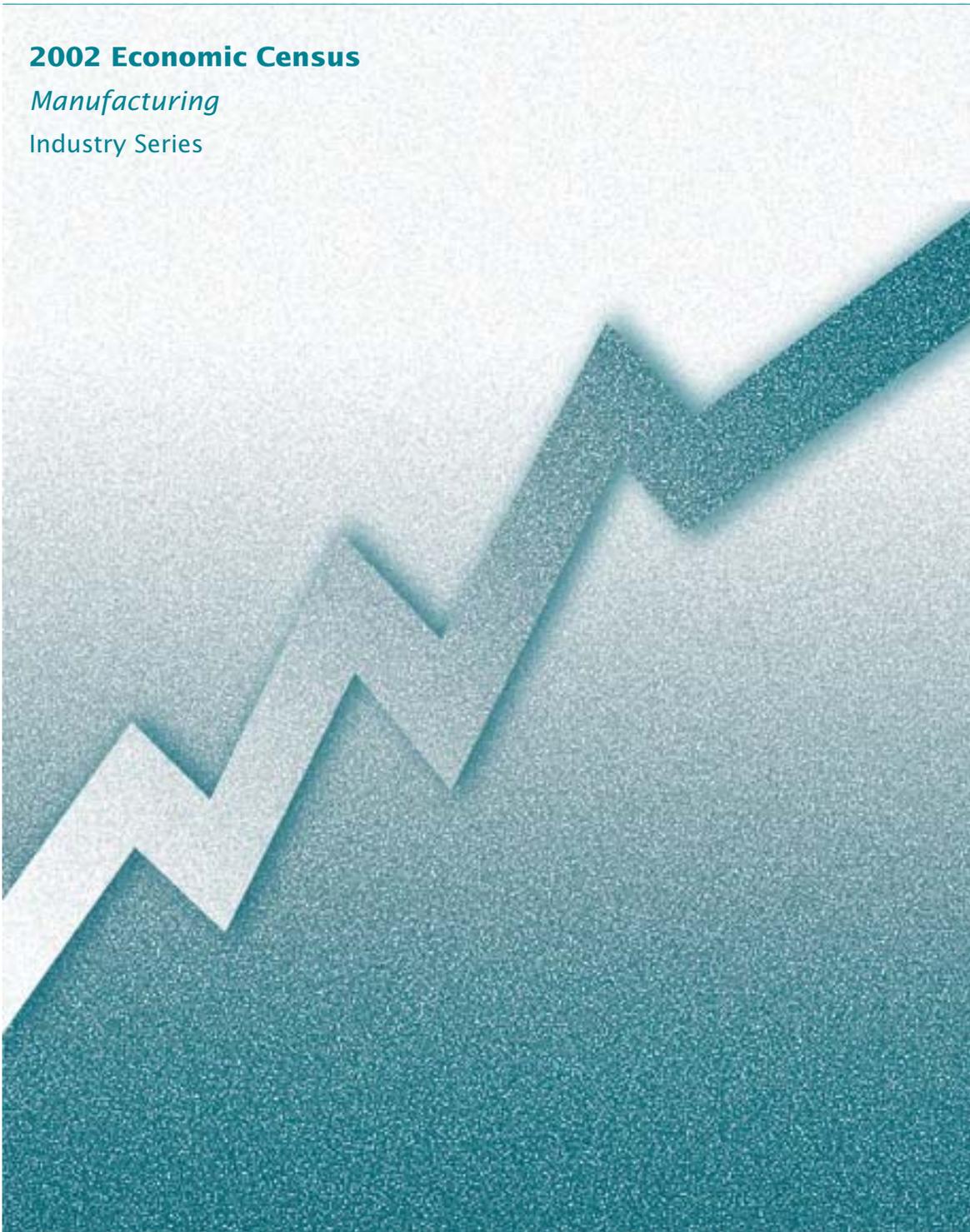
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2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
Economics and Statistics Administration
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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
334414, Electronic capacitor manufacturing	2002.. 84	104	10 915	383 510	7 495	14 824	185 734	720 467	840 854	1 628 202	131 130
	2001.. N	N	15 529	518 340	10 758	20 630	263 998	982 670	1 101 301	2 130 299	144 146
	2000.. N	N	17 940	576 459	12 923	24 883	307 478	1 919 426	1 533 021	3 385 855	281 460
	1999.. N	N	16 159	481 969	11 080	22 306	262 032	1 258 172	1 088 771	2 361 117	122 002
	1998.. N	N	18 197	510 415	12 737	24 966	272 439	1 239 544	1 033 132	2 265 591	158 673
	1997.. 112	130	19 317	539 446	13 611	26 326	291 291	1 444 666	1 158 130	2 560 984	127 856

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)	
	E ¹	Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)					Wages (\$1,000)
334414, Electronic capacitor manufacturing												
United States	—	104	60	10 915	383 510	7 495	14 824	185 734	720 467	840 854	1 628 202	131 130
California	2	24	13	1 678	55 724	1 232	2 390	30 808	103 613	44 797	150 587	9 670
Florida	—	5	3	452	12 469	364	769	7 160	18 091	20 677	39 990	1 757
Massachusetts	—	8	2	628	17 309	399	824	8 861	28 163	34 233	64 961	3 738
New York	—	10	6	1 026	34 010	692	1 364	16 180	90 389	23 977	115 671	8 291
North Carolina	—	4	4	851	26 207	688	1 149	17 481	86 491	109 689	194 098	7 504

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
334414, Electronic capacitor manufacturing	
Companies ¹	number.. 84
All establishments ²	number.. 104
Establishments with 1 to 19 employees	number.. 44
Establishments with 20 to 99 employees	number.. 26
Establishments with 100 employees or more	number.. 34
All employees ³	number.. 10 915
Total compensation	\$1,000.. 483 961
Annual payroll	\$1,000.. 383 510
Total fringe benefits	\$1,000.. 100 451
Production workers, average for year	number.. 7 495
Production workers on March 12	number.. 7 749
Production workers on May 12	number.. 7 679
Production workers on August 12	number.. 7 533
Production workers on November 12	number.. 7 009
Production worker hours	1,000.. 14 824
Production worker wages	\$1,000.. 185 734
Total cost of materials	\$1,000.. 840 854
Materials, parts, containers, packaging, etc., used	\$1,000.. 572 890
Resales	\$1,000.. 232 823
Purchased fuels	\$1,000.. 3 842
Purchased electricity	\$1,000.. 25 073
Contract work	\$1,000.. 6 226
Quantity of electricity purchased for heat and power	1,000 kWh.. 425 639
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 1 628 202
Primary products value of shipments	\$1,000.. 1 277 771
Secondary products value of shipments	\$1,000.. 61 162
Total miscellaneous receipts	\$1,000.. 289 269
Value of resales	\$1,000.. D
Contract receipts	\$1,000.. -
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 95
Value of primary products shipments made in all industries	\$1,000.. 1 366 028
Value of primary products shipments made in this industry	\$1,000.. 1 277 771
Value of primary products shipments made in other industries	\$1,000.. 88 257
Coverage ratio	percent.. 94
Value added	\$1,000.. 720 467
Total inventories, beginning of year	\$1,000.. 524 311
Finished goods inventories	\$1,000.. 141 668
Work-in-process inventories	\$1,000.. 93 084
Materials and supplies inventories	\$1,000.. 289 559
Total inventories, end of year	\$1,000.. 403 719
Finished goods inventories	\$1,000.. 83 772
Work-in-process inventories	\$1,000.. 84 099
Materials and supplies inventories	\$1,000.. 235 848
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 1 327 375
Total capital expenditures (new and used)	\$1,000.. 131 130
Buildings and other structures (new and used)	\$1,000.. 18 901
Machinery and equipment (new and used)	\$1,000.. 112 229
Automobiles, trucks, etc., for highway use	\$1,000.. 4 953
Computers and peripheral data processing equipment	\$1,000.. 10 167
All other expenditures for machinery and equipment	\$1,000.. 97 109
Total retirements	\$1,000.. 73 745
Gross value of depreciable assets at end of year	\$1,000.. 1 384 760
Depreciation charges during year	\$1,000.. 104 786
Total rental payments	\$1,000.. 9 612
Buildings and other structures	\$1,000.. 5 704
Machinery and equipment	\$1,000.. 3 908
Total other expenses ⁴	\$1,000.. 155 224
Response coverage ratio ⁵	percent.. 69
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 13 732
Communications services ⁴	\$1,000.. 2 950
Legal services ⁴	\$1,000.. 2 026
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 991
Advertising and promotional services ⁴	\$1,000.. 989
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 2 957
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 2 274
Management consulting and administrative services ⁴	\$1,000.. 1 988
Taxes and license fees ⁴	\$1,000.. 6 828
All other expenses ⁴	\$1,000.. 120 488

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
334414, Electronic capacitor manufacturing											
All establishments	—	104	10 915	383 510	7 495	14 824	185 734	720 467	840 854	1 628 202	131 130
Establishments with—											
1 to 4 employees	9	23	52	1 575	36	69	756	2 625	3 990	6 611	452
5 to 9 employees	8	9	61	1 845	42	84	871	4 014	4 491	8 505	595
10 to 19 employees	5	12	163	5 899	98	195	2 288	11 844	7 437	19 410	1 006
20 to 49 employees	—	17	627	19 615	432	862	10 018	71 051	23 731	92 556	2 793
50 to 99 employees	—	9	749	23 054	542	1 058	12 747	45 282	19 723	66 813	2 722
100 to 249 employees	—	22	3 400	108 604	2 527	4 578	60 519	219 644	283 951	564 302	25 504
250 to 499 employees	—	9	h	D	D	D	D	D	D	D	D
500 to 999 employees	—	2	g	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	—	1	g	D	D	D	D	D	D	D	D
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	33	142	4 476	105	208	2 175	7 366	12 058	19 420	1 391

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
334414	Electronic capacitor manufacturing ...	104	10 915	383 510	7 495	14 824	185 734	720 467	840 854	1 628 202	131 130
3344140	Capacitors for electronic circuitry ...	104	10 915	383 510	7 495	14 824	185 734	720 467	840 854	1 628 202	131 130

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments		
				Quantity	Value (\$1,000)	
334414	Electronic capacitor manufacturing	2002..	N	X	X	1 366 028
		1997..	N	X	X	2 128 486
3344140	Capacitors for electronic circuitry	2002..	N	X	X	1 366 028
33441401	Capacitors for electronic circuitry	1997..	N	X	X	2 128 486
		2002..	N	X	X	1 346 443
3344140100	Capacitors for electronic circuitry ¹	1997..	N	X	X	2 066 258
		2002..	69	X	X	1 346 443
3344140Y	Capacitors for electronic circuitry, nsk, total	1997..	79	X	X	2 066 258
		2002..	N	X	X	19 585
3344140YWW	Capacitors for electronic circuitry, nsk, for nonadministrative-record establishments	1997..	N	X	X	62 228
		2002..	N	X	X	11 203
3344140YWY	Capacitors for electronic circuitry, nsk, for administrative-record establishments	1997..	N	X	X	27 992
		2002..	N	X	X	8 382
		1997..	N	X	X	34 236

¹For additional detail, see Current Industrial Report MA334Q, Semiconductors and Electronic Components.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
334414	Electronic capacitor manufacturing		
00900001	Total materials	2002.. X	572 890
		1997.. X	805 395
32721203	Tube blanks	2002.. X	D
		1997.. X	N
33441200	Printed circuit boards (without inserted components) for electronic circuitry	2002.. X	D
		1997.. X	3 830
001900C4	Printed circuit assemblies, loaded boards, and modules (printed circuit boards with inserted electronic components)	2002.. X	D
		1997.. X	D
33441300	Semiconductors (including transistors, diodes, rectifiers, and integrated circuits), for electronic circuitry	2002.. X	1 206
		1997.. X	5 693
33441400	Capacitors for electronic circuitry	2002.. X	69 665
		1997.. X	85 331
33441500	Resistors for electronic circuitry	2002.. X	625
		1997.. X	D
001900D3	All other miscellaneous components and accessories, for electronic circuitry (excluding tubes)	2002.. X	17 193
		1997.. X	32 209
33141911	Gold and other precious metals, all forms (including ingot, sheet, strip, solder, plating, electrodes, etc.)	2002.. X	65 032
		1997.. X	83 502
33141917	Doped chemicals and other doped materials for electronic use	2002.. X	D
		1997.. X	D
33111107	Ferrites (powder and paste)	2002.. X	D
		1997.. X	D
331000AA	Metal powders	2002.. X	119 729
		1997.. X	203 473
33411001	Electronic computer equipment	2002.. X	26
		1997.. X	N
33593101	Current-carrying wiring devices	2002.. X	D
		1997.. X	D
33451501	Electrical instrument mechanisms and meter movements (including instrument relays)	2002.. X	D
		1997.. X	-
33451503	All other miscellaneous electrical measuring instruments and parts	2002.. X	D
		1997.. X	N
32720003	Glass and glass products (excluding windows and mirrors)	2002.. X	D
		1997.. X	N
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc.	2002.. X	7 886
		1997.. X	12 167
32610011	Fabricated plastics products (excluding gaskets)	2002.. X	1 139
		1997.. X	15 725
332000A9	Sheet metal products (excluding stampings)	2002.. X	1 315
		1997.. X	7 769
332000AC	Metal stampings	2002.. X	17 855
		1997.. X	22 300
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products	2002.. X	949
		1997.. X	4 493
33200033	Other fabricated metal products (excluding forgings)	2002.. X	2 024
		1997.. X	7 034
33100035	Castings, rough and semifinished	2002.. X	D
		1997.. X	D
33120001	Steel shapes and forms (excluding castings, forgings, and fabricated metal products)	2002.. X	D
		1997.. X	950
33142111	Copper and copper-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	2002.. X	521
		1997.. X	916
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	2002.. X	34 879
		1997.. X	N
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products)	2002.. X	5 759
		1997.. X	N
331000A7	Insulated wire and cable (including magnet wire)	2002.. X	130
		1997.. X	D
32220017	Paper and paperboard containers (including shipping sacks and other paper packaging supplies)	2002.. X	11 841
		1997.. X	10 686
32611305	Resists (photosensitive resin films applied to the surface of a wafer)	2002.. X	D
		1997.. X	N
32512005	Commodity gases	2002.. X	3 019
		1997.. X	3 873
32518843	Speciality gases	2002.. X	D
		1997.. X	D
32599217	Masks	2002.. X	D
		1997.. X	N
32510074	Solvents	2002.. X	1 244
		1997.. X	N
32561000	Cleaning compounds	2002.. X	39
		1997.. X	N
00970099	All other materials and components, parts, containers, and supplies	2002.. X	160 470
		1997.. X	210 410
00971000	Materials, ingredients, containers, and supplies, nsk	2002.. X	27 753
		1997.. X	47 257

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.