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Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997

INSTRUCTIONS

1. General – The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in item 18B. Please review the entire list and report separately each item consumed. Leave blank if you do not consume the item. If you use materials, parts, and supplies which are not listed, describe and report them in the "Cost of all other materials . . ." line at the end of this section. If you consumed less than \$25,000 of a listed material, include the value with "Cost of all other materials . . .," Census material code 970099 8.

Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.

If quantities are requested, please use the unit of measure specified.

If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.

2. Valuation of Materials Consumed – The value of the materials, etc., consumed should be based on the delivered cost; i.e., the amount paid or payable after discounts and including freight and other direct charges incurred in acquiring the materials.

Materials received from other plants within your company should be reported at their full economic value (the value assigned by the shipping plant, plus the cost of freight and other handling charges).

If purchases or transfers do not differ significantly from the amounts actually put into production, you may report the cost of purchases or transfers. However, if consumption differs significantly from the amounts purchased or transferred, these amounts should be adjusted for changes in the materials and supplies inventories by adding the beginning inventory to the amount purchased or transferred and subtracting ending inventory.

3. Contract Work – Include as materials consumed those you purchased or used by others making products for you under contract. Amounts paid to the companies doing the contract work should be reported in item 10, line e, and should include freight in and out. On the other hand, materials owned by others but used at this establishment in making products for others under contract or on commission should be excluded.

4. Resales – Cost for products bought and sold or transferred from other establishments of your company and sold without further manufacture, processing, or assembly should be reported in item 10, line b, not in item 17 below. The value of these products shipped by this establishment should be reported in item 18B under Census product code 99989 00 6, "Resales."

5. Produced and Consumed – Forgings, foundries, and screw machine products – Report the quantities produced and used in manufacturing other products made in this establishment in item 19. Note that the materials used to produce these items should be reported in item 17.

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Line No.	Materials, parts, and supplies  (A)	Census material code  (B)	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in) (E)		
			574 Millions	Thou- sands	Dollars
1	Electric motors and generators	362100 2	\$		
2	Electrical transmission, distribution, and control equipment	360101 0			
3	FLUID POWER PRODUCTS, HYDRAULIC AND PNEUMATIC	Fluid power pumps, motors, and hydraulic transmissions (complete assemblies)	359412 4		
4		Fluid power cylinders and rotary actuators	359301 9		
5		Fluid power filters	356921 7		
6		Fluid power valves	349271 7		
7		Fluid power hose or tube fittings and assemblies	349261 8		
8		Other hydraulic and pneumatic products	190089 3		
9	Speed changers, gears, and industrial high-speed drives	356601 5			
10	Ball and roller bearings (mounted or unmounted)	356200 6			
11	Pumps and pump parts, except fluid power (hydraulic and pneumatic)	356101 6			
12	FABRICATED METAL PRODUCTS, EXCEPT FORGINGS AND FLUID POWER (Hydraulic and pneumatic products)	Bolts, nuts, screws, washers, rivets, and screw machine products	345001 2		
13		Metal tanks, heat exchangers, steam condensers, and other boiler products; fabricated steel plate and weldments	344301 7		
14		Pipe, valves, and pipe fittings (except fluid power)	349402 8		
15		Other fabricated metal products, except fluid power	340072 8		
16	Forgings	346000 3			
17	CASTINGS (Rough and semifinished)	Iron and steel	332001 7		
18		Nonferrous	336010 4		

Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 - Continued

Line No.	Materials, parts, and supplies  (A)			Census material code  (B)	Consumption of purchased materials and of materials received from other establishments of your company		
					Cost, including delivery cost (freight-in) (E)		
					Millions	Thousands	Dollars
19	Shapes and Forms (Except castings, forgings, and fabricated metal products)	STEEL	Bars, bar shapes, and plates	331007 5	\$		
20			Sheet and strip	331022 4			
21			All other	331034 9			
22		NONFERROUS	Aluminum and aluminum-base alloy	335001 4			
23			Other	335091 5			
24	Filter paper			262195 1			
25	Cost of all other materials and components, parts, containers, and supplies consumed . . . <i>Describe the principal materials, etc., included in this value.</i>			970099 8			
26	TOTAL Sum of lines 1-25 should equal item 10, line a				\$		

Item 18A. INSTRUCTIONS AND INQUIRY FOR COMPANIES ENGAGED IN INSTALLATION (OR ERECTION) OF PRODUCTS OF THEIR OWN MANUFACTURE

It is preferable that you report the value of shipments for individual products, excluding the amounts received for installation and erection. The installation and erection receipts (if any) should be reported on line 159, item 18B. In order to evaluate the reporting for this item, please answer the following questions:

	Key		Mark (X) appropriate boxes		
	591	5512			
1a. Do the value of shipments figures for individual products include the cost of installation or erection of the product? . . . . .	592		1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> Don't know
b. If "Yes," please estimate the total amount received for installation or erection . . . . .	593		1 <input type="checkbox"/> Under \$50,000	2 <input type="checkbox"/> \$50,000-\$499,999	3 <input type="checkbox"/> \$500,000-\$999,999 4 <input type="checkbox"/> \$1 million or more
2. Do the employees of this manufacturing establishment install or erect the products of your company? . . . . . If "Yes," include these employees in item 2 and their wages in item 3A.	594		1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> Don't know
3. Does a distinct outside labor force (not attached to this manufacturing plant) erect or install the products for your establishment? . . . . . If "Yes," do not include this labor force in item 2 or their wages in item 3A. Payments made by this establishment for any work done by others should be reported as a cost of contract work in item 10e. The payroll of this outside labor force should be reported by the establishment that maintains the records for them.	595		1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> Don't know

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Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997

INSTRUCTIONS

1. General – The manufactured products and services listed below are generally made in your industry. If you make products that are not listed, describe and report them in the "All other products made in this establishment" section at the end of item 18B. PLEASE DO NOT COMBINE PRODUCT LINES.  
If quantities are requested, please use the unit of measure specified.  
If the information as requested cannot be taken directly from your book records, REASONABLE ESTIMATES ARE ACCEPTABLE.
2. Valuation of Products – Report the value of the products shipped and services performed at the net selling value, f.o.b. plant to the customer; i.e., after discounts and allowances, and exclusive of freight charges and excise taxes.  
If you transfer products to other establishments within your company, you should assign the full economic value to the transferred products; i.e., include all direct costs of production and a reasonable proportion of all other costs and profits.
3. Contract Work – Report PRODUCTS MADE BY OTHERS FOR YOU FROM YOUR MATERIALS on the specific lines as if they were made in this establishment. On the other hand, do not report on the specific product lines PRODUCTS THAT YOU MADE FROM MATERIALS OWNED BY OTHERS. Report only the amount that you received for "commission or contract receipts" under Census product code 93000 00 8.
4. Resales – Do not report on the specific product lines those PRODUCTS BOUGHT AND SOLD OR TRANSFERRED FROM OTHER ESTABLISHMENTS OF YOUR COMPANY AND SOLD WITHOUT FURTHER MANUFACTURE. Report only a value under Census product code 99989 00 6, "Resales."
5. Detailed Data Reported Elsewhere – Items denoted by an asterisk (\*) require totals for groups of products covered in the more frequent Current Industrial Reports (CIR). If you report on the CIR forms, the sum of the detailed CIR products should equal the total reported on this census form.  
NOTE: Only CIR totals are requested; do not duplicate detail reported on the CIR.

Line No.	Products and services  (A)			Census product code  (B)	Products shipped and other receipts		
					Value, f.o.b. plant (E)		
				581	584	Thou-	Dollars
				Millions	sands		
1	Filters for Fluid Power Systems (Hydraulic and Pneumatic; see lines 37-41 for other fluid power products)	NON-AEROSPACE-TYPE	Hydraulic (corresponds to the sum of items 3301-3309 as reported on CIR form MA35N, Fluid Power Products, for 1997)	35694 00 9	\$		
2			Pneumatic (corresponds to the sum of items 3311 -3323 as reported on CIR form MA35N, Fluid Power Products, for 1997)	35695 00 6			
3		Aerospace-type, hydraulic and pneumatic (corresponds to the sum of items 3325 and 3327 as reported on CIR form MA35N, Fluid Power Products, for 1997)		35696 00 4			
4	Filters and Strainers, Except for Fluid Power Systems and Parts (See also lines 9-27 for other filtration and separation products)	FILTER AND STRAINER ASSEMBLIES (Containment or housing devices), WITH OR WITHOUT FILTER ELEMENT INSTALLED	For water	35693 04 3			
5			For other fluids	35693 08 4			
6		FILTER REPLACEMENT ELEMENTS (Media)	Reusable (cleanable)	35693 11 8			
7			Nonreusable, including disposable (throwaway) litter cartridges	35693 12 6			
8		Parts and accessories, sold separately		35693 89 4			
9	Industrial air pollution control equipment, including products made specifically for the collection of particulate or gaseous emissions or other purification of outgoing air			35646 11 6			
10	Parts for industrial air pollution control equipment (for cleaning or purifying outgoing air)			35646 21 5			
11	Dust Collection, Air Purification Equipment, and Air Washers for Heating, Ventilating, and Air-Conditioning Systems, Clean Room Applications, and Similar Functions for Cleaning Incoming Air	Air washers, except parts		35645 31 6			
12		OTHER PRODUCTS, EXCEPT PARTS	Electrostatic precipitation equipment, except for use in air pollution control (outgoing air purification) applications	35645 41 5			
13			Air filters for air-conditioners and furnaces, etc., of 2400 cubic feet per minute or less	35645 43 1			
14			Other products	35645 46 4			
15		Parts		35645 47 2			
16	FILTERS FOR INTERNAL COMBUSTION ENGINES	For motor vehicles		37144 00 3			
17		For other uses		35944 98 7			

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued						
Line No.	Products and services  (A)		Census product code  581 (B)	Products shipped and other receipts		
				Value, f.o.b. plant (E)		
				584 Millions	Thou- sands	Dollars
18	Swimming pool filters		35892 95 9	\$		
19	Air or gas liquefying machinery		35591 07 2			
20	Parts for distilling, rectifying, fractionating, heat exchange, or air or gas liquefying machinery, or dryers (for chemical manufacturing use; see lines 19 and 108-110 for complete units)		35591 13 0			
21	OTHER PRODUCTS FOR SEPARATING SOLIDS, LIQUIDS, OR GASES	Gas separating equipment, complete units	35699 03 2			
22		Steam and vapor separators, complete units	35699 05 7			
23		Sifting and screening machines, complete units	35699 15 6			
24		Centrifugals and separators (except cream, grain, and berry), complete units	35699 21 4			
25		Other products, except filters and strainers, complete units - <i>Specify kind</i>	35699 46 1			
26		Parts for products for separating solids, liquids, or gases, except parts for filters and strainers and fluid power products	35699 50 3			
27	Sewage treatment equipment		35892 00 9			
28	Assembly machines		35492 00 8			
29	Industrial robots, attachments, and parts		35699 09 9			
30	Mixers for industrial processes, complete units (report parts on line 150)		35699 11 5			
31	Automatic fire sprinklers, complete units and systems (report parts on line 150)		35699 23 0			
32	Presses, metal baling, complete units (report parts on line 150)		35699 17 2			
33	Hydraulic jacks, complete units (report parts on line 150)		35699 27 1			
34	Screwjacks, except automotive; complete units (report parts on line 150)		35699 31 3			
35	Gas generating equipment, complete units (report parts on line 150)		35699 01 6			
36	LUBRICATING SYSTEMS, INDUSTRIAL, CENTRALIZED AND AUTOMATIC (Complete units sold separately)	Other than for pneumatic systems (complete units; report parts on line 150)	35699 08 1			
37		For pneumatic systems (corresponds to item 3347 as reported on CIR form MA35N, Fluid Power Products, for 1997)	35699 07 3			
38	Compressed air and gas dryers (refrigerant, desiccant and other; corresponds to the sum of items 3341-3346 as reported on CIR form MA35N, Fluid Power Products, for 1997)		35699 45 3			
39	Fluid power valves and hose fittings and assemblies (corresponds to the sum of items 1201-2277 as reported on CIR form MA35N, Fluid Power Products, for 1997; see lines 51-53 for other valves)		34920 00 9			
40	Fluid power cylinders and actuators (corresponds to the sum of items 4501-4893 as reported on CIR form MA35N, Fluid Power Products, for 1997)		35930 00 7			
41	Fluid power pumps, motors, and hydrostatic transmission components (corresponds to the sum of items 5504-5597 as reported on CIR form MA35N, Fluid Power Products, for 1997)		35940 00 6			
42	Steam, gas, and hydraulic turbines, and turbine generator set units; except aircraft (report those on line 44), agricultural (report farm windmill heads and towers for pumping water on line 59), and electrical (report these on lines 151-156)		35110 00 6			
43	Carburetors, pistons, piston rings, and engine intake and exhaust valves		35920 00 8			
44	Aircraft engines and aircraft engine parts		37240 00 9			
45	Gasoline engines (and parts) for automobiles, highway trucks, and buses		37142 00 7			
46	Other internal combustion engines and parts (report electric motors and generators on lines 151-156)		35190 00 8			
47	Gasoline service station pumps, including lubricating pumps and grease guns		35860 00 6			

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Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued

Line No.	Products and services  (A)	Census product code  581 (B)	Products shipped and other receipts		
			Value, f.o.b. plant (E)		
			584 Millions	Thou-sands	Dollars
48	Vacuum pumps (except laboratory: report those on lines 151–156), air and gas compressors (except refrigeration; report those on line 91), and parts; and industrial spraying and dusting equipment (except for agricultural use; report similar agricultural equipment on line 59) and parts	35630 00 3	\$		
49	Other pumps and pumping equipment (except motor vehicle; report those on line 87)	35610 00 5			
50	Industrial and commercial fans and blowers (report attic fans here, but report other household, noncommercial kitchen, and small portable fans on lines 151–156), and parts	35640 00 2			
51	Industrial valves, except fluid power and plumbing and heating (see lines 39 and 53)	34910 00 0			
52	Fabricated pipe and pipe fittings made from purchased pipe – <i>Specify kind of metal</i>	34980 00 3			
53	Valves and pipe fittings, not elsewhere classified (except plastics pipe fittings, plumbing fixture fittings and trim, and garden hose fittings and couplings; report those products on lines 151–156)	34940 00 7			
54	Oil and gas field machinery and equipment (except pumps)	35330 00 0			
55	Mining machinery (except oil and gas field), complete units	35320 00 1			
56	Parts and attachments for mining machinery, sold separately (including mining drill bits)	35329 00 2			
57	Construction machinery and equipment, complete units, including crane and excavator attachments and machinery for mounting on trucks, tractors, and other prime movers – <i>Specify kind</i>	35310 00 2			
58	Parts for construction machinery, sold separately	35319 00 3			
59	Farm (and commercial turf) machinery and equipment (corresponds to the sum of items 6101–8143, except "Totals," as reported on CIR form MA35A, Farm Machinery and Lawn and Garden Equipment, for 1997)	35230 00 2			
60	Home lawn and garden equipment (corresponds to the sum of items 8202–8335, except "Totals," as reported on CIR form MA35A, Farm Machinery and Lawn and Garden Equipment, for 1997)	35240 00 1			
61	Overhead traveling cranes, hoists, and monorail systems (except aircraft loading hoists; report those on line 63 and their parts sold separately on line 64)	35360 00 7			
62	Elevator and movifng stairways (except farm and conveying equipment; see lines 59 and 65–70)	35340 00 3			
63	Industrial trucks, tractors, mobile straddle carriers and cranes, and automatic stacking machines, for materials-handling use in and around plants, depots, docks, airports, and terminals (complete units)	35373 00 0			
64	Parts for industrial trucks, tractors, mobile straddle carriers and cranes, and automatic stacking machines, for materials-handling use in and around plants, depots, docks, airports, and terminals	35374 00 8			
65	<b>Unit Handling Conveyors and Conveying Systems (Except hoists and farm equipment)</b>	COMPLETE UNITS Powered (belt and roller), light- to medium-duty – <i>Specify whether belt or roller</i>			
66		Other	35353 00 2		
67		Parts, attachments, and accessories	35354 00 0		
68	<b>Bulk Material Handling Conveyors and Conveying Systems (Except hoists and farm equipment)</b>	COMPLETE UNITS Belt, conveyors and systems	35355 05 6		
69		Other, including pneumatic, vibrating, screw, portable, apron, en masse, flight, and drag conveyors; bucket elevators; bucket wheel reclaimers, vibrating feeders, bins, apron feeders, gates, and similar unloading and reclaiming systems; traveling stackers, trippers, centrifugal throwers, and similar loading and storing systems; etc. – <i>Specify kind</i>	35355 00 7		
70	Parts – <i>Specify kind if for belt conveyors</i>	35356 00 5			

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued					
Line No.	Products and services  (A)	Census product code  581 (B)	Products shipped and other receipts		
			Value, f.o.b. plant (E)		
			584 Millions	Thou- sands	Dollars
71	Packaging machinery, including wrapping and bottling machinery; complete units	35651 00 9	\$		
72	Parts for packaging machinery	35652 00 7			
73	Power-driven handtools (except for construction; report such products on line 57)	35460 00 5			
74	Saw blades and handsaws (except power-driven sawing machines for woodworking use; report those on line 121)	34250 00 1			
75	Other non-power-driven handtools and edge tools (except metal cutting dies; report those on line 79)	34230 00 3			
76	Metal cutting type machine tools (except handtools and electric gas welding and soldering equipment; report handtools on lines 73 through 75, handheld soldering irons on line 75, and other electric and gas welding and soldering equipment on line 83)	35410 00 0			
77	Metal forming type machine tools (except handtools, and electric and gas welding and soldering equipment; report handtools on lines 73 through 75, other electric and gas welding and soldering equipment on line 83, and rolling mill equipment on line 82)	35420 00 9			
78	Cutting tools, machine tool accessories, and machinists' precision measuring tools (except handtools; see lines 73 through 75)	35450 00 6			
79	Special dies and tools, die sets, jigs, and fixtures (report cutting dies for non-metals on line 75)	35441 00 5			
80	Industrial molds and mold boxes (except for heavy steel ingots; report those on line 125)	35442 00 3			
81	Industrial patterns	35430 00 8			
82	Rolling mill machinery and equipment	35470 00 4			
83	Electric and gas welding and soldering equipment (except handheld soldering irons; report those on line 75; report electron beam, ultrasonic, and laser welding equipment on lines 151-156)	35480 00 3			
84	Metal degreasing machinery and parts	35598 74 7			
85	Wire fabricating machines (weaving, drawing, coil conversion or straightening, etc., and drawbenches) and other metalworking machinery, not elsewhere classified (see line 123 for foundry equipment)	35495 00 1			
86	Antifriction bearings (ball and roller, mounted or unmounted) and parts (corresponds to the sum of all items, except totals, as reported on CIR form MA35Q, Antifriction Bearings, for 1997)	35620 00 4			
87	Power transmission equipment, pumps, and other parts, not elsewhere classified, for automobiles, highway trucks, and buses (see line 16 for filters)	37140 00 1			
88	Power transmission equipment for aircraft, and other parts, not elsewhere classified, for aircraft	37280 00 5			
89	Speed changers, industrial high-speed drives, gears, and parts, except automotive and aircraft (see lines 87 and 88)	35660 00 0			
90	Other mechanical power transmission equipment, not elsewhere classified, including plain bearings and bushings	35680 00 8			
91	Air-conditioning, warm air heating, and commercial and industrial refrigeration equipment (report all air-conditioners here, but report refrigerators for household or farm use on lines 151-156)	35850 00 7			
92	Commercial cooking and food-warming equipment (report products for household use on lines 151-156)	35891 00 1			
93	Commercial laundry, dry-cleaning, and pressing machinery (report products for household use on lines 151-156)	35820 00 0			
94	Commercial and industrial vacuum cleaners, parts, and attachments (report products for household use on lines 151-156)	35893 00 7			
95	Automatic vending machines and coin-operated mechanisms for them; and parts	35810 00 1			
96	Automotive maintenance equipment, except handtools (see lines 73 and 75)	35597 00 4			
97	Industrial process furnaces, ovens, and kilns; and industrial electric heating equipment and related devices, including furnaces and ovens for semiconductor manufacturing (report bakery ovens on line 117; cement, wood, and chemical kilns on line 124; cremating ovens on line 149; and laboratory furnaces and ovens on lines 151-158); and parts	35670 00 9			
98	Scales and balances (weighing and force-measuring machines of all types), including parts; except laboratory (report scientific apparatus for laboratory work on lines 151-156)	35960 00 4			
99	Test equipment for testing motors and electrical, radio, communications, printed circuit board, and semiconductor circuitry (corresponds to the sum of items 5701-5849 as reported on CIR form MA38B, Selected Instruments and Related Products, for 1997); except portable instrument transformers; report those on lines 151-156)	38252 00 3			

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**Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued**

Line No.	Products and services  (A)		Census product code  (B)	Products shipped and other receipts		
				Value, f.o.b. plant (E)		
				584 Millions	Thou- sands	Dollars
100	Automatic controls for monitoring residential and commercial environments and appliances (corresponds to the sum of items 4570-4609 as reported on CIR form MA38B, Selected Instruments and Related Products, for 1997)		38220 00 0	\$		
101	Industrial instruments for controlling process variables (corresponds to the sum of items 4612-4897 as reported on CIR form MA38B, Selected Instruments and Related Products, for 1997)		38230 00 9			
102	Physical properties and kinematic testing, inspecting, and measuring equipment (corresponds to the sum of items 6201-6218 as reported on CIR form MA38B, Selected Instruments and Related Products, for 1997)		38292 00 9			
103	Specific-purpose industrial controls (corresponds to the sum of items 6101-6355 as reported on CIR form MA36A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 1997)		36252 00 5			
104	Other industrial controls (corresponds to the sum of items 5400-5496, 6402-6509, 6703, and 6705, as reported on CIR form MA36A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, for 1997)		36250 00 9			
105	Electrical and electronic teaching machines, teaching aids, trainers, and simulators, including kits		36991 00 8			
106	Commercial- and institutional-type electric lighting fixtures, including parts and accessories (except bulbs, glassware, and industrial-, residential-, vehicular-, outdoor-, spotlight-type, and portable fixtures; report such products on lines 151-156) (corresponds to the sum of item codes 2101-2298, as reported on CIR form MA36L, Electric Lighting Fixtures, for 1997)		36462 00 0			
107	Other machinery, not elsewhere classified, for service industry use		35892 00 9			
108	MACHINERY (Not elsewhere classified) FOR MANUFACTURING CHEMICALS (Including pharmaceuticals, soaps, and paints)	Distilling, rectifying, or fractionating (complete units; report parts on line 20)	35591 01 5			
109		Heat exchange units (complete units; report parts on line 20)	35591 03 1			
110		Dryers (complete units; report parts on line 20)	35591 05 6			
111		Mixing, kneading, crushing, grinding, sifting, homogenizing, emulsifying, or stirring machines (complete units; report parts on line 113)	35591 09 8			
112		Other (except air or gas liquefying machinery; see lines 19 and 20), complete units (report parts on line 113)	35591 11 4			
113	Parts for products listed on lines 111 and 112		35591 15 5			
114	OTHER MACHINERY (And parts), USED FOR SPECIFIC INDUSTRIAL PURPOSES (By industry in which products are used)	Semiconductor manufacturing	35596 00 6			
115		Printing trades (except textile printing; see line 118)	35550 00 3			
116		Paper industries (except printing; see line 115)	35540 00 4			
117		Food products (except packaging and refrigeration; see lines 65-72 and 91-92)	35560 00 2			
118		Textiles (except sewing machines; report industrial sewing machines on line 124 and household sewing machines on lines 151-156)	35520 00 6			
119		Plastics working (except patterns and molds; see lines 80 and 81)	35593 00 3			
120		Rubber working (excluding tire molds)	35594 00 1			
121		Woodworking (except saws and handtools included on lines 73 through 75)	35530 00 5			
122		Printed circuit board manufacturing (except testing; see line 99)	35595 00 8			
123		Foundries (except patterns and molds; see lines 80 and 81)	35592 00 5			
124		Other, including glass making, petroleum refining, desalination, metal finishing, sewing, stone or ceramics (or clay, etc.) working, concrete products forming, wood kilning, battery making, wire or cable insulating, cotton ginning, etc., for SPECIFIC industry use		35598 00 2		
125	Castings	FERROUS	Gray and ductile iron castings	33210 00 6		
126			Malleable iron castings	33220 00 5		
127			Steel investment castings	33240 00 3		
128			(Continued on next page)	Other	33250 00 2	

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued								
Line No.	Products and services  (A)			Census product code  581	Products shipped and other receipts			
					Value, f.o.b. plant (E)			
				(B)	584 Millions	Thou- sands	Dollars	
129	Castings - Continued	NONFERROUS	Aluminum (and aluminum-base alloy) die-castings	33630 00 5	\$			
130			Other nonferrous die-castings (including copper)	33640 00 4				
131			Other aluminum (and aluminum-base alloy) castings	33650 00 3				
132			Other copper (and copper-base alloy) castings	33660 00 2				
133			Other nonferrous castings	33690 00 9				
134	Metal heat treating for the trade			33980 00 4				
135	Sheet metal work			34440 00 8				
136	Fabricated plate work and weldments			34430 00 9				
137	Welding repair shop services			97692 00 8				
138	Cold-heading (or warm- or hot-heading) products, including metal fasteners			34520 00 7				
139	Precision turned products (made on screw machines, turning centers, CNC equipment, etc.)			34510 00 8				
140	Automotive stampings			34650 00 2				
141	Metal crowns and closures			34660 00 1				
142	Other metal stampings			34690 00 8				
143	Iron and steel forgings			34620 00 5				
144	Nonferrous forgings			34630 00 4				
145	Wire products, not elsewhere classified, made from purchased wire - <i>Specify kind of product and whether ferrous or nonferrous</i>			34960 00 5				
146	Electroplating, plating, polishing, anodizing, and coloring of metals, for the trade			34710 00 4				
147	Galvanizing, lacquering, enameling, and allied services to metals, for the trade			34790 00 6				
148	Receipts for machine shop job work and job order repair			35995 00 0				
149	Other general industrial machinery, not elsewhere classified, complete units - <i>Specify kind</i>			35699 48 7				
150	Parts and attachments for compressed air and gas dryers, centralized and automatic industrial lubricating systems, industrial mixers, automatic fire sprinklers, metal baling presses, jacks, gas generating equipment, and other general industrial machinery and equipment, not elsewhere classified			35699 52 9				
151	ALL OTHER PRODUCTS MADE IN THIS ESTABLISHMENT	<i>Describe and report separately each product with a sales value of \$50,000 or more which cannot be assigned to one of the lines above.</i>			18			
152					26			
153					34			
154					42			
155					59			
156					67			
157	CONTRACT WORK	Receipts for work done for others on their own materials . . . . . <i>Describe below products worked on and kind of work.</i>			93000 00 8			

If not shown, please enter your 11-digit Census File Number from the address label on page 1	Census File Number
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**Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 - Continued**

Line No.	Products and services  (A)		Census product code  (B)	Products shipped and other receipts		
				Value, f.o.b. plant (E)		
				584 Millions	Thou- sands	Dollars
158	RESALES	Sales of products bought and sold without further manufacture, processing, or assembly in this establishment. The cost of such items should be reported in item 10, line b.	99989 00 6	\$		
159	MISCELLANEOUS RECEIPTS	Receipts or installation (for construction) of products of this establishment	99980 31 0			
160		Other miscellaneous receipts (including receipts for sale of scrap and refuse, repair work, etc.)	99980 98 9			
161	TOTAL value of shipments and other receipts Sum of lines 1-160, column (E)		77000 00 8	\$		

**Item 19. SELECTED PRODUCTS PRODUCED IN THIS ESTABLISHMENT AND USED IN MANUFACTURING OTHER PRODUCTS MADE IN THIS ESTABLISHMENT**

INSTRUCTIONS

1. Report below the quantity of each listed item produced in this establishment and used in manufacturing other products made in this establishment.
3. Materials used to produce the items specified below should be reported in item 17.
2. Purchases or receipts of the items specified below should be reported only in item 17.
4. Quantities produced for sale as such and not for incorporation in other products should be reported in item 18B.
5. Report quantities in the unit of measure specified in column (D).

Line No.	Item  (A)	Census code  (B)	Was this operation performed at this establishment during 1997?  (C)		Unit of measure for quantities  (D)	Quantities produced in this establishment and used in manufacturing other products made in this establishment
			592 Yes	No		593 (E)
1	Ferrous foundries	1001 7	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Short tons	
2	NONFERROUS FOUNDRIES (Except die-casting)	1002 5	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Thousand pounds ↑ ↓	
3		1003 3	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
4		1004 1	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
5		1005 8	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
6	Nonferrous die-casting foundries	1006 6	1 <input type="checkbox"/>	2 <input type="checkbox"/>		
7	Precision turned products (on screw machines, turning centers, and CNC equipment)	1007 4	1 <input type="checkbox"/>	2 <input type="checkbox"/>		

Items 20 and 21 - Not applicable to this report

REMARKS - Please use this space for any explanations that may be essential in understanding your reported data.

**Item 22. CERTIFICATION - This report is substantially accurate and has been prepared in accordance with instructions.**

Name of person to contact regarding this report ( <i>Print or type</i> )		Telephone	Area code	Number	Extension
		2			
Name of company			Address ( <i>Number and street, city, State, ZIP Code</i> )		
Period covered	FROM: Month	Day	Year	TO: Month	Day
	666 1			2	
Signature of authorized person			Title		Date