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Census File Number

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 it in the "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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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 for use 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	Fluid power products including pumps, motors, valves, cylinders, rotary actuators, hose or tube fittings and assemblies, filters, etc., (hydraulic and pneumatic)	190090 1	\$		
2	Electrical transmission, distribution, and control equipment	360101 0			
3	Electric heating elements for industrial furnaces, ovens, and kilns	356751 8			
4	Fabricated metal products, including forgings	340004 1			
5	CASTINGS (Rough and semifinished)	Iron and steel	332001 7		
6		Nonferrous	336010 4		
7	Shapes and Forms (Except castings, forgings, and fabricated metal products)	STEEL	Bars, bar shapes, and plates	331007 5	
8			Sheet and strip	331022 4	
9			All other	331034 9	
10		NONFERROUS	Aluminum and aluminum-base alloy	335001 4	
11			Other	335091 5	
12	Cost of all other materials and components, parts, containers, and supplies consumed <i>Describe the three principal materials, etc., included in this value.</i>	970099 8			
13	TOTAL Sum of lines 1–12 should equal item 10, line a		\$		

CONTINUE WITH ITEM 18A ON PAGE 6

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 in item 18B on line 56. In order to evaluate the reporting for this item please answer the following questions:

1a. Do the value of shipments figures for individual products include the cost of installation or erection of the products?

b. If "Yes," please estimate the total amount received for installation or erection

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.

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.

Key		Mark (X) appropriate boxes		
591	5512			
592	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> Don't know	
593	1 <input type="checkbox"/> Under \$50,000	3 <input type="checkbox"/> \$500,000-\$999,999		
	2 <input type="checkbox"/> \$50,000-\$499,999	4 <input type="checkbox"/> \$1 million or more		
594	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> Don't know	
595	1 <input type="checkbox"/> Yes	2 <input type="checkbox"/> No	3 <input type="checkbox"/> Don't know	

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)			
			584	Thou- sands	Dollars	
1	FUEL-FIRED (Nonelectric) INDUSTRIAL FURNACES, OVENS, AND KILNS	Fuel-fired metal processing and heat treating furnaces (as for annealing, hardening, carburizing, and porcelain enameling), except parts and attachments	35670 03 3	\$		
2		Other fuel-fired furnaces, ovens, and kilns for the melting, roasting, or other heat treatment of ores, pyrites, or metals, except parts and attachments	35670 06 6			
3		Other fuel-fired industrial furnaces, ovens, and kilns, except nonelectric incinerators, and parts and attachments	35670 09 0			
4		Parts and attachments for fuel-fired industrial furnaces, ovens, and kilns	35670 14 0			
5	ELECTRIC INDUSTRIAL FURNACES, OVENS, AND KILNS, AND HIGH-FREQUENCY INDUCTION AND DIELECTRIC HEATING EQUIPMENT (Continued on next page)	High-frequency induction and dielectric heating equipment, including furnaces, ovens, and kilns, except parts and attachments	35670 40 5			
6		Electric resistance-heated metal processing and heat treating furnaces (as for annealing, hardening, carburizing, and porcelain enameling), except parts and attachments	35670 42 1			
7		Other electric resistance-heated furnaces, ovens, and kilns, except parts and attachments	35670 44 7			
8		Electric (except high-frequency induction and dielectric and resistance-heated) metal processing and heat treating furnaces (as for annealing, hardening, carburizing, and porcelain enameling), except parts and attachments	35670 47 0			

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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)		
			581	584	Millions	Thou- sands
9	ELECTRIC INDUSTRIAL FURNACES, OVENS, AND KILNS AND HIGH-FREQUENCY INDUCTION AND DIELECTRIC HEATING EQUIPMENT – Continued	Electric (except high-frequency induction and dielectric and resistance-heated) furnaces and ovens for diffusion, oxidation, or annealing of semiconductor wafers; except parts and attachments	35670 50 0	\$		
10		Other electric industrial furnaces, ovens, and kilns, except parts and attachments	35670 53 4			
11		Parts and attachments for electric industrial furnaces, ovens, and kilns, and high-frequency induction and dielectric heating equipment	35670 59 1			
12	OTHER INDUSTRIAL ELECTRIC HEATING EQUIPMENT	Electric industrial tubular heaters, except parts and attachments	35670 71 0			
13		Other electric heating equipment for industrial use, except parts and attachments	35670 75 1			
14		Parts and attachments for electric industrial tubular heaters and other electrical heating equipment for industrial use	35670 79 3			
15	Bakery ovens		35562 73 5			
16	Laboratory furnaces and ovens, and other laboratory apparatus (complete units and parts sold separately) (corresponds to the sum of items 4520–4538 and 4541–4548 as reported on CIR form MA38B, Selected Instruments and Related Products, for 1997)		38210 10 0			
17	Laboratory furniture, and parts sold separately (corresponds to the sum of items 4539 and 4540 as reported on CIR form MA38B, Selected Instruments and Related Products, for 1997)		38210 20 9			
18	Cremating ovens		35699 48 7			
19	AIR-CONDITIONING AND WARM AIR HEATING EQUIPMENT, AND COMMERCIAL AND INDUSTRIAL REFRIGERATION EQUIPMENT	Warm air furnaces, including duct furnaces and humidifiers, and electric and nonelectric comfort heating equipment (except parts, and excluding household appliances; report parts on line 21 and household appliances on lines 46–53)	3585C 00 1			
20		Other, except parts – <i>Specify kind</i>	35850 00 7			
21		Parts – <i>Specify kind</i>	3585D 00 9			
22	HEATING EQUIPMENT (Except warm air furnaces, electrical products, household appliances, water heaters, cooking and food-warming equipment, and laboratory equipment)	Nonelectric floor and wall furnaces, unit heaters, infrared heaters, mechanical stokers, and parts	34338 00 4			
23		Parts and attachments for gas burners (sold separately)	34339 19 2			
24		Other (except industrial, power, and marine boilers; report those on line 43), including parts	34330 00 1			
25	Bulk material handling conveyors and conveying systems, complete units		35355 00 7			
26	Parts for bulk material handling conveyors and systems – <i>Specify kind if for belt conveyors</i>		35356 00 5			
27	Automatic controls for monitoring residential and commercial environments and for regulating 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			
28	Electric motors and generators (corresponds to the sum of items 1015–8595, except "totals," as reported on CIR form MA36H, Motors and Generators, for 1997)		36210 00 3			
29	Relays and industrial controls (corresponds to the sum of items 5400–6705, except "totals," as reported on CIR form MA36A, Switchgear and Industrial Controls, for 1997)		36250 00 9			
30	Household cooking equipment (except portable; report portable equipment on lines 46–53) (corresponds to the sum of items 1111–1429, except "totals," as reported on CIR form MA36F, Major Household Appliances, for 1997)		36310 00 1			
31	Air pollution control equipment		35646 00 9			

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	
32	Gas generating equipment		35699 01 6	\$			
33	MACHINERY, NOT ELSEWHERE CLASSIFIED, FOR USE IN ONE SPECIFIC INDUSTRY (Report products potentially for use in more than one industry on lines 46-53)	Semiconductor manufacturing	35596 00 6				
34		Foundries (excluding patterns and molds; report those on lines 46-53)	35592 00 5				
35		Plastics working (excluding patterns and molds; report those on lines 46-53)	35593 00 3				
36		Woodworking (except handtools; report those on lines 46-53)	35530 00 5				
37		Paper industries (excluding printing trades; see line 38)	35540 00 4				
38		Printing trades (except textile printing; report such products on line 39)	35550 00 3				
39		Textiles (except sewing machines; report industrial sewing machines on line 42 and household sewing machines on lines 46-53)	35520 00 6				
40		Chemical manufacturing (including pharmaceuticals, cleaning preparations, paint, etc.; including chemical kilns)	35591 00 7				
41		Food products, either industrial (manufacturing) or commercial (other than refrigeration, cooking and food-warming, and packaging equipment; report refrigeration equipment on lines 20-21, and packaging, cooking, and food-warming equipment on lines 46-53)	35560 00 2				
42		Another industry (including cement and wood kilns) – <i>Specify product and industry</i>	35590 00 9				
43		Fabricated steel plate work (boiler shop products), including weldments, heat exchangers, steam condensers, tanks, vessels, gas cylinders, and industrial, power, and marine boilers		34430 00 9			
44		Sheet metal work		34440 00 8			
45	Receipts for machine shop job work and job order repair		35995 00 0				
46	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. For all remaining products, write "Other" and report a single total value.</i>					
			18				
47			26				
48			34				
49			42				
50			59				
51			67				
52			75				
53			83				
54	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				
55	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				
56	MISCELLANEOUS RECEIPTS	Sales of scrap, refuse, and other miscellaneous receipts (including receipts for repair work, etc.)	99980 00 5				
57	TOTAL value of shipments and other receipts Sum of lines 1-56, column (E)		77000 00 8	\$			

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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.
- 2. Purchases or receipts of the items specified below should be reported only in item 17.
- 3. Materials used to produce the items specified below should be reported 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 (E)
			591	592		
			Yes	No		
1	Ferrous foundries	1001 7	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Short tons	
2	NONFERROUS FOUNDRIES (Except die-casting)	Aluminum	1002 5	1 <input type="checkbox"/>	2 <input type="checkbox"/>	Thousand pounds
3		Copper	1003 3	1 <input type="checkbox"/>	2 <input type="checkbox"/>	
4		Zinc	1004 1	1 <input type="checkbox"/>	2 <input type="checkbox"/>	
5		Other	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	
667	1	2				
Name of company			Address (<i>Number and street, city, State, ZIP Code</i>)			
Period covered	FROM: Month	Day	Year	TO: Month	Day	Year
	666	1		2		
Signature of authorized person			Title		Date	