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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 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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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 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  <b>(A)</b>		Census material code  <b>(B)</b>	Consumption of purchased materials and of materials received from other establishments of your company		
				Cost, including delivery cost (freight-in) <b>(E)</b>		
				574 Millions	Thou- sands	Dollars
1	PUMPS	Hydraulic and pneumatic fluid power pumps, motors, and hydrostatic transmissions	359412 4	\$		
2		Other pumps, except hydraulic	356102 4			
3	FLUID POWER PRODUCTS (Hydraulic and pneumatic) EXCEPT PUMPS AND MOTORS	Valves	349271 7			
4		Cylinders and rotary actuators	359301 9			
5		Hose or tube fittings and assemblies	349261 8			
6		Filters	356921 7			
7		Other fluid power products, (except pumps, compressors, valves, cylinders, rotary actuators, hose or tube fittings and assemblies, and filters)	190089 3			
8	FABRICATED METAL PRODUCTS (Except forgings)	Metal tanks, heat exchangers, steam condensers, and other boiler products; fabricated steel plate and weldments	344310 8			
9		All other fabricated metal products	340076 9			
10		Forgings	346000 3			
11	CASTINGS (Rough and semifinished)	Iron and steel	332001 7			
12		Aluminum and aluminum-base alloy	336005 4			
13		All other nonferrous castings	336003 9			

CONTINUE WITH ITEM 17 ON PAGE 6

**Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 – Continued**

Line No.	Materials, parts, and supplies  <b>(A)</b>		Census material code  <b>(B)</b>	Consumption of purchased materials and of materials received from other establishments of your company			
				Cost, including delivery cost (freight-in) <b>(E)</b>			
				574 Millions	Thou- sands	Dollars	
14	<b>Shapes and Forms (Except castings, forgings, and fabricated metal products)</b>	STEEL	Bar, bar shapes, and plates	331007 5	\$		
15		Sheet and strip	331022 4				
16		All other steel shapes and forms	331034 9				
17		ALUMINUM AND ALUMINUM-BASE ALLOY	Sheet, plate, foil, and welded tubing	335301 8			
18			All other, except sheet, plate, foil, and welded tubing	335011 3			
19		All other nonferrous shapes and forms	335091 5				
20	ELECTRIC MOTORS AND GENERATORS	Fractional horsepower electric motors (less than 1 hp) (excluding timing motors)		362115 8			
21		Integral horsepower motors and generators (1 hp or more)		362120 8			
22	Ball and roller bearings (mounted and unmounted)		356200 6				
23	Speed changers, gears, and industrial high-speed drives		356601 5				
24	Electrical transmission, distribution, and control equipment		360101 0				
25	Wood boxes, pallets, skids, and containers		244021 2				
26	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				
27	<b>TOTAL</b> Sum of lines 1–26 should equal item 10, line a			\$			

**Item 18A – Not applicable to this report**

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

**INSTRUCTIONS**

- 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.
- 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.
- 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.
- 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."
- 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.

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

Line No.	Products and services *Item corresponds to products reported on Current Industrial Reports		Census product code 581	Products shipped and other receipts			
				Value, f.o.b. plant (E)			
				584	Thou-	Dollars	
(A)	(B)	Millions	sands				
1	DAIRY AND MILK PRODUCTS PLANT MACHINERY AND EQUIPMENT (Except bottling and packaging machinery) (35561)	Industrial cream separators	35561 04 2	\$			
2		Dryers for treating milk and dairy products	35561 07 5				
3		Dairy and milk product plant freezing equipment (including ice cream freezers)	35561 11 7				
4		Other industrial machinery and equipment for treating milk and dairy products by means of a change in temperature	35561 15 8				
5		Other dairy and milk products plant machinery and equipment	35561 17 4				
6		Parts and attachments for dairy and milk products plant machinery and equipment	35561 21 6				
7	Commercial Food Products Machinery (Except packaging machinery and food cooking and warming equipment) (35562)	Slicers	35562 11 5				
8		Choppers, grinders, cutters, dicers, and similar machines	35562 21 4				
9		Mixers and whippers (except drink mixers)	35562 31 3				
10		INDUSTRIAL BAKERY MACHINERY AND EQUIPMENT	Dough mixers, dividers, and molders	35562 65 1			
11			Bake ovens (including traveling tray)	35562 73 5			
12			Industrial rolling machines including pastry for the manufacture of bakery products	35562 75 0			
13			Other industrial bakery machinery and equipment	35562 91 7			
14		Other commercial food preparation machines, including tenderizers (power-driven) – Specify kind	35562 41 2				
15		Parts and attachments for commercial food preparation machines	35562 51 1				
16		Industrial Machinery and Equipment for Manufacturing or Processing Foods, Beverages (Except dairy products), and Animal or Fowl Feed (Excluding packaging and bottling machinery and farm machinery) (35563)	Presses, crushers, and similar machinery used in the production of wine, cider, fruit juices, and similar beverages	35563 04 8			
17	Machinery for sorting, grading, or cleaning fruits, vegetables, or eggs		35563 05 5				
18	Industrial machinery and equipment for freezing or rapid chilling of food products		35563 09 7				
19	Industrial driers for the manufacture of food products		35563 13 9				
20	Industrial machinery and equipment, n.e.c., for treating food products by a process involving a change in temperature (e.g. cooking or roasting)		35563 15 4				
21	Industrial machinery and equipment, n.e.c., for processing and preparing meat and poultry (not including the extraction or preparation of oils)		35563 17 0				
22	Industrial machinery, n.e.c., for the preparation of fruits, vegetables, and nuts (not including the extraction or preparation of fixed vegetable oils)		35563 27 9				
23	Industrial machines for cleaning, sorting, or grading seed, grain, or dried leguminous vegetables		35563 29 5				
24	Other industrial machinery used in the milling industry or for the working of cereals or dried leguminous vegetables		35563 31 1				
25	Industrial machinery, n.e.c., for the extraction or preparation of animal or fixed vegetable fats or oils		35563 33 7				
26	Other industrial food and feed products machinery		35563 39 4				
27	PARTS AND ATTACHMENTS FOR INDUSTRIAL FOOD PRODUCTS MACHINERY		Parts and attachments for bakery furnaces and ovens	35563 40 2			
28			Parts and attachments for presses, crushers, and similar machinery used in the production of wine, cider, fruit juices, and similar beverages	35563 41 0			
29			Parts and attachments for sorting, grading or cleaning fruits, vegetables, or eggs	35563 43 5			
30			Parts and attachments used in the milling industry or for the working of cereals or dried leguminous vegetables	35563 45 1			
31		Other parts and attachments for industrial food products machinery	35563 47 7				

Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued							
Line No.	Products and services  <b>(A)</b>		Census product code  <b>(B)</b>	Products shipped and other receipts			
				Value, f.o.b. plant <b>(E)</b>			
				584	584	584	
			Millions	Thou- sands	Dollars		
32	<b>Packing, Packaging, and Bottling Machinery, Except Parts (35651)</b>	Cartoning, multipacking, and leaflet/coupon placing machinery	35651 23 1	\$			
33		Thermoforming, blister and skin (including carded display) machinery	35651 25 6				
34		Bag (pre-formed) opening, filling, and closing machinery and systems	35651 03 3				
35		Vacuum, gas, and other modified atmosphere laminating and bagging machines	35651 31 4				
36		Bag or pouch form, fill, and seal machinery (must perform all three functions):					
		• Horizontal	35651 04 1				
37		• Vertical	35651 05 8				
38		Adhesive devices (hot melt and cold glue)	35651 52 0				
39		Machinery for cleaning or drying bottles or other containers	35651 22 3				
40		Bottling and canning machinery (including fillers, all types of closers, and accessory equipment)	35651 51 2				
41		FILLING MACHINERY	Dry products (free and nonfree flowing) including by count machinery, except bags	35651 33 0			
42			Liquids and viscous products (very heavy liquids, slurries, and pumpable semisolids)	35651 35 5			
43		Glass or plastics container or can capping, sealing, and lidding machinery (excluding all filling, bottling, and canning machinery)	35651 45 4				
44		Labeling machinery (all types of applications and methods)	35651 37 1				
45		Coding, dating, imprinting, jet printing, marking, and stamping machinery	35651 41 3				
46		Corrugated and solid fiber case and tray forming, loading, and sealing machinery	35651 43 9				
47		Accumulating, collating, feeding, and unscrambling machinery	35651 18 1				
48		Testing, inspecting, detecting, check weighing, and other quality control devices	35651 49 6				
49		Paper, film, and foil wrapping machines (all types, except shrink and stretch film equipment)	35651 27 2				
50		Shrink and stretch film overwrapping, banding, and bundling machinery (excluding pallet unitizing, but including shrink tunnels)	35651 28 0				
51	Palletizing, depalletizing, and pallet unitizing machinery with stretch film, adhesive, or strapping	35651 53 8					
52	Other packing, packaging, and bottling machinery or systems and combinations or equipment not listed above, except parts	35651 59 5					
53	Parts for packing, packaging, and bottling machinery <b>(35652)</b>	35652 00 7					
54	Nonferrous metal storage tanks, more than 4,000 gallon capacity (complete at factory, standard line nonpressure)	34437 19 4					
55	Farm dairy machines and equipment, sprayers and duster (except aerial types), farm elevators, and farm blowers and attachments (corresponds to the sum of the item codes 6204–6216, 6219–6265, and 6270–6275 on CIR Form MA35A, Farm Machinery and Lawn and Garden Equipment, for 1997) <b>(35232)*</b>	35232 00 8					
56	Harvesting machinery and attachments (corresponds to the sum of item codes 6511–6583 on CIR Form MA35A, Farm Machinery and Lawn and Garden Equipment, for 1997) <b>(35235)*</b>	35235 00 1					

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

Line No.	Products and services  <b>(A)</b>		Census product code  <b>(B)</b>	Products shipped and other receipts				
				Value, f.o.b. plant <b>(E)</b>				
				584 Millions	Thou- sands	Dollars		
57	<b>Bulk Material Handling Conveying Systems (Except hoists and farm elevators) (35355)</b>	CONVEYORS AND ELEVATORS	Belt conveyors and systems	35355 05 6	\$			
58			Screw conveyors	35355 09 8				
59			Bucket elevators	35355 11 4				
60			Pneumatic conveyors	35355 15 5				
61			Portable conveyors (except farm)	35355 19 7				
62			En masse conveyors	35355 23 9				
63			Vibrating conveyors	35355 27 0				
64			Bulk handling conveyors and conveying systems especially designed for underground use	35355 12 2				
65			Other bulk handling conveyors and conveying systems	35355 13 0				
66		UNLOADING AND RECLAIMING SYSTEMS		Bucket wheel reclaimers	35355 41 1			
67			Vibrating feeders	35355 43 7				
68			All other, such as bins, apron feeders, gates, etc.	35355 45 2				
69	LOADING AND STORING SYSTEMS		Traveling stackers	35355 51 0				
70			Other, such as trippers, centrifugal throwers, etc. - <i>Specify kind</i>	35355 55 1				
71	<b>CHEMICAL MANUFACTURING MACHINERY AND EQUIPMENT AND PARTS (35591)</b>		Distilling, rectifying, or fractionating machinery	35591 01 5				
72			Heat exchange units	35591 03 1				
73			Dryers	35591 05 6				
74			Gas or air liquefying machinery	35591 07 2				
75			Mixing, kneading, crushing, grinding, sifting, homogenizing, emulsifying, or stirring machines	35591 09 8				
76			Other chemical manufacturing machinery and equipment	35591 11 4				
77			Parts for distilling, rectifying, fractionating, heat exchange, dryers, gas or air liquefying machinery and equipment	35591 13 0				
78			Parts for other chemical manufacturing machinery and equipment	35591 15 5				
79	<b>Commercial Cooking and Food Warming Equipment (35891)</b>	NONELECTRIC	Commercial ranges, ovens, and broilers (except electric)	35891 11 8				
80				Deep-fat fryers	35891 13 4			
81				Other commercial cooking equipment (except electric) (including griddles, toasters, coffee urns, pressure-cookers-steam, etc.) - <i>Specify kind</i>	35891 30 8			
82			(Continued on next page)	Commercial food warming equipment (except electric) (including steam tables)	35891 31 6			

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

Line No.	Products and services  <b>(A)</b>		Census product code  <b>(B)</b>	Products shipped and other receipts			
				Value, f.o.b. plant <b>(E)</b>			
				584	Thou-	Dollars	
	Millions	sands					
<b>83</b>	<b>Commercial Cooking and Food Warming Equipment (35891) - Continued</b>	ELECTRIC	Commerical ranges, ovens, and broilers (electric)	35891 61 3	\$		
<b>84</b>			Commerical microwave stoves and ovens	35891 63 9			
<b>85</b>			Deep-fat fryers	35891 67 0			
<b>86</b>			Other commercial cooking equipment (electric) (including griddles, toasters, coffee makers, coffee urns, etc.) - <i>Specify kind</i>	35891 70 4			
<b>87</b>			Commercial food warming equipment (electric) (including hot food server units and steam tables)	35891 81 1			
<b>88</b>			Parts and accessories for commercial cooking and food warming equipment	35891 85 2			
<b>89</b>	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			
<b>90</b>				26			
<b>91</b>				34			
<b>92</b>				42			
<b>93</b>				59			
<b>94</b>				67			
<b>95</b>				75			
<b>96</b>	CONTRACT WORK	Receipts for work done for others on their own materials . . . . .	93000 00 8				
		<i>Describe below products worked on and kind of work.</i>					
<b>97</b>	MISCELLANEOUS RECEIPTS	Sales of scrap and refuse	99980 13 8				
<b>98</b>		Receipts for repair work	99980 61 7				
<b>99</b>		Receipts for installation or construction	99980 31 0				
<b>100</b>		Other miscellaneous receipts	99980 98 9				
<b>101</b>	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 10, line b.	99989 00 6				
<b>102</b>	<b>TOTAL value of shipments and other receipts</b> Sum of lines 1-101, 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  <b>(A)</b>	Census code  <b>(B)</b>	Was this operation performed at this establishment during 1997? <b>(C)</b>		Unit of measure for quantities  <b>(D)</b>	Quantities produced in this establishment and used in manufacturing other products made in this establishment  <b>(E)</b>
			592			
			591	593		
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	