Census File Number

If not shown, please enter your 11-digit Census File Number from the address label on page 1

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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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

	Ma	Census material code	purchase and of received establishn cor	Consumption of purchased materials and of materials received from other establishments of your company Cost, including delivery		
					_	,
		571 (B)	574 Millions		 Dollars	
Fabricated meta	l products, includ	ling forgings	340004 1	\$	 	
Castings (rough	and semifinished	1)	330091 0		 	
Shapes and Forms (Except castings.	STEEL	Bars and bar shapes	331072 9		 	
forgings, and fabricated		Sheet and strip	331022 4		 	
metal products) Wire and wire products						
		331035 6		 		
	COPPER AND COPPER-BASE	Rod, bar, and bar shapes	335103 8		 	
ALLOY		Plate, sheet, and strip (including military cups and discs)	335143 4		 	
		All other copper and copper-base alloy shapes and forms	335110 3		 	i I
	ALUMINUM AND	Extruded shapes (including extruded rod, bar, pipe, tube, etc.)	335405 7		 	
	BASE ALLOY	All other (wire, rolled rod and bar, powder, welded tubing, etc.)	335020 4		 	
	All other nonfer	rous shapes and forms	335099 8			
Paperboard con	tainers, boxes, ar	nd corrugated paperboard	265001 8		 	
Special dies, too machine tools)	ols, die sets, jigs,	and fixtures (except cutting tools for	354430 1		 	
			970099 8		 	1
TOTAL Sum of lin	es 1–15 should e	qual item 10, line a		\$		
	Castings (rough Shapes and Forms (Except castings, forgings, and fabricated metal products) Paperboard con Special dies, too machine tools) Cost of all other Describe the pri	Fabricated metal products, include Castings (rough and semifinished Shapes and Forms (Except castings, forgings, and fabricated metal products) COPPER AND COPPER-BASE ALLOY ALUMINUM AND ALUMINUM-BASE ALLOY All other nonfer Paperboard containers, boxes, and Special dies, tools, die sets, jigs, machine tools) Cost of all other materials and condition of the principal materials, TOTAL	Bars and bar shapes	Materials, parts, and supplies (A) (B) Fabricated metal products, including forgings 340004 1 Castings (rough and semifinished) STEEL Bars and bar shapes 331072 9 Sheet and strip Wire and wire products All other steel shapes and forms 331027 3 All other steel shapes and forms ALUMINUM AND ALUMINUM-ALUMINUM-BASE ALLOY All other copper and copper-base alloy shapes and forms ALUMINUM-BASE ALLOY All other copper and copper-base alloy shapes and forms ALUMINUM-BASE ALLOY All other (wire, rolled rod and bar, powder, welded tubing, etc.) All other nonferrous shapes and forms Paperboard containers, boxes, and corrugated paperboard Special dies, tools, die sets, jigs, and fixtures (except cutting tools for machine tools) TOTAL TOTAL	Materials, parts, and supplies (A) (A) (B) Fabricated metal products, including forgings Castings (rough and semifinished) Shapes and forms (Except castings, and fabricated metal products) STEL Bars and bar shapes Sheet and strip Wire and wire products All other steel shapes and forms COPPER AND COPPER-BASE ALLOY Plate, sheet, and strip (including military cups and discs) All other copper and copper-base alloy shapes and forms ALUMINUM AND ALUMINUM-BASE ALLOY All other rougher and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms All other copper and copper-base alloy shapes and forms Sociol of the principal materials, etc., included in this value.	Materials, parts, and supplies Census material code Census mate

Item 18A. SELECTED METALWORKING AND RELATED OPERATIONS PERFORMED IN THIS ESTABLISHMENT DURING 1997

| Selected Metalworking and Related Operations Performed in This | Selected Metalworking and Related Operations | Selected Metalworking | Selected

	591	3207 8									
	Mark (X) appropriate box										
		Yes	No								
	592										
l		1 □									

Were any of the operations listed below performed in this establishment in 1997?

If "Yes," indicate in column (C) by marking appropriately, which of the specified operations were performed in this establishment during 1997. Where "YES" is marked, show in column (D) the approximate number of production workers on all shifts usually engaged in the specified operation.

Line No.	Operation (A)	Census code	Was opera perform the establis during	ation med in is shment 1997?	Number of production workers (on all shifts) usually employed when operated (estimate if necessary) (D)
1	Electroplating and other plating	018	1 🗆	2 🗌	
2	Galvanizing and other hot dip coating	026	1	2 🗌	
3	Heat treating of metals for production purposes	034	1	2 🗌	
4	Precision turned products (on screw machines, turning centers, and CNC equipment)	042	1	2	
5	Machine shop	059	1 🗆	2 🗌	
6	Tool and die shop (if separate from machine shop) for jigs, fixtures, dies, and other special tooling	067	1 🗆	2 🗌	
7	Pattern shop (foundry patterns only – metal, wood, etc.)	075	1 🗆	2 🗌	
8	Sheet metal work, aluminum or steel	083	1 🗆	2 🗌	
9	Stamping and blanking of metals	091	1 🗌	2 🗌	
10	Painting, lacquering, and enameling on metals	109	1	2 🗌	
11	Welding of steel plate for manufacturing production	117	1	2 🗌	
12	Welding repair shop	125	1 🗆	2 🗌	

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.

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."

If not shown, please enter your 11-digit Census File Number from the address label on page 1 $\,$

Census File Number

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

	<u> </u>	DUCTS AND SEI		Products shipped and other receipts						
	Products and services					Value, f.o.b. plant				
No.			Products and se	ervices	product code	584	(E)	I		
Line			(B)	Millions	Thou- sands	l Dollars				
1	Externally Threaded	BOLTS	Mine roof bolts		34524 11 6	\$	l I			
2	Metal Fasteners (Except			ding heavy, tap-and-joint, excluding ructural)	34524 12 4		 	 		
3	aircraft types)		Other metal bolhigh-strength st	ts (including square, round, plow, ructural, and bent bolts)	34524 19 9		 			
4	(34524)	SCREWS	Can set machi	ne, lag, flange, and self-locking	34524 39 7		 			
5			Tapping (includir	ng fillister, flat, hex, oval, and mood, including flat, oval, and round)	34524 45 4		 	 		
6		Other externally above (including		fasteners not mentioned	34524 89 2		 			
7	Internally Threaded Metal	NUTS	Hex (including f flat, jam slotted locking)	langes, double chamfered, washer face, , thick, castle, heavy, machine, and	34525 04 8		 			
8	Fasteners (Except aircraft types)		Square (including sleeve, and made cage, anchor, or	ng flat, washer, crowned, heavy, track, chine; sheet metal; weld; wing; and r nut retainers)	34525 29 5		 	 		
9	(34525)		d nuts (all types	asteners not mentioned above except hex) and locknuts	34525 89 9		 			
10	Nonthreaded Metal	RIVETS	Solid		34526 09 5		' 			
11	Fasteners (Except aircraft types)		Tubular; split (ir	ncluding rivet caps) and blind	34526 15 2		 	 		
12	(34526)	Washers		34526 35 0		 	 			
13		Other nonthread including pins (a		ers not mentioned above	34526 79 8		 			
14	Aircraft (Including aerospace)	EXTERNALLY THREADED	Bolts	Less than 161 KSI tensile	34527 01 0		 			
15	Fasteners Other Than Plastics			161 KSI tensile or more	34527 06 9		 	 		
16	(Meet specifica-		Screws, all type	s; and studs, all types	34527 15 0		 	1		
17	tions for flying vehicles)	INTERNALLY THREADED	Locknuts (include	ling flanged locknuts)	34527 45 7		 			
18	(34527)		Other (including flanged locknuts metal fasteners)	g flanged nuts (all types excluding s), hex square nuts (all types), and sheet	34527 59 8		 	 		
19		NONTHREADED	Washers, all typ	es	34527 61 4		 	! !		
20			Rivets, all types		34527 62 2			 		
21			34527 63 0		 					
22	OTHER COLD- HEADING PRODUCTS (Or warm-or	Automotive	34528 11 7		 	 				
23	hot-heading products; formed nonplastics,	Household appli	ances (including	34528 21 6		 				
24	nonfastener parts, made on fastener machines) Aircraft						 			
25	(34528)	All other (includ	ing ordnance)		34528 98 4		1 	 		
23		ers made of plas		d and use	3-320 30 4		<u> </u>			
							1 			
26					30893 00 2		<u> </u>	I		

CONTINUE WITH ITEM 18B ON PAGE 8

It	Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued												
				Products shipped and other receipts									
0.		Products and services	Census product —code	Value, f.o.b. plant (E)									
Line No			581 Code	584	Th	l I							
Ë		(A)	(B)	Millions	Thou- sands	Dollars							
27	Steel nails, stap	les, tacks, spikes, and brads	33152 00 0	\$	 	 							
	Paper clips, and and type of me	other products made from purchased wire – Specify kind of product			1								
28			34968 00 8		 								
29	Buttons, needle	s, pins, zippers, buckles, hooks, eyelets, and similar notions	39650 00 7		 								
30	PRECISION TURNED	For automotive use	34511 00 6		1	 							
	PRODUCTS MADE ON	For other use – Specify end use if known	04011000		1								
	SCREW MACHINE				 	 							
	TURNING CENTERS OR				 	 							
31	CNC		24512.00.4		 	 							
31	Bicycle parts – 3	 Specify kind	34512 00 4		<u> </u> 	l I							
	.,,				 	 							
32			37511 00 3										
33	Conveyors and	parts	35350 00 8		 								
34	Telephone swite	ching and switchboard equipment (corresponds to the sum of item 6 as reported on CIR form MA36P, Communication Equipment, for 1997)	36611 00 2		[
		raulic, and powder-actuated handtools – Specify kind			<u>.</u> 	 							
35			35462 00 1		 								
	Hand and edge razor blades, sa 48–55) – <i>Specif</i> y	tools (except cutlery, scissors, shears, trimmers, snips, razors and ws and components, and power-driven tools; report those on lines y kind											
36			34230 00 3		 								
37	Special dies and other than meta	d tools, die sets, jigs, and fixtures (except cutting dies for materials al; report those on line 36)	35441 00 5		 	 							
38	Cutting tools, m for machine too	nachine tool accessories, and machinists' precision measuring devices, als and for other metalworking machinery	35450 00 6		 								
39	Gears (including non-aircraft use vehicles on line	g pinions, racks, and worms: loose gears for non-automotive, only; report drives, gearboxes, and gears for aircraft and motor s 48–55)	35660 00 0		 								
	Other mechanic	al power transmission equipment (except antifriction bearings; report .8–55) – <i>Specify kind</i>			 	 							
40	THOSE OF THIS S	o oo, opoony kina	35680 00 8		 								
41	JOB STAMPINGS	Automotive	34650 00 2		 								
42		Other	34692 00 4		 								
	Hardware, not e	elsewhere classified – Specify kind and use			 	l							
					1	l I							
43			34290 00 7		1								
44	Electroplating,	plating, polishing, and anodizing (performed on metals)	34710 00 4		 								
45	Etching, engrav	ing, coating, and allied services (performed on metals)	34790 00 6		 								
46	Heat treating of tempering, etc.)	metal (heat treating, pickling, annealing, brazing, shot peening,	33980 00 4		 								
47	Receipts for ma	chine shop job work and job order repairs	35995 00 0		 	l 							

If not shown, please enter your 11-digit Census File Number from the address label on page 1

Census	File	Number

Item	18B.	PRODUCTS	AND S	SERVICES (OF THIS	ESTABLISHMENT	DURING	1997 - Continued
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.,	TREM TOD: THOUGHT AND SERVICES OF THIS ESTABLISHMENT BOTHING 1997 CONTINUES												
			Census	Products and oth	er rece	ipts							
Line No.		Products and services	product code	Value, f.o.b. plan									
ne			581	584	Thou-	İ							
		(A)	(B)	Millions	sands	Dollars							
	ALL OTHER PRODUCTS MADE IN THIS ESTABLISH-	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.			 	 							
48	MENT		18	\$	 	 							
49			26		 								
50			34		 								
51			42		 								
52			59		 								
53			67		 								
54			75		 								
55			83		 								
56	CONTRACT WORK	Receipts for work done for others on their own materials	93000 00 8		 	1							
		Describe below products worked on and kind of work.			 	 							
					l l	1							
57	MISCELLA- NEOUS RECEIPTS	Sales of scrap and refuse	99980 13 8		 								
58		Other miscellaneous receipts (including receipts for repair work, etc.)	99980 98 9		 								
59	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		 								
60	TOTAL va Sum of lir	alue of shipments and other receipts nes 1–59, column (E)	77000 00 8	\$	 								
14	40.04	lat applicable to this years of											

Items 19–21 – 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 (Print or type)						Area coo	le Nu	ımber		Extension	
667 1					Telephone	2					
Name of company					Address (Number and street, city, State, ZIP Code)						
	FROM: Month	Day	Yea	r	TO: Mo	onth		Day		Year	
Period covered	666 1	! 			2						
Signature of authorized person Title									Date		