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

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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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. Toll Operations Tolling must be performed for customers outside your own company. If the work is done for other establishments within your company, the value of the materials consumed in the tolling operation should be reported in your cost of materials data and the processed value of the product should be reported as a product shipment and a corresponding interplant transfer.
- 6. Gross Weight Where gross weight is requested (lines 12 and 22) the figures reported should represent the entire weight of the materials in the relevant form shown on the schedule and not the metal content of the material. Gross weight should not include tare.
- 7. Lines 15–21 Include scrap generated in other establishments of your company and transferred to this plant, as well as scrap purchased from outside sources. Exclude home scrap.

		Materials, parts, and supplies		Census	Unit of measure for quantities	Consumption of purchased materials and of materials received from other establishments of your company				
	e No.					Quantity	Cost, including deliver cost (freight-in)		elivery n)	
:	Line		(A)		(B)	(C)	(D)	574 Millions	Thou- sands	l Dollars
	1	Shapes and Forms (Except castings, forgings, and fabricated ALUMINUM AND ALUMINUM-BASE ALLOY		Ingot	333471 1	Short tons		\$		
	2			All other aluminum and aluminum-base alloy shapes and forms	330009 2				 	
	3	metal products)	COPPER AND COPPER-BASE ALLOY	Refined unalloyed copper (cathodes, ingots, cakes, slabs, etc.) and blister or anode copper	333120 4	Short tons			 	
	4			All other copper and copper- base alloy shapes and forms	330012 6				 	
	5	2500 and 1600 sace aney		333962 9						
	6			333978 5	Short tons			 	 	
	7	(Continued on next page)	Tin and tin-base	alloy	333975 1				 	

CONTINUE WITH ITEM 17 ON PAGE 6

ı	tem 17. CONSU	JMPTION OF S	ELECTED MATERIALS DUI	URING 1997 – Continued						
No No	Materials, parts, and supplies		Census material code	Unit of measure for quantities	Consumption of and of material establishmen Quantity	s received f its of your of Cost, inclu cost (f	rom othe company ding deliv reight-in) (E)	very		
-		(A)		(B)	(C)	(D)	Millions	Thou- sands Do	ollars	
8	Shapes and Forms (Except	Precious metal a (including gold, s	and precious metal alloy silver, and platinum)	333904 1			\$			
٤	castings, forgings, and	MAGNESIUM AND MAGNESIUM-	Ingot	333974 4						
10	fabricated metal	BASE ALLOY	All other magnesium and magnesium-base alloy shapes and forms	333930 6						
11		All other nonferrous shapes and forms		333964 5						
12	METAL MINING (Ores and concentrates)	Copper ores, co	Copper ores, concentrates, and precipitates		Gross wt short tons					
13	3	Precious metal ores and concentrates		100005 8				1		
14	ı	All other nonferro	All other nonferrous metal ores and concentrates							
14	SCRAP	Aluminum and aluminum-base alloy (excluding home scrap) Copper and copper-base alloy		190040 6	Short tons					
10	5			190024 0						
17	7	Lead and lead-b	·	190025 7						
18	3	Zinc and zinc-ba and skimmings)	se alloy (including drosses	190026 5						
19	9	Tinplate (includir	ng shredded steel can scrap)	190027 3						
20			nd precious metal alloy	190051 3				l I		
2	ı	All other nonferro	ous metal and metal-base	190052 1						
22	2 Alumina			281951 4	Gross wt short tons					
23	containers, and	supplies consum	omponents, parts, ned	970099 8						
	Describe the pri value.	incipal materials,	etc., included in this					 		
24	TOTAL Sum of lines 1–23 should equal item 10, line a						\$			

CONTINUE WITH ITEM 18A ON PAGE 7

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

Census I	File	Number	

Item 18A. TYPE OF OPERATION

Line No.	Item Mark (X) the ONE item which BEST describes the operation at this establishment (A)	Key	Mark (X) ONE box only (B)
1	Smelting or refining of copper from ore or smelter products	401	5215
2	Smelting or refining of lead from ore or smelter products	402	5231
3	Smelting or refining of zinc from ore	403	5256
4	Aluminum reduction	404	5272 🗌
5	Smelting or refining of other nonferrous metals from ore or smelter products	405	5298
6	Smelting or refining of nonferrous metal from scrap and dross	406	5314
7	Production of aluminum ingot or billet in aluminum rolling mills	407	5330
	Other – Specify		
8		408	5355 🗌

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. Column (D-1) - Production - Report the total quantity of each product produced. If this establishment performs both smelting and refining operations, production should be reported separately for each stage. Also, within each stage, production should be reported only in the form in which the metal passes from the smelter stage to the refined stage, or is shipped from this plant, or is consumed in this plant in the manufacture of products beyond the refined metal stage. Do not report production of intermediate stages through which the metal may be processed.

- 3. Columns (D-2) and (E) Products Shipped and Other Receipts Report the quantity and value of shipments of all products made in this establishment during 1992. For value of shipments, report the net selling value, f.o.b. plant, after discounts and allowances, and exclusive of freight charges and excise taxes. Include products shipped on consignment, whether or not sold at the end of the year. Exclude shipments of materials to your toll processor. Include products made for you on a toll basis whether shipped direct from the toll processor or from this plant. Exclude shipments of products made in this establishment on a toll basis for others. Report the amount you received for "commission or toll processing" on line 28, Census product code 93000 85 9.
- 4. 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 14 9.
- 5. 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."

ſ		Products and services		Concue	Census Unit of		Products shipped and other receipts			
	No.			product measure product for		Quantity produced for all purposes	Quantity	Value, f.o.b. plant (E)		ant
Line				581	quantities		583	584 Millions	Thou-	Dollars
ŀ		(A)		(B)	(C)	(D-1)	(D-2)	Willions	Janus	Dollars
	1	Copper smelter products (not of commercial grade, produced for further refining either in this plant or in other establishments, including blister or anode copper, matte, speiss, flue dust, residues, etc.)		33311 00 2				\$	 	
	2	REFINED PRIMARY COPPER AND COPPER-	Cathode	33312 17 4	Short tons				 	
	3	BASE ALLOY (33312)	Other (including wire bar, ingot and ingot bar, cakes, slabs, shot, etc.)	33312 30 7					 	
	4	Copper and copper-base alloy powders, paste, and flakes (copper content only)		33991 33 2	Thousand pounds				[[

CONTINUE WITH ITEM 18B ON PAGE 8

It	Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued											
No.	Aluminum ingot (including pigs, sows, and		Census product code	Unit of measure for	Quantity produced for all purposes	Products ship Quantity	Value,		•			
Line			(B)	quantities (C)	(D-1)	(D-2)	584 Millions	Thou- sands	Dollars			
5			33347 00 6	Short tons			\$					
6	Aluminum e	extrusion ingot (billet)	33348 00 4	↓ ↓				 				
7	Aluminum a and flakes (and aluminum-base powders, paste, aluminum content only)	33991 11 8	Thousand pounds				 	 			
8	grade, prod this plant or	r products (not of commercial uced for further refining either in in other establishments, including n, matte, speiss, etc.)	33391 00 4					 				
9	REFINED PRIMARY ZINC	Zinc (including all ASTM specification zinc) unalloyed	33392 31 7					 				
10	(33392)	Zinc-base alloys	33392 51 5	Short tons				1				
11	PRE- CIOUS METALS	Gold	33395 25 2	1				! 				
12	AND PRE- CIOUS	Silver	33395 35 1					 				
13	METAL ALLOYS (33395)	Platinum (including platinum- group metals)	33395 45 0	Troy ounces				 				
14	powders, pa platinum, et	etal and precious metal alloy aste, and flakes (gold, silver, c.)	33991 91 0	\				 				
15	OTHER PRIMARY NON-	Lead and lead-base alloys	33398 05 8					 				
16	FERROUS METALS,	Magnesium and magnesium-base alloys	33398 33 0	Short tons				 				
17	N.E.C. (33398)	Nickel, nickel-base alloys, and tin	33398 51 2					 				
18		Silicon, unalloyed	33398 73 6					! 				
19		Other unrefined nonferrous metals (including lead smelter products, metal bearing furnace residues, and other metal products which have to be further refined before sale to customers)	33398 89 2						 			
		Other refined nonferrous metals and their alloys (including cadmium, antimony, cobalt, molybdenum, titanium sponge, etc.) – Specify metal										
20			33398 99 1					 				
21	item codes Form MA28	d (corresponds to the sum of survey 9311–9331 as reported on CIR B, Inorganic Fertilizer Materials d Products, for 1997)	28193 00 1									
22	activated ar	anic chemicals, excluding and reactivated carbon and ulverized and granular, n.e.c.	28199 97 4									

CONTINUE WITH ITEM 18B ON PAGE 9

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

- 10	Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued										
	(A)		Census Unit of Quantity produced for		Products ship	ped and other receipts					
No.			product code		produced for all purposes	Quantity	Value, f.o.b. plant (E)				
Line [581	quantities	582	583	584	Thou-	I I		
_			(B)	(C)	(D-1)	(D-2)	Millions	sands	Dollars		
	ALL OTHER PRODUCTS MADE IN THIS ESTABLISH- MENT	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. Specify unit of measure for quantity. For all remaining products, write "Other" and report a single total value.							 		
23			18				 \$	 	 		
24			26					1			
25			34					 			
26			42								
			59					 			
27	CONTRACT WORK	Receipts for smelting and	93000 85 9					 			
20	WORK	ore refining of materials owned by others on a toll basis. The quantity of production and shipment of these products should be included in column (D-1) on pages 7 and 8. Describe on lines below.	93000 85 9								
29		All other receipts for work done for others on their	93000 14 9					1			
		own materials. Describe below products worked on and kind of work.						 			
30	MISCELLA- NEOUS RECEIPTS	Sales of scrap and refuse	99980 13 8								
	NECEIF 13	Other miscellaneous receipts (including receipts for repair work,						 			
31		etc.)	99980 98 9					1			
32	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					 			
33	and other	llue of shipments receipts es 1–32, column (E)	77000 00 8				\$	 			

Items 19-21 - Not applicable to this report

2

Title

Period covered

666 1

Signature of authorized person

Date