

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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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

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."

**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.

| Line No. | Materials, parts, and supplies  |                                  | Census material code   | Unit of measure for quantities | Consumption of purchased materials and of materials received from other establishments of your company |  |                 |    |  |  |  |
|----------|---|----------------------------------|--|--------------------------------|--|--|-----------------|----|--|--|--|
|          |   |                                  |  |                                | Quantity   | Cost, including delivery cost (freight-in) |                 |    |  |  |  |
|          |   |                                  |  |                                |  | <b>(E)</b>                                 |                 |    |  |  |  |
|          | <b>(A)</b>  | <b>(B)</b>                       | <b>(C)</b>   | <b>(D)</b>                     | Millions   | Thou-sands                                 | Dollars         |    |  |  |  |
| 1        | <b>Nonferrous Shapes and Forms (Except castings, forgings, and fabricated metal products)</b> | ALUMINUM AND ALUMINUM-BASE ALLOY | Ingot, pig, shot   | Unalloyed                      | 333404 2   | ↑  | Short tons      | \$ |  |  |  |
| 2        |   |                                  | Alloyed  |                                |  |  |                 |    |  |  |  |
| 3        |   |                                  | Sheet, plate, foil, and welded tubing  |                                | 335301 8   | ↑  | Thousand pounds |    |  |  |  |
| 4        |   |                                  | Extruded shapes (including extruded rod, bar, pipe, and tube)                  |                                | 335405 7   | ↓  |                 |    |  |  |  |
| 5        |   |                                  | All other aluminum and aluminum-base alloy shapes and forms                    |                                | 330010 0   |  |                 |    |  |  |  |
| 6        |   | COPPER AND COPPER-BASE ALLOY     | Cathodes   |                                | 333102 2   | ↑  | Short tons      |    |  |  |  |
| 7        |   |                                  | Ingot, ingot bar, and wire bar   |                                | 333127 9   |  |                 |    |  |  |  |
| 8        |   |                                  | All other copper and copper-base alloy shapes and forms                        |                                | 333135 2   |  |                 |    |  |  |  |
| 9        |   |                                  | Magnesium and magnesium-base alloy   |                                | 333973 6   | ↓  |                 |    |  |  |  |
| 10       |   |                                  | Nickel and nickel-base alloy   |                                | 333963 7   |  |                 |    |  |  |  |
| 11       |   |                                  | Zinc and zinc-base alloy   |                                | 333978 5   | ↓  |                 |    |  |  |  |
| 12       |   |                                  | Molybdenum and molybdenum-base alloy   |                                | 333981 9   | ↑  | Thousand pounds |    |  |  |  |
| 13       |   |                                  | Tin and tin-base alloy   |                                | 333983 5   | ↓  |                 |    |  |  |  |
| 14       |   |                                  | Titanium and titanium-base alloy   |                                | 333940 5   |  | Short tons      |    |  |  |  |
| 15       |   |                                  | Precious metal and precious metal alloy (including gold, silver, and platinum) |                                | 333904 1   |  | Troy ounces     |    |  |  |  |
| 16       |   |                                  | Brass  |                                | 335100 4   |  | Short tons      |    |  |  |  |
| 17       |   |                                  | All other nonferrous shapes and forms  |                                | 333960 3   |  |                 |    |  |  |  |

CONTINUE WITH ITEM 17 ON PAGE 6

| Item 17. CONSUMPTION OF SELECTED MATERIALS DURING 1997 - Continued |   |   |   |                                 |                                       |  |   |         |  |
|--|---|---|---|---------------------------------|---------------------------------------|--|---|---------|--|
| Line No.   | Materials, parts, and supplies<br>(A)   |   |   | Census material code<br>571 (B) | Unit of measure for quantities<br>(C) | Consumption of purchased materials and of materials received from other establishments of your company |   |         |  |
|  |   |   |   |                                 |                                       | Quantity<br>573 (D)  | Cost, including delivery cost (freight-in)<br>(E) |         |  |
|  |   |   |   |                                 | Millions                              |  | Thou- sands                                       | Dollars |  |
| 18   | Nonferrous Metal Scrap (Excluding home scrap)   | ALUMINUM AND ALUMINUM-BASE ALLOY  | From other establishments of your company | 190021 6                        | Short tons<br>↑<br>↓                  |  | \$  |         |  |
| 19   |   |   | From all other sources                    | 190022 4                        |                                       |  |   |         |  |
| 20   |   | Copper and copper-base alloy  |   | 190024 0                        |                                       |  |   |         |  |
| 21   |   | Other nonferrous metal scrap (including antimonial lead scrap and zinc drosses and skimmings) |   | 190080 2                        |                                       |  |   |         |  |
| 22   | Cost of all other materials and components, parts, containers, and supplies consumed. . . . .<br><i>Describe the principal materials, etc., included in this value.</i> |   |   | 970099 8                        |                                       |  |   |         |  |
| 23   | TOTAL<br>Sum of lines 1-22 should equal item 10, line a   |   |   |                                 |                                       |  | \$  |         |  |

Item 18A. TYPE OF OPERATION

| Line No. | Operation<br><i>Mark (X) the statement below which best describe the operations at this establishment.</i><br>(A)                     | Key | <i>Mark (X) ONE box only</i><br>(B) |
|----------|---|-----|-------------------------------------|
| 1        | Produce aluminum ingot or billet in aluminum reduction plant  | 401 | 5272 <input type="checkbox"/>       |
| 2        | Produce aluminum ingot or billet from scrap or dross  | 402 | 5322 <input type="checkbox"/>       |
| 3        | Produce aluminum ingot or extrusion billet in aluminum rolling mill   | 403 | 5330 <input type="checkbox"/>       |
| 4        | Produce aluminum wire and cable from rods produced in this establishment  | 404 | 5413 <input type="checkbox"/>       |
| 5        | Produce aluminum wire and cable from rods or redraw wire purchased from other companies or received from other plants of this company | 405 | 5439 <input type="checkbox"/>       |
| 6        | Produce aluminum extrusions (either for sale or for own use)  | 406 | 5454 <input type="checkbox"/>       |

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. Column (D-1) - Production - Report in this column the total quantity each specified product made in this establishment during 1997. Do not report any data on the production of intermediate stages through which the metal may be processed in the production of other rolled, drawn, or extruded products. For example, if you purchase ingot or wire bars, roll them into rods and then draw wire from these rods, you should only report information on the wire in this section of the form; no information is necessary on the rods.

3. Columns (D-2) and (E) - Products Shipped and Other Receipts - Report in these columns the quantity and value of all products made in this establishment which were physically shipped on consignment, whether or not sold at the end of the year. The value of the products shipped and services performed should be based on the net selling value, f.o.b. plant, after discounts and allowances, and exclusive of freight charges and excise taxes.

4. Contract Work

a. 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.

b. 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.

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."

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

| Line No. | Products and services<br><br>(A)  |   | Census product code<br><br>(B) | Unit of measure for quantities<br><br>(C) | Quantity produced for all purposes<br><br>(D-1) | Products shipped and other receipts |                         |             |         |
|----------|---|---|--------------------------------|---|---|-------------------------------------|-------------------------|-------------|---------|
|          |   |   |                                |   |   | Quantity<br><br>(D-2)               | Value, f.o.b. plant (E) |             |         |
|          |   |   |                                |   |   |                                     | 584<br>Millions         | Thou- sands | Dollars |
| 1        | COPPER WIRE, BARE AND TINNED (Nonelectrical) (33511)                                  | Unalloyed   | 33511 11 4                     | Short tons                                |   |                                     | \$                      |             |         |
| 2        |   | Alloyed   | 33511 31 2                     |   |   |                                     |                         |             |         |
| 3        | COPPER AND COPPER-BASE ALLOY ROD, BAR, AND SHAPES (33513)                             | Unalloyed (except electric rod)   | 33513 11 0                     |   |   |                                     |                         |             |         |
| 4        |   | Alloyed (except electric rod)   | 33513 32 6                     |   |   |                                     |                         |             |         |
| 5        | COPPER AND COPPER-BASE ALLOY SHEET, STRIP, AND PLATE (33514)                          | Unalloyed   | 33514 13 4                     |   |   |                                     |                         |             |         |
| 6        |   | Alloyed (including military cups and discs, net weight)   | 33514 35 7                     |   |   |                                     |                         |             |         |
| 7        | COPPER AND COPPER-BASE ALLOY PIPE AND TUBE (33515)                                    | Unalloyed<br>Pipe and tube, plumbing  | 33515 16 4                     |   |   |                                     |                         |             |         |
| 8        |   | Other pipe and tube   | 33515 18 0                     |   |   |                                     |                         |             |         |
| 9        |   | Alloyed<br>Pipe and tube, plumbing  | 33515 36 2                     |   |   |                                     |                         |             |         |
| 10       |   | Other pipe and tube   | 33515 38 8                     |   |   |                                     |                         |             |         |
| 11       | ALUMINUM PLATE (Thickness of 0.25 inches or more) (Including continuous cast) (33531) | Heat-treatable  | 33531 13 8                     |   |   |                                     |                         |             |         |
| 12       |   | Nonheat-treatable   | 33531 15 3                     |   |   |                                     |                         |             |         |
| 13       | ALUMINUM SHEET AND STRIP (Including continuous cast) (33532)                          | Flat, heat-treatable  | 33532 23 5                     |   |   |                                     |                         |             |         |
| 14       |   | Flat, nonheat-treatable, bare and precoated   | 33532 25 0                     |   |   |                                     |                         |             |         |
| 15       |   | Coiled, heat-treatable  | 33532 27 6                     |   |   |                                     |                         |             |         |
| 16       |   | Coiled, nonheat-treatable, bare   | 33532 31 8                     |   |   |                                     |                         |             |         |
| 17       |   | Coiled, nonheat-treatable, precoated (including only permanent finishes such as enameling and vinyl coatings; excluding coatings which are applied only for temporary protection) | 33532 33 4                     |   |   |                                     |                         |             |         |
| 18       | Plain aluminum foil (less than .006 inches thick)                                     |   | 33533 00 1                     |   |   |                                     |                         |             |         |
| 19       | Aluminum welded tube  |   | 33534 00 9                     |   |   |                                     |                         |             |         |
| 20       | EXTRUDED ALUMINUM ROD, BAR, AND OTHER EXTRUDED SHAPES (33541)                         | Rod and bar<br>Alloys other than 2000 and 7000 series   | 33541 15 2                     |   |   |                                     |                         |             |         |
| 21       |   | Alloys in 2000 and 7000 series  | 33541 18 6                     |   |   |                                     |                         |             |         |
| 22       |   | Other extruded shapes (except tube)<br>Alloys other than 2000 and 7000 series   | 33541 25 1                     |   |   |                                     |                         |             |         |
| 23       |   | Alloys in 2000 and 7000 series  | 33541 28 5                     |   |   |                                     |                         |             |         |
| 24       | EXTRUDED AND DRAWN ALUMINUM TUBE (33542)  | Alloys other than 2000 and 7000 series  | 33542 61 4                     |   |   |                                     |                         |             |         |
| 25       |   | Alloys in 2000 and 7000 series  | 33542 63 0                     |   |   |                                     |                         |             |         |

CONTINUE WITH ITEM 18B ON PAGE 8

| Item 18B. PRODUCTS AND SERVICES OF THIS ESTABLISHMENT DURING 1997 – Continued |   |  |   |  |  |                                     |                                   |     |       |
|---|---|--|---|--|--|-------------------------------------|-----------------------------------|-----|-------|
| Line No.  | Products and services<br><br><b>(A)</b>   |  | Census product code<br><br><b>(B)</b>   | Unit of measure for quantities<br><br><b>(C)</b> | Quantity produced for all purposes<br><br><b>(D-1)</b> | Products shipped and other receipts |                                   |     |       |
|   |   |  |   |  |  | Quantity<br><br><b>(D-2)</b>        | Value, f.o.b. plant<br><b>(E)</b> |     |       |
|   |   |  |   |  |  |                                     | 583                               | 584 | Thou- |
|   |   |  |   |  |  | Millions                            | sands                             |     |       |
| 26  | Aluminum and aluminum-base alloy wire and cable, except covered or insulated (including ACSR) |  | 33551 00 3  |  |  |                                     |                                   |     |       |
| 27  | Rolled aluminum rod, bar (including continuous cast)  |  | 33552 00 1  | Short tons                                       |  |                                     |                                   |     |       |
| 28  | Aluminum ingot, excluding billet  |  | 33553 00 9  |  |  |                                     |                                   |     |       |
| 29  | Aluminum extrusion ingot (billet)   |  | 33554 00 7  | ↑<br>Short tons<br>↓                             |  |                                     |                                   |     |       |
| 30  | NICKEL AND NICKEL-BASE ALLOY MILL SHAPES (Including nickel-copper alloys) <b>(33561)</b>      | Plate, sheet, and strip (excluding nickel-copper alloys)   | 33561 61 4  |  |  |                                     |                                   |     |       |
| 31  |   | Other nickel shapes (excluding nickel-copper alloys and wire)  | 33561 64 8  |  |  |                                     |                                   |     |       |
| 32  |   | Nickel-copper alloys, all shapes and forms (except wire)   | 33561 65 5  |  |  |                                     |                                   |     |       |
| 33  |   | Nickel and nickel alloy wire   | 33561 66 3  |  |  |                                     |                                   |     |       |
| 34  |   | TITANIUM AND TITANIUM-BASE ALLOY MILL SHAPES (Excluding wire) <b>(33562)</b>   | Ingot   |  | 33562 72 9   |                                     |                                   |     |       |
| 35  | Forging and extrusion ingot (billet)  |  | 33562 74 5  |  |  |                                     |                                   |     |       |
| 36  | Other, including sheet, plate, tubing, bar, etc.  |  | 33562 79 4  |  |  |                                     |                                   |     |       |
| 37  | PRECIOUS METAL MILL SHAPES <b>(33563)</b>   | Gold (excluding wire)  | 33563 81 8  |  |  |                                     |                                   |     |       |
| 38  |   | Silver (excluding wire)  | 33563 83 4  |  |  |                                     |                                   |     |       |
| 39  |   | Other, including platinum-group metals (excluding wire)  | 33563 86 7  |  |  |                                     |                                   |     |       |
| 40  |   | Precious metal wire  | 33563 91 7  |  |  |                                     |                                   |     |       |
| 41  | <b>All Other Nonferrous Metal Mill Shapes (33569)</b>   | Magnesium and magnesium-base alloy mill shapes (excluding wire)  | 33569 34 4  | ↑<br>Short tons<br>↓                             |  |                                     |                                   |     |       |
| 42  |   | LEAD AND LEAD-BASE ALLOY MILL SHAPES (Excluding wire)  | Plate, sheet, and strip   |  | 33569 51 8   |                                     |                                   |     |       |
| 43  |   |  | Other rolled, drawn, or extruded products, including pipe, tubing, traps, and bends | 33569 57 5                                       |  |                                     |                                   |     |       |
| 44  |   | Tungsten and tungsten-base alloy mill shapes (excluding wire)  | 33569 94 8  |  |  |                                     |                                   |     |       |
| 45  |   | Molybdenum and molybdenum-base alloy mill shapes (excluding wire)  | 33569 96 3  |  |  |                                     |                                   |     |       |
| 46  |   | Other nonferrous metals, rolled, drawn, and extruded shapes, including zinc (excluding wire) – <i>Specify metals</i> |   | 33569 97 1                                       |  |                                     |                                   |     |       |
|   |   | Other nonferrous wire (except copper, aluminum, nickel, and precious metals) <i>Specify metals</i>                   |   |  |  |                                     |                                   |     |       |
| 47  |   |  | 33569 93 0  |  |  |                                     |                                   |     |       |

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

| Line No. | Products and services<br><br>(A)  |  | Census product code<br><br>581<br>(B)             | Unit of measure for quantities<br><br>(C) | Quantity produced for all purposes<br><br>582<br>(D-1) | Products shipped and other receipts |                         |             |         |  |
|----------|---|--|---|---|--|-------------------------------------|-------------------------|-------------|---------|--|
|          |   |  |   |   |  | Quantity<br><br>583<br>(D-2)        | Value, f.o.b. plant (E) |             |         |  |
|          |   |  |   |   |  |                                     | 584<br>Millions         | Thou- sands | Dollars |  |
| 48       | Laminated Aluminum Foil Rolls and Sheets for Flexible Packaging Uses (Converting and printing or converting only) | Film/foil without paper  | 34972 10 9  | ↑<br>Thousand pounds<br>↓                 |  |                                     | \$                      |             |         |  |
| 49       |   | FOIL/PAPER   | Extrusion laminated foil/paper combinations       |   | 34972 22 4   |                                     |                         |             |         |  |
| 50       |   |  | Adhesive or wax laminated foil/paper combinations |   | 34972 25 7   |                                     |                         |             |         |  |
| 51       |   | Converted unmounted aluminum foil packaging products not laminated to other materials for household, institutional, and freezer foil   |   |   | 34971 32 5   |                                     |                         |             |         |  |
| 52       | 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. Specify unit of measure for quantity. For all remaining products, write "Other" and report a single total value.</i> |   |   |  |                                     |                         |             |         |  |
| 53       |   |  |   | 18  |  |                                     |                         |             |         |  |
| 54       |   |  |   | 26  |  |                                     |                         |             |         |  |
| 55       | CONTRACT WORK   | Receipts for processing (rolling, drawing, extruding, etc.) 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 87 5  |   |  |                                     |                         |             |         |  |
| 56       |   | Receipts for work done for others on their own materials. . . . . Describe below products worked on and kind of work.  |   | 93000 14 9                                |  |                                     |                         |             |         |  |
|          |   |  |   |   |  |                                     |                         |             |         |  |
| 57       | MISCELLANEOUS 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 value of shipments and other receipts<br>Sum of lines 1-59, column (E)                                      |  | 77000 00 8  |   |  |                                     | \$                      |             |         |  |

CONTINUE WITH ITEM 22 ON PAGE 10

**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 ( <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> ) |           |        |           |      |
| <b>Period covered</b>  | FROM: Month |   | Day | Year  | TO: Month |        | Day       | Year |
|  | 666         | 1 |     |   | 2         |        |           |      |
| Signature of authorized person   |             |   |     | Title   |           |        | Date      |      |