

**16** DETAILED COST OF MATERIALS, PARTS, AND SUPPLIES

**General** - The materials, parts, and supplies listed below are those commonly consumed in the manufacture, processing, or assembly of the products listed in **2**. 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 that are not listed, describe and report them in the "Cost of all other materials . . ." 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 009700 99 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Report materials, parts, and supplies purchased, transferred from other plants of your company, or withdrawn from inventory.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.

**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 amount 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.

**Contract Work** - Include all 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 **15**, line A5, 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.

**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 **15**, line A2, not in **16**. The value of these products shipped by this establishment should be reported in **2** under Census product code 000999 8900 6, "Resales."

INFORMATION COPY  
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Line No.	Materials, parts, and supplies	Census material code	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in)		
			\$ Bil.	Mil.	Thou.
0634		0630	0631		
	Fabricated metal products (excluding castings and forgings)				
<b>1</b>	Fabricated metal pipe . . . . .	332900 05 9			
<b>2</b>	Valves and pipe fittings . . . . .	332919 05 9			
<b>3</b>	Parts specially designed for steel power boilers, nec . . . . .	332000 A3 2			
<b>4</b>	All other fabricated metal products . . . . .	332000 39 7			
	Castings (rough and semifinished)				
<b>5</b>	Iron and steel . . . . .	331510 01 6			
<b>6</b>	Nonferrous (aluminum, copper, etc.) . . . . .	331520 11 4			
<b>7</b>	Forgings . . . . .	332100 01 5			
	Shapes and forms (excluding castings, forgings, and fabricated metal products)				
	Steel				
<b>8</b>	Bars and bar shapes (excluding concrete reinforcing bars) . . . . .	331200 57 6			
<b>9</b>	Sheet and strip . . . . .	331200 17 0			
<b>10</b>	Plate . . . . .	331200 79 0			

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If not shown, please enter your 11-digit Census File Number (CFN) from the mailing address.

**16** DETAILED COST OF MATERIALS, PARTS, AND SUPPLIES - Continued

Line No.	Materials, parts, and supplies	Census material code	Consumption of purchased materials and of materials received from other establishments of your company		
			Cost, including delivery cost (freight-in)		
			\$ Bil.	Mil.	Thou.
0634		0630	0631		
	Shapes and forms (excluding castings, forgings, and fabricated metal products) - Continued				
	Steel - Continued				
	Structural shapes (excluding sheet pilings)				
<b>11</b>	Wide flange beams . . . . .	331200 41 0			
<b>12</b>	All other structural shapes . . . . .	331200 47 7			
<b>13</b>	All other shapes and forms (including sheet pilings) . . . . .	331200 39 4			
	Copper and copper-base alloy				
<b>14</b>	Pipe and tube . . . . .	331421 35 4			
<b>15</b>	All other shapes and forms . . . . .	331421 41 2			
	Aluminum and aluminum-base alloy				
<b>16</b>	Sheet, plate, foil, and welded tubing . . . . .	331315 01 0			
<b>17</b>	All other and extruded shapes (including wire, rolled rod and bar, powder, etc., and extruded rod, bar, pipe, tube, etc.) . . . . .	331000 55 4			
<b>18</b>	All other nonferrous shapes and forms . . . . .	331000 67 9			
<b>19</b>	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied products . . . . .	325510 03 0			
<b>20</b>	Welding electrodes . . . . .	333992 03 0			
<b>21</b>	Cost of all other materials and components, parts, containers, and supplies consumed (Specify the principal materials, etc., included in this value.) ↴	009700 99 8			
<b>22</b>	<b>TOTAL</b> (Should equal total reported in <b>16</b> , line A1) . . . . .	771000 00 7			

**17-21** Not Applicable.

33217092

**22** DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE

**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 2. 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 code 000930 0000 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 code 000999 8900 6, "Resales."

Line No.	Products and services	Census product code	Products shipped and other receipts, including interplant transfers			
			Value, f.o.b. plant			
			\$ Bil.	Mil.	Thou.	
			0734			
				0730		
	Heat exchangers and steam condensers (except for nuclear applications)					
	Heat exchangers, closed type, industrial					
<b>1</b>	Bare tube . . . . .	332410 1101 5				
<b>2</b>	Fin tube . . . . .	332410 1206 2				
<b>3</b>	Steam condensers . . . . .	332410 1311 0				
	Steel power boilers (stationary and marine), parts, and attachments (except nuclear applications)					
	Water tube more than 15 psi steam working pressure					
	100,000 lb/hr or less					
<b>4</b>	Saturated . . . . .	332410 5106 0				
<b>5</b>	Super heated . . . . .	332410 5111 0				
	100,001 lb/hr or more					
<b>6</b>	Saturated . . . . .	332410 5126 8				
<b>7</b>	Super heated . . . . .	332410 5131 8				
<b>8</b>	Other water tube . . . . .	332410 5141 7				
<b>9</b>	Fire tube horizontal return tubular and firebox . . . . .	332410 5169 8				
	Fire tube					
<b>10</b>	Scotch type pressure . . . . .	332410 5171 4				
<b>11</b>	Vertical and other fire tube type . . . . .	332410 5181 3				
<b>12</b>	Steel power boilers (stationary and marine) (except nuclear applications)	332410 5186 2				
<b>13</b>	Parts and attachments for steel power boilers, sold separately . . . . .	332410 5291 0				

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services	Census product code	Products shipped and other receipts, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
14	Gas cylinders Seamless, ferrous and nonferrous . . . . .	332420 7101 8			
15	Welded, ferrous and nonferrous . . . . .	332420 7106 7			
16	Metal tanks complete at factory (standard line pressure) Liquefied petroleum gas tanks (all types), ferrous and nonferrous . . . . .	332420 9101 6			
17	Air receivers, ferrous and nonferrous . . . . .	332420 9106 5			
18	Other pressure tanks (including anhydrous ammonia tanks, but excluding range boilers, expansion tanks, hot-water storage tanks, and tanks for water heater sold separately), ferrous and nonferrous . . . . .	332420 9111 5			
19	Nuclear reactor steam supply systems (including primary vessels and tanks) (sold separately); heat exchangers and condensers (sold separately); pressurizers, components, and auxiliary equipment (sold separately), ferrous and nonferrous . . . . .	332420 A100 6			
20	Metal tanks complete at factory (standard line nonpressure) Storage tanks 4,000 gallon capacity or less Ferrous . . . . .	332420 C101 2			
21	Nonferrous . . . . .	332420 C106 1			
22	More than 4,000 gallon capacity Ferrous . . . . .	332420 C111 1			
23	Nonferrous . . . . .	332420 C116 0			
24	Other nonpressure tanks (including tanks for trailers, metal septic tanks, and truck tanks, for delivery of fluids) Ferrous . . . . .	332420 C121 0			
25	Nonferrous . . . . .	332420 C126 9			
26	Metal tanks and vessels, custom fabricated at the factory Pressure vessels and tanks (more than 24 in. outside diameter and not less than 5 cu ft capacity) (excluding liquefied petroleum gas) Ferrous Refineries, chemical plants, and paper mills . . . . .	332420 E101 0			
27	Other processing industries . . . . .	332420 E106 9			
28	Nonferrous process vessels, tanks, and kettles for refineries, chemical plants, and paper mills . . . . .	332420 E211 7			
29	Liquefied petroleum gas tanks, ferrous and nonferrous . . . . .	332420 E216 6			

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**22** DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services	Census product code	Products shipped and other receipts, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
	Metal tanks and vessels, custom fabricated at the factory - Continued				
	All other tanks and vessels, custom fabricated at the factory (including anhydrous ammonia tanks)				
30	Ferrous . . . . .	332420 E221 6			
31	Nonferrous . . . . .	332420 E226 5			
	Metal tanks and vessels, custom fabricated and field erected				
	Bulk storage tanks				
	Elevated type				
	Ferrous				
32	Dry materials . . . . .	332420 G101 8			
33	Water . . . . .	332420 G106 7			
34	Other liquids . . . . .	332420 G111 7			
35	Nonferrous . . . . .	332420 G116 6			
	Ground storage type				
	Ferrous				
36	Dry materials . . . . .	332420 G121 6			
37	Petroleum products . . . . .	332420 G126 5			
38	Water . . . . .	332420 G131 5			
39	Other . . . . .	332420 G136 4			
40	Nonferrous . . . . .	332420 G141 4			
	Pressure vessels and tanks (including gas holders and process vessels, tanks, and kettles)				
41	Ferrous refineries, chemical plants, and paper mills . . . . .	332420 G246 1			
42	Ferrous other processing industries . . . . .	332420 G351 9			
43	Nonferrous metal pressure vessels and tanks (including gas holders and process vessels, etc.), custom fabricated and field erected . . . . .	332420 G356 8			
44	Electrical and electronic reinforced and fiberglass plastics products . . . . .	326199 A121 0			
45	Vulcanizable elastomeric linings . . . . .	326299 7145 1			
	Custom roll form products, nsk (Specify kind.) ↴				
46		332114 0YWW 8			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services	Census product code	Products shipped and other receipts, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
47	Fabricated structural metal Metal bar joist and concrete reinforcing bars made from a) iron and steel, b) aluminum and used for, i) industrial, ii) commercial, iii) residential, iv) institutional, v) public, vi) utility buildings (Specify metal used and intended structure.) ↴	332312 1YWW 9			
48	Other fabricated structural metal made from a) iron and steel, b) aluminum, c) other metal and used for, ii) transmission/communication structures, iii) offshore structures, iv) underground structures, v) aerospace structures, vi) ships structures (Specify metal used and intended structure.) ↴	332312 5YWW 5			
49	Fabricated steel plate (stacks and weldments), nsk (Specify kind.) ↴	332313 0YWW 6			
50	Sheet metal work . . . . .	332322 WYWW 4			
51	Ornamental and architectural metal work, nsk (Specify kind.) ↴	332323 3YWW 4			
52	Other architectural and ornamental work, nsk (Specify kind.) ↴	332323 9YWW 8			
53	Receipts for machine shop job work and job order repairs . . . . .	332710 0100 1			
54	Gates, globes, angles, straightway (Y-type) checks, stop and check, cross, 3- and 4-way, carbon steel and forged, etc. (including manual and power-operated, on-off valves; excluding automatic valves and water works) . . . .	332911 1105 3			
55	Fabricated iron and steel pipe and pipe fittings made from purchased pipe .	332996 3101 1			
56	Fabricated pipe and pipe fittings made from purchased pipe and aluminum and aluminum-base alloy . . . . .	332996 3203 5			
57	Metal pallets and skids (excluding wood and metal combination) . . . . .	332999 H305 7			
58	Other fabricated metal products, nec (including metal ironing boards and metal memorial tablets and grave markers) . . . . .	332999 H397 4			
59	Dairy and milk products plant machinery and equipment (except cream separators, dryers, freezing equipment, or equipment for treating milk and dairy products by means of a change in temperature) . . . . .	333294 1141 8			

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22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued					
Line No.	Products and services	Census product code	Products shipped and other receipts, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
60	Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment manufacturing, nsk (Specify kind.) ↴	333415 WYWW 5			
61	Air and gas compressors, except compressors for ice making, refrigeration, or air-conditioning equipment, and air motors and packaged compressors .	333912 1110 0			
62	Bulk material handling conveyors and conveying systems (excluding hoists) Farm conveyors, elevators, and stackers (Specify kind.) ↴	333922 7257 2			
63	Trippers, centrifugal throwers, etc. (Specify kind.) ↴	333922 7281 2			
64	Automobile and light truck trailers, 26,000 pounds or less GVW (including general utility, commercial display, etc., and for transport of goods (excluding travel and camping trailers) . . . . .	336214 3111 4			
65	Railroad and streetcar parts and accessories (excluding braking equipment and hook and coupling devices) . . . . .	336510 5419 0			
66	All other products made in this establishment - Specify and report each product with sales value of \$50,000 or more that cannot be assigned to one of the "listed products and services". For all remaining products, write "Other" and report a single total value.	18			
67		26			
68		34			
69		42			
70		59			
71		67			
72	Contract work - Receipts for work done for others on their materials (Specify products worked on and kind of work.) ↴	000930 0000 8			

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**22** DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE - Continued

Line No.	Products and services	Census product code	Products shipped and other receipts, including interplant transfers		
			Value, f.o.b. plant		
			\$ Bil.	Mil.	Thou.
0734		0730	0731		
<b>73</b>	Miscellaneous receipts				
	Sales of scrap and refuse . . . . .	000999 8013 8			
<b>74</b>	Receipts for installation or construction . . . . .	000999 8031 0			
<b>75</b>	Receipts for research and developmental work . . . . .	000999 8041 9			
<b>76</b>	Other miscellaneous receipts (including receipts for repair work, etc.) . .	000999 8098 9			
<b>77</b>	Resales - Sales of products bought and sold without further manufacture, processing, or assembly (The cost of such items should be reported in 15, line A2.) . . . . .	000999 8900 6			
<b>78</b>	<b>TOTAL</b> (Should equal 4, line A) . . . . .	770000 0000 8			

**23-27** Not Applicable.



33217159



**28** ESTABLISHMENT ACTIVITIES

**A.** Indicate activities that were performed by this establishment or were performed for this establishment by another company during 2002.  
(Mark "X" ALL that apply.)

This activity was performed -			
By this establishment	By another establishment of this company	By another company	Not at all
0921 <input type="checkbox"/>	8071 <input type="checkbox"/>	0941 <input type="checkbox"/>	0961 <input type="checkbox"/>
<b>1.</b> Product design/engineering . . . . .			
<b>2.</b> Order fulfillment			
0923 <input type="checkbox"/>	8072 <input type="checkbox"/>	0943 <input type="checkbox"/>	0963 <input type="checkbox"/>
<b>a.</b> Bundling or kitting (combining multiple items into a prepackaged product) . . . . .			
0924 <input type="checkbox"/>	8073 <input type="checkbox"/>	0944 <input type="checkbox"/>	0964 <input type="checkbox"/>
<b>b.</b> Pick and pack (taking goods from inventory and packaging them to fill orders). . . . .			
0925 <input type="checkbox"/>	8074 <input type="checkbox"/>	0945 <input type="checkbox"/>	0965 <input type="checkbox"/>
<b>c.</b> Warehousing of finished products . . . . .			
0926 <input type="checkbox"/>	8075 <input type="checkbox"/>	0946 <input type="checkbox"/>	0966 <input type="checkbox"/>
<b>d.</b> Breaking bulk (reducing large shipments into smaller portions for customers) . . . . .			
0927 <input type="checkbox"/>	8076 <input type="checkbox"/>	0947 <input type="checkbox"/>	0967 <input type="checkbox"/>
<b>e.</b> Local delivery (within a city, town, or other local area, including adjoining towns and suburban areas) . . . . .			
0928 <input type="checkbox"/>	8077 <input type="checkbox"/>	0948 <input type="checkbox"/>	0968 <input type="checkbox"/>
<b>f.</b> Long distance delivery (beyond local areas and commercial zones) . . . . .			
0932 <input type="checkbox"/>	8078 <input type="checkbox"/>	0952 <input type="checkbox"/>	0972 <input type="checkbox"/>
<b>g.</b> Processing of returned merchandise . . . . .			

**B.** During 2002 did this establishment:

- |  |                                   |                                  |
|--|-----------------------------------|----------------------------------|
| <b>1.</b> Manage inventory owned by this establishment AND held at this location? . . . . .  | 0936 <input type="checkbox"/> Yes | 0937 <input type="checkbox"/> No |
| <b>2.</b> Manage inventory owned by this establishment BUT held at a customer's location? . . . . .  | 0956 <input type="checkbox"/> Yes | 0957 <input type="checkbox"/> No |
| <b>3.</b> Manage inventory owned by another company BUT held at this location? . . . . .   | 0976 <input type="checkbox"/> Yes | 0977 <input type="checkbox"/> No |
| <b>4.</b> Manage inventory owned by another company AND held somewhere other than at this location? . . . . .  | 0994 <input type="checkbox"/> Yes | 0995 <input type="checkbox"/> No |
| <b>5.</b> Contract with another firm for any of your production using materials owned by this location? . . . . .  | 8041 <input type="checkbox"/> Yes | 8042 <input type="checkbox"/> No |
| <b>6.</b> Send any partially completed products to a foreign facility for processing that were then returned to this establishment for completion? . . . . . | 8044 <input type="checkbox"/> Yes | 8045 <input type="checkbox"/> No |
| <b>7.</b> Manufacture products for a government to their specifications? . . . . .   | 8047 <input type="checkbox"/> Yes | 8048 <input type="checkbox"/> No |
| <b>8.</b> Manufacture products for another business to their specifications? . . . . .   | 8016 <input type="checkbox"/> Yes | 8017 <input type="checkbox"/> No |
| <b>9.</b> Manufacture products for a final retail customer to their specifications? . . . . .  | 8060 <input type="checkbox"/> Yes | 8062 <input type="checkbox"/> No |

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**29 OPERATIONAL STATUS**

Activity that best describes this establishment's status at the end of 2002  
(Mark "X" only ONE box.)

- 0011  In operation
- 0012  Under construction, development, or exploration
- 0013  Temporarily or seasonally inactive
- 0014  Ceased operation - Give date at right →
- 0015  Sold or leased to another operator - Give date at right AND enter new name and mailing address below ↴

0018	Month	Day	Year

0060 Name of new owner or operator		0061 Employer Identification Number		
		Enter EIN of new owner (9 digits) →		
0062 Mailing address (number and street, P.O. Box, etc.)				
0063 City, town, village, etc.		0064 State	0065 ZIP Code	

Remarks (Please use this space for any explanations that may be essential in understanding your reported data.)

**30 CERTIFICATION** - This report is substantially accurate and was prepared in accordance with the instructions.

Is the time period covered by this report a calendar year?

- 0078  Yes
- 0079  No - Enter time period covered →

FROM	Month	Year	TO	Month	Year
0070			0071		

0072 Name of person to contact regarding this report		0073 Title			

Telephone	Area code	Number		Extension	Fax	Area code	Number	
0074		-			0075		-	

0076 Internet e-mail address			Date completed	Month	Day	Year
			0069			

**Thank you for completing your 2002 Economic Census form.**  
**PLEASE PHOTOCOPY THIS FORM FOR YOUR RECORDS AND RETURN THE ORIGINAL.**

33217175