

U.S. Census Bureau
Metalworking Machinery - 2007
MQ333W(07)-5
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Address inquiries concerning these data to Investment Goods Industries Branch, U.S. Department of Commerce, Census Bureau, Manufacturing and Construction Division, Washington, DC 20233-6900, or call Rachel Horwitz, 301-763-2834.

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Table 1. Value of Shipments, Including Exports of Metalworking Machinery
by Class of Product: 2007

[Thousands of dollars]

| Product code | Product description | 2007 | 2006 |
|--------------|---|-----------|-----------|
| | Metalworking machinery..... | 3,318,208 | 3,094,478 |
| | Metal cutting type 1/ 2/ 3/..... | 2,533,389 | 2,293,813 |
| 333512A1 | Boring and drilling machines | 130,220 | 178,487 |
| 33351212 | Gear cutting machines 1/..... | (D) | (D) |
| 33351221 | Grinding and polishing machines (except gear-tooth grinding, lapping, polishing, and buffing machines)..... | 237,928 | 259,063 |
| 33351231 | Lathes 2/ 3/ 4/..... | 375,871 | 295,651 |
| 33351241 | Milling machines 2/ 5/..... | 81,294 | 56,082 |
| 33351271 | Machining centers (multifunction numerically controlled machines)..... | 807,425 | 703,045 |
| 33351281 | Station type machines | 104,283 | 79,153 |
| 33351291 | Other metal cutting machine tools (except those designed primarily for home workshops, laboratories, etc.)..... | 585,522 | 464,779 |
| 3335126111 | Remanufactured metal cutting machine tools..... | 81,004 | 90,172 |
| | Metal forming type 6/7/ | 784,819 | 800,665 |
| 33351311 pt. | Punching and shearing machines..... | 147,876 | 130,126 |
| 33351311 pt. | Bending and forming machines..... | 185,301 | 273,235 |
| 33351331 | Presses (except forging) 6/..... | 135,292 | 128,599 |
| 33351351 | Other metal forming type machines 7/ | 209,309 | 228,880 |
| 3335137121 | Remanufactured metal forming machine tools | 10,382 | 15,081 |

D Withheld to avoid disclosing data for individual companies. pt. Part

1/Data for "Gear cutting machines" are included in total "Metal cutting type."

2/Data for "All lathes (turning machines) valued under \$3,025 each" and "All milling machines, valued at under \$3,025 each" are included in total "Metal cutting type."

3/Data for product code 3335123126, "Vertical NC turning machines" are included in total "Metal cutting type," but excluded from product code 33351231

4/Product code 33351231, "Lathes," excludes the values for product code 3335123131, "All lathes (turning machines) valued under \$3,025 each or more."

5/Product code 33351241, "Milling machines," excludes the value for product code 3335124101, "All Milling machines valued under \$3,025 each."

6/For 2007, data for product code 3335131136 "Press brakes, all types," is included in total "Metal forming type" but excluded from product code 33351311 "Bending and forming machines."

7/Data for product codes 3335133101 "All presses valued under \$3,025 each" and 3335135101 "All other metal forming type machine tools valued at under \$3,025 each," are included in total "Metal forming type," but excluded from product codes 33351331 and 33351351 respectively.

Table 2. Total Shipments and Unfilled Orders
(Quantity in units; value in thousands of dollars)

| Product code | Product description | No. of cos. | 2007 | | | 2006 | | | |
|--------------|--|-------------|----------|-----------------|-----------|-------------------------|-----------------|-----------|-------------------------|
| | | | Quantity | Total shipments | | Unfilled orders (value) | Total shipments | | Unfilled orders (value) |
| | | | | Value | Quantity | | Value | | |
| | Metalworking machinery..... | (X) | 130,745 | 3,318,208 | 1,433,996 | 129,114 | 3,094,478 | 1,233,717 | |
| | Total metal cutting type machine tools..... | (X) | 79,969 | 2,533,389 | 1,079,748 | 83,784 | 2,293,813 | 891,893 | |
| | Total metal forming type machine tools..... | (X) | 50,776 | 784,819 | 354,248 | 45,330 | 800,665 | 341,824 | |
| | Metal cutting type machine tools valued at \$3,025 each or more 1/ 2/ 3/ 4/ 5/..... | (X) | 32,163 | 2,405,834 | 1,023,117 | 30,747 | 2,162,048 | 845,112 | |
| | Metal cutting type machine tools valued under \$3,025 6/ 7/ 8/ | (X) | 46,999 | 46,551 | 943 | 52,154 | 41,593 | 498 | |
| 333512A1 | Boring and drilling machines 4/..... | 32 | 7,734 | 130,220 | 52,512 | 8,709 | 178,487 | 48,288 | |
| | Boring machines valued at \$3,025 each or more: | | | | | | | | |
| 333512A103 | Horizontal boring, drilling, and milling machines, including floor, table, rail mounted, and all other nonprecision boring machines (except boring lathes) | 7 | (D) | (D) | (D) | (D) | (D) | (D) | |
| 333512A105 | Precision and jig boring machines, including horizontal and vertical machines | 2 | (D) | (D) | (D) | (D) | (D) | (D) | |
| 333512A111 | All drilling machines valued under \$3,025 each 3/..... | 8 | 6,151 | 6,426 | (D) | 6,354 | 7,494 | 83 | |
| | Drilling machines valued at \$3,025 each or more: | | | | | | | | |
| 333512A113 | Vertical upright drilling machines, including plain upright and heavy duty | 2 | (D) | (D) | (D) | (D) | (D) | (D) | |
| 333512A117 | Deep hole drilling machines | 5 | (D) | (D) | (D) | (D) | (D) | (D) | |
| 333512A120 | Multiple spindle drilling machines..... | 7 | 201 | c/ 10,874 | 1,207 | c/ 262 | b/ 12,348 | (D) | |
| 333512A123 | All other drilling machines..... | 4 | (D) | (D) | (X) | (D) | (D) | (X) | |
| 3335121200 | Gear cutting machines, including gear hobbors, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines 1/ | 3 | (D) | (D) | c/ 90,727 | (D) | (D) | 69,489 | |
| 33351221 | Grinding, polishing, buffing, honing, and | | | | | | | | |

| | | | | | | | | | | | |
|------------|--|-----|--------|----|---------|----|---------|----------|----|---------|-----------|
| | lapping machines 6/..... | 56 | 24,381 | | 237,928 | a/ | 188,102 | 30,879 | | 259,063 | 133,434 |
| 3335122101 | All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each 6/..... | 13 | 22,242 | a/ | 25,885 | | (D) | 28,248 | a/ | 17,359 | c/ 130 |
| | All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more: | | | | | | | | | | |
| 3335122110 | External cylindrical grinding machines..... | 10 | 422 | | 55,584 | | 38,978 | b/ 686 | | 73,108 | 35,538 |
| 3335122120 | Internal cylindrical grinding machines | 2 | (D) | | (D) | | (D) | (D) | | (D) | (D) |
| 3335122122 | Surface grinding machines | 6 | 457 | b/ | 12,096 | | (D) | b/ 502 | b/ | 12,051 | (D) |
| 3335122136 | All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders | 3 | (D) | | (D) | | 6,369 | (D) | | (D) | (D) |
| 3335122142 | Tool, cutter, and drill point grinding machines | 11 | 336 | | 61,325 | | 10,702 | 381 | | 66,646 | (D) |
| 3335122151 | All other grinding machines, including planer type, and thread grinding machines | 9 | 312 | a/ | 22,990 | c/ | 22,204 | 373 | | 25,104 | a/ 11,810 |
| 3335122156 | Honing and lapping machines (except flat surface lapping machines), internal, including combination bore, hone, and external | 5 | (D) | | (D) | | (D) | (D) | | (D) | (D) |
| 3335122161 | Flat surface lapping machines (except gear lapping) | 3 | (D) | | (D) | | (D) | (D) | | (D) | (D) |
| 3335122166 | Polishing and buffing machines, including speed lathes and multistation type | 10 | (D) | | (D) | | (D) | (D) | | (D) | 18,529 |
| 33351231 | Lathes 2/ 4/ 7/..... | (X) | 6,210 | | 375,871 | | 42,658 | 5,769 | | 295,651 | 50,185 |
| | Numerically controlled: | | | | | | | | | | |
| | Horizontal..... | 7 | 5,616 | | 339,375 | | 42,190 | 5,088 | | 288,195 | 49,355 |
| | Single spindle NC turning machines: | | | | | | | | | | |
| 3335123107 | Chuck sizes less than 10 inches | 5 | 3,327 | | 145,881 | | (D) | 3,103 | | 135,307 | 16,143 |
| 3335123116 | Chuck sizes from 10 inches but less than 15 inches | 5 | (D) | | (D) | | (D) | (D) | | (D) | (D) |
| 3335123127 | Chuck sizes 15 inches and over and multiple spindle NC turning machines..... | 3 | (D) | | (D) | | (D) | (D) | | (D) | (D) |
| 3335123126 | Vertical NC turning machines 2/..... | 4 | (D) | | (D) | | (D) | (D) | | (D) | (D) |
| 3335123131 | All lathes (turning machines) valued under \$3,025 each 7/..... | 2 | (D) | | (D) | | (D) | (D) | | (D) | (X) |
| 3335123134 | All nonnumerically controlled lathes (turning machines) valued at \$3,025 each or more 4/..... | 7 | 563 | b/ | 6,138 | | (D) | c/ 681 | b/ | 7,456 | (D) |
| 33351241 | Milling machines 5/7/..... | 9 | 1,512 | | 81,294 | | 70,627 | a/ 1,388 | | 56,082 | (D) |
| 3335124101 | All milling machines valued under \$3,025 each 7/..... | 1 | (D) | | (D) | | (X) | (D) | | (D) | (X) |

| | | | | | | | | | | | | | |
|------------|---|-----|--------|----|---------|----|---------|----|--------|----|---------|--|---------|
| | \$3,025 9/..... | (X) | 37,124 | | 24,689 | | 614 | | 31,903 | | 29,460 | | 424 |
| 33351311 | Punching, shearing, bending, and forming machines | 59 | 12,628 | | 409,791 | | 191,969 | | 12,330 | | 403,361 | | 152,847 |
| 3335131101 | All punching and shearing machines valued under \$3,025 each | 8 | 1,119 | | 1,395 | b/ | 103 | a/ | 1,249 | | 1,439 | | 104 |
| | All punching and shearing machines valued at \$3,025 each or more: | | | | | | | | | | | | |
| | Power operated only: | | | | | | | | | | | | |
| 3335131106 | Punches, including combination punching and shearing machines | 15 | 4,514 | | 63,294 | | 2,847 | a/ | 3,783 | a/ | 44,840 | | 2,559 |
| 3335131111 | Punching machines fixed position and two axes positioning table | 3 | 184 | | 49,663 | | 17,436 | | 201 | | 53,637 | | 9,574 |
| | Plate shearing machines: | | | | | | | | | | | | |
| 3335131116 | Mechanical | 3 | (D) | | (D) | | (D) | | (D) | | (D) | | (D) |
| 3335131121 | Hydraulic | 9 | 1,010 | | 19,291 | | 3,811 | | 966 | | 17,356 | | 6,254 |
| 3335131126 | Other power operated punching and shearing machines | 4 | (D) | | (D) | | (D) | | (D) | | (D) | | (D) |
| 3335131131 | All bending and forming machines, power operated valued at under \$3,025 each | 6 | 1,574 | | 3,249 | | 54 | | 1,635 | | 3,277 | | 141 |
| | All bending and forming machines, power operated valued at \$3,025 each or more: | | | | | | | | | | | | |
| 3335131136 | Press brakes, all types | 7 | (D) | | (D) | | 20,285 | | 674 | | 67,295 | | 19,803 |
| 3335131145 | Roll bending machines including sheet, plate, angles, bars, shapes and tubes, and rotary bending and forming machines, including rotary head..... | 15 | 812 | | 89,293 | | 97,633 | b/ | 915 | | 96,990 | | 72,763 |
| 3335131161 | Other bending and forming machines, including folders and slide bending machines | 16 | 2,506 | a/ | 92,759 | | 47,709 | a/ | 2,543 | | 105,673 | | 39,211 |
| 33351331 | Presses (except forging) 9/..... | 31 | 1,747 | a/ | 135,292 | | 82,405 | b/ | 1,876 | | 128,599 | | 78,153 |
| 3335133101 | All presses valued under \$3,025 each 9/..... | 6 | (D) | | (D) | | (D) | | (D) | | (D) | | (D) |
| | All presses valued at \$3,025 each or more: | | | | | | | | | | | | |
| 3335133109 | Mechanical presses: Gap or C-frame..... | 4 | (D) | | (D) | | (D) | | (D) | | (D) | | 109 |
| 3335133136 | Automatic presses, strip or coil fed | 6 | (D) | | (D) | | 15,279 | a/ | 179 | | 64,653 | | 17,358 |
| 3335133143 | Vertical, automatic, and all other mechanical presses..... | 4 | (D) | | (D) | | 29,993 | | (D) | | (D) | | (D) |
| | Hydraulic presses: | | | | | | | | | | | | |
| | Vertical single action, all tonnages: | | | | | | | | | | | | |
| 3335133146 | Housing or straight side type | 3 | (D) | | (D) | | (D) | | (D) | | (D) | | (D) |
| 3335133151 | Column type (open rod) | 5 | (D) | | (D) | | 16,214 | | (D) | | (D) | | (D) |
| | Gap or C-frame: | | | | | | | | | | | | |
| 3335133156 | 15 tons and under | 5 | 177 | | 2,917 | | (D) | | 224 | | 4,045 | | 129 |
| 3335133161 | 16 tons to 35 tons | 4 | (D) | | (D) | | 1,356 | | 62 | | 2,947 | | (D) |

| | | | | | | | | | | | | | |
|------------|---|----|-------|-----|---------|-------|--------|-------|-------|---------|--------|---------|-------|
| 3335133166 | Over 35 tons | 5 | (D) | (D) | b/ | 1,821 | 68 | 4,626 | c/ | 1,021 | | | |
| 3335133171 | Other hydraulic and pneumatic presses, including horizontal | 8 | 1,122 | b/ | 20,796 | a/ | 12,428 | c/ | 1,147 | b/ | 22,741 | 8,490 | |
| 33351351 | All other metal forming type machine tools 9/..... | 31 | 1,874 | | 209,309 | | 74,469 | 2,010 | a/ | 228,880 | b/ | 105,916 | |
| 3335135101 | All other metal forming type machine tools valued under \$3,025 each 9/..... | 5 | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |
| 3335135118 | All other metal forming type machine tools valued at \$3,025 each or more: Forging machines, including forging presses and die stamping presses, and die casting machines, all types..... | 6 | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |
| 3335135121 | Riveting machines | 5 | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | |
| 3335135126 | All other metal forming type machine tools | 18 | 1,211 | | 157,948 | | 73,721 | (D) | (D) | (D) | (D) | 79,308 | |
| 3335137121 | Remanufactured metal forming machine tools..... | 8 | 96 | a/ | 10,382 | c/ | 4,948 | a/ | 95 | b/ | 15,081 | b/ | 4,729 |

D Withheld to avoid disclosing data for individual companies. X Not applicable

1/Product code 3335121200 is included in the total for "Metal cutting type machine tools valued at \$3,025 each or more"

2/Product code 3335123126 is included in the total for "Metal cutting type machine tools valued at \$3,025 each or more," but excluded from product class 33351231.

3/"Unfilled orders (value)" for product class 33351281 for 2006 is included in the total for "Metal cutting type machine tools valued at \$3,025 each or more" to avoid disclosing data for individual companies.

4/"Unfilled orders (value)" for product code 3335123134 is included in the total for "Metal cutting type machine tools valued at \$3,025 each or more," but excluded from product classes 33351231.

5/"Unfilled order (value)" for product code 3335124125 for 2006 is included in the total for "Metal cutting type machine tools valued at \$3,025 each or more," but excluded from product class 33351241.

6/"Unfilled orders (value)" for product code 3335122101 for 2007 is included in the total for "Metal cutting type machine tools valued under \$3,025," but excluded from product class 33351221.

7/Product codes 3335123131 and 3335124101 are included in the total for "Metal cutting type machine tools valued under \$3,025," but excluded from product class 33351231 and 33351241, respectively.

8/"Unfilled orders (value)" for product code 3335129101 for 2006 is included in the total for "Metal cutting type machine tools valued under \$3,025," but excluded from product class 33351291.

9/Product codes 3335133101 and 3335135101 are included in the total for "Metal forming type machine tools valued under \$3,025," but excluded from product classes 33351331 and 33351351, respectively.

Note: This report includes complete machines only. Percent of estimation of each item is indicated as follows: a/16 to 25 percent of this item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of this item is estimated.

Table 3. Shipments of Numerically Controlled Machines and Exports: 2007 and 2006
 [Quantity in units. Value in thousands of dollars]

| Product description | 2007 | | | 2006 | | |
|---|--|-----------|------------------|--|-----------|------------------|
| | Shipments of numerically controlled machines | | Export shipments | Shipments of numerically controlled machines | | Export shipments |
| | Quantity | Value | (value) 1/ | Quantity | Value | (value) 1/ |
| Metalworking machinery..... | 22,639 | 2,237,513 | 938,056 | 22,328 | 1,996,636 | 783,601 |
| Metal cutting type machine tools 2/..... | 21,643 | 1,992,233 | 705,200 | 21,518 | 1,789,350 | 580,151 |
| Boring and drilling machines 2/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Gear cutting machines 2/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Grinding, polishing, buffing, and lapping machines | 495 | 105,318 | 44,834 | 585 | 125,115 | 42,903 |
| Valued under \$3,025 each, external cylindrical grinding machines (plain and universal), and surface grinding machines, all types | (D) | (D) | (D) | (D) | (D) | (D) |
| Honing, lapping, polishing and buffing machines | (D) | (D) | (D) | (D) | (D) | (D) |
| Horizontal NC turning machines, valued at \$3,025 or each or more | 5,592 | 338,946 | 115,275 | 5,088 | 288,195 | 87,322 |
| Single spindle NC turning machines: | | | | | | |
| Chuck sizes less than 10 inches | 3,327 | 145,881 | (D) | 3,103 | 135,307 | (D) |
| Chuck sizes over 10 inches but less than 15 inches | (D) | (D) | (D) | (D) | (D) | (D) |
| Chuck sizes 15 inches and over and multiple spindle | (D) | (D) | (D) | (D) | (D) | (D) |
| Vertical NC turning machines, valued at \$3,025 each or more 2/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Nonnumerically controlled turning machines, valued at \$3,025 or more 2/..... | (X) | (X) | (D) | (X) | (X) | (D) |
| Milling machines 2/..... | 735 | 70,999 | (D) | 1,363 | 55,351 | (D) |
| Machining centers 3/4/..... | 11,516 | 798,001 | (D) | 10,767 | 703,045 | (D) |
| Drill, mill and bore, vertical (automatic tool change) 3/4/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Y-axis travel less than 20 inches 3/4/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Y-axis travel 20 inches through 26 inches | 4,261 | 300,847 | 107,733 | 3,894 | 287,304 | 83,463 |
| Y-axis travel over 26 inches 4/..... | 1,181 | 129,832 | (D) | 959 | 104,869 | (D) |
| Drill, mill and bore, horizontal (automatic tool change) 3/4/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Under 500mm pallet 4/..... | (D) | (D) | (D) | 284 | 34,960 | (D) |
| 500mm-800mm pallet 3/4/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Over 800mm pallet 3/4/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| All other machining centers 3/..... | (D) | (D) | (X) | (D) | (D) | (X) |
| Station type machines, and other metal cutting machine tools | 2,090 | 418,608 | 146,914 | 1,762 | 320,734 | 108,667 |
| Remanufactured metal cutting machines 2/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| Metal forming type machine tools 5/..... | 996 | 245,280 | 232,856 | 810 | 207,286 | 203,450 |
| Punching, shearing, bending, and forming machines | 783 | 126,877 | 76,501 | 655 | 128,249 | 77,225 |
| Punching and shearing machines | 362 | 54,879 | 29,926 | 224 | 56,266 | 24,210 |
| All bending and forming machines, power operated | 421 | 71,998 | 46,575 | 431 | 71,983 | 53,015 |
| Presses (except forgings) 5/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| All other metal forming type machine tools 5/ | (D) | (D) | (D) | (D) | (D) | (D) |
| Remanufactured metal forming machines 5/ | (D) | (D) | (D) | (D) | (D) | (D) |

D Withheld to avoid disclosing data for individual companies. X Not applicable.

1/Data includes the value of all types of machines exported, as reported by MQ333W survey panel.

2/Data were included in total "Metal cutting type machine tools."

3/Data were included in total "Machining centers."

4/Export (value) data were included in "Metal cutting type machine tools."

5/Data were included in total "Metal forming type machine tools."

Table 4. Shipments, Exports, and Imports of Metalworking Machinery: 2007 and 2006
 [Quantity in units. Value in thousands of dollars]

| Product description | Manufacturers' shipments | | Exports of domestic merchandise 1/2/ | | Imports for consumption 1/3/ | |
|---|--------------------------|---------|--------------------------------------|---------------|------------------------------|----------|
| | Quantity | Value | Quantity | Value at port | Quantity | Value 4/ |
| 2007 | | | | | | |
| Boring and drilling machines, excluding multifunction NC machines, machining centers: | | | | | | |
| Boring machines valued at \$3,025 each or more..... | (D) | (D) | 425 | 13,453 | 1,170 | 85,879 |
| Drilling machines: | | | | | | |
| Valued under \$3,025 each..... | 6,151 | 6,426 | 12,495 | 9,726 | 124,379 | 19,411 |
| Valued at \$3,025 each or more | (D) | (D) | 2,185 | 56,973 | 1,698 | 91,446 |
| Gear cutting machines | (D) | (D) | 4,420 | 36,369 | 431 | 124,033 |
| Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines): | | | | | | |
| Valued under \$3,025 each..... | 22,242 | 25,885 | 80,378 | 20,966 | 754,890 | 28,527 |
| Valued at \$3,025 each or more | 2,139 | 212,043 | 2,940 | 116,478 | 5,685 | 322,394 |
| Lathes (turning machines) under \$3,025..... | (D) | (D) | 6,815 | 6,111 | 17,494 | 13,127 |
| Horizontal NC turning machines..... | 5,616 | 339,375 | 635 | 78,390 | 7,996 | 890,995 |
| Vertical NC turning machines..... | (D) | (D) | 168 | 18,742 | 573 | 130,877 |
| Nonnumerically controlled turning machines..... | 563 | 6,138 | 1,625 | 57,383 | 4,862 | 81,284 |
| Milling machines: | | | | | | |
| Valued under \$3,025 each..... | (D) | (D) | 2,700 | 4,919 | 10,781 | 9,130 |
| Valued at \$3,025 each or more..... | 1,512 | 81,294 | 1,190 | 35,905 | 5,486 | 158,443 |
| Machining centers (multifunction NC machines)..... | | | | | | |
| Drill, mill, and bore, vertical (automatic tool change): | | | | | | |
| Y-axis travel less than 20 inches and 20 inches through 26 inches..... | (D) | (D) | 2,235 | 231,657 | 3,413 | 306,093 |
| Y-axis travel 26 inches and over..... | 1,181 | 129,832 | 361 | 44,282 | 728 | 145,662 |
| Drill, mill, and bore, horizontal (automatic tool change) | (D) | (D) | - | - | 2,075 | 552,993 |
| Other machining centers | (D) | (D) | 159 | 12,797 | 181 | 66,205 |
| Station type machines | 125 | 104,283 | - | - | 416 | 116,812 |
| Other metal cutting machine tools: | | | | | | |
| Valued under \$3,025 each..... | 16,610 | 12,824 | (NA) | (NA) | (NA) | (NA) |
| Valued at \$3,025 each or more..... | 8,873 | 572,698 | 6,609 | 178,229 | 10,070 | 440,548 |
| Punching and shearing machines: | | | | | | |
| Valued under \$3,025 each..... | 1,119 | 1,395 | 21,647 | 13,638 | 12,271 | 4,133 |
| Valued at \$3,025 each or more..... | (D) | (D) | 2,707 | 105,828 | 2,648 | 173,619 |
| Bending and forming machines: | | | | | | |
| Valued under \$3,025 each..... | 1,574 | 3,249 | 34,726 | 18,235 | 130,483 | 19,539 |
| Valued at \$3,025 each or more..... | (D) | (D) | 3,931 | 83,133 | 4,362 | 192,656 |
| Presses (except forging presses)..... | 1,747 | 135,292 | 13,509 | 71,539 | 36,822 | 132,208 |
| All other metal forming type machine tools: | | | | | | |
| Valued under \$3,025 each..... | (D) | (D) | (NA) | (NA) | (NA) | (NA) |
| Machines valued at \$3,025 each or more: | | | | | | |
| Forging machines, including forging presses and die stamping presses, and die casting machines, all types..... | (D) | (D) | 893 | 77,434 | 5,173 | 177,902 |
| Other metal forming machines | 1,211 | 157,948 | (NA) | (NA) | (NA) | (NA) |

2006

Boring and drilling machines, excluding multifunction NC machines, machining centers:

| | | | | | | |
|---|--------|---------|--------|---------|---------|-----------|
| Boring machines valued at \$3,025 each or more..... | (D) | (D) | 453 | 23,546 | 1,194 | 104,730 |
| Drilling machines: | | | | | | |
| Valued under \$3,025 each..... | 6,354 | 7,494 | 10,527 | 8,613 | 167,447 | 21,674 |
| Valued at \$3,025 each or more | (D) | (D) | 980 | 28,941 | 1,564 | 134,221 |
| Gear cutting machines | (D) | (D) | 70,359 | 63,503 | 393 | 123,183 |
| Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines): | | | | | | |
| Valued under \$3,025 each..... | 28,248 | 17,359 | 75,222 | 14,301 | 858,575 | 29,831 |
| Valued at \$3,025 each or more | 2,631 | 241,704 | 2,298 | 94,830 | 5,823 | 376,012 |
| Lathes (turning machines) under \$3,025..... | (D) | (D) | 3,284 | 4,021 | 17,578 | 14,032 |
| Horizontal NC turning machines..... | 5,088 | 288,195 | 704 | 77,230 | 7,909 | 886,625 |
| Vertical NC turning machines..... | (D) | (D) | 213 | 29,941 | 489 | 113,640 |
| Nonnumerically controlled turning machines..... | 681 | 7,456 | 2,101 | 64,654 | 4,351 | 75,913 |
| Milling machines: | | | | | | |
| Valued under \$3,025 each..... | (D) | (D) | 4,954 | 7,973 | 11,820 | 8,862 |
| Valued at \$3,025 each or more..... | 1,388 | 56,082 | 1,840 | 50,271 | 4,983 | 148,349 |
| Machining centers (multifunction NC machines)..... | 10,767 | 703,045 | 2,193 | 261,303 | 5,964 | 1,013,414 |
| Drill, mill, and bore, vertical (automatic tool change): | | | | | | |
| Y-axis travel less than 20 inches and 20 inches through 26 inches..... | (D) | (D) | 1,615 | 189,068 | 3,294 | 311,060 |
| Y-axis travel 26 inches and over..... | 959 | 104,869 | 256 | 31,348 | 678 | 128,593 |
| Drill, mill, and bore, horizontal (automatic tool change) | (D) | (D) | - | - | 1,782 | 502,357 |
| Other machining centers | (D) | (D) | 322 | 40,887 | 210 | 71,404 |
| Station type machines | 71 | 79,153 | 121 | 34,217 | 921 | 194,747 |
| Other metal cutting machine tools: | | | | | | |
| Valued under \$3,025 each..... | 15,711 | 15,425 | (NA) | (NA) | (NA) | (NA) |
| Valued at \$3,025 each or more..... | 7,507 | 449,354 | 15,156 | 513,804 | 8,405 | 509,335 |
| Punching and shearing machines: | | | | | | |
| Valued under \$3,025 each..... | 1,249 | 1,439 | 67,357 | 11,323 | 12,205 | 4,599 |
| Valued at \$3,025 each or more..... | (D) | (D) | 1,742 | 69,743 | 2,359 | 148,922 |
| Bending and forming machines: | | | | | | |
| Valued under \$3,025 each..... | 1,635 | 3,277 | 16,548 | 12,953 | 96,106 | 14,476 |
| Valued at \$3,025 each or more..... | 4,132 | 269,958 | 6,142 | 167,356 | 11,242 | 354,844 |
| Presses (except forging presses)..... | 1,876 | 128,599 | 22,346 | 94,109 | 14,480 | 156,627 |
| All other metal forming type machine tools: | | | | | | |
| Valued under \$3,025 each..... | (D) | (D) | (NA) | (NA) | (NA) | (NA) |
| Machines valued at \$3,025 each or more: | | | | | | |
| Forging machines, including forging presses and die stamping presses, and die casting machines, all types..... | (D) | (D) | 1,280 | 84,503 | 24,421 | 242,349 |
| Other metal forming machines | (D) | (D) | (NA) | (NA) | (NA) | (NA) |

D Withheld to avoid disclosing data for individual companies. - Represents zero. NA Not available.
X Not applicable.

1/For a comparison of North American Industry Classification System (NAICS)-based product codes, Schedule B export codes, and HTSUSA import codes, see Table 5.

2/Source: Census Bureau report EM 545, U.S. Exports.

3/Source: Census Bureau report IM 145, U.S. General Imports for Consumption.

4/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus import duties.

Table 5. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2007

| Product code | Product description | Export Code 1/ | Import Code 2/ |
|--------------|--|--|--|
| | Boring machines, excluding multifunction NC machines, machining centers: | | |
| | Machines valued at \$3,025 each or more: | | |
| 333512A103 | Horizontal boring, drilling, and milling machines, including floor, table and rail mounted, and all other boring machines (except boring lathes) | 8459.31.0010 8459.31.0040 8459.31.0070 8459.39.0040 8459.39.0050 8459.40.0040 8459.40.0050 8459.40.0070 8459.40.0080 | 8459.31.0010 8459.31.0040 8459.31.0070 8459.39.0040 8459.39.0050 8459.40.0040 8459.40.0050 8459.40.0070 8459.40.0080 |
| 333512A105 | Precision and jig boring machines, including horizontal, vertical, and all other precision boring machines | 8459.10.0000 | 8459.10.0000 |
| | Drilling machines, excluding machining centers: | | |
| 333512A111 | All drilling machines valued under \$3,025 each | 8459.29.0020 | 8459.29.0020 |
| | Machines valued at \$3,025 each or more: | | |
| 333512A113 | Vertical, upright drilling machines, including plain upright and heavy duty | 8459.29.0070 | 8459.29.0070 |
| 333512A120 | Multiple spindle drilling machines (cluster of spindles driven from one central power unit): | 8459.29.0040 | 8459.29.0040 |
| 333512A117 | Deep hole drilling machines | 8459.21.0080 | 8459.21.0080 |
| 333512A123 | All other drilling machines, including bench type sensitive vertical and radial | 8459.29.0050 8459.29.0090 | 8459.29.0050 8459.29.0090 |
| | | 8461.40.1050 | 8461.40.1020 |
| 3335121100 | Gear cutting machines, including gear hobbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines | 8461.40.1070 8461.40.1090 8461.40.5040 8461.40.5060 | 8461.40.1030 8461.40.1040 8461.40.1060 8461.40.5040 8461.40.5050 8461.40.5070 |
| | Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines): | | |
| 3335122101 | All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each | 8460.39.0020 8460.40.0020 8460.90.0020 | 8460.39.0020 8460.40.8020 8460.90.8020 |
| | Machines valued at \$3,025 each or more: | | |
| 3335122110 | External cylindrical grinding machines | 8460.21.0080 8460.29.0010 | 8460.21.0080 8460.29.0010 |
| 3335122120 | Internal cylindrical grinding machines | 8460.29.0030 | 8460.29.0030 |
| 3335122136 | All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders | 8460.29.0050 | 8460.29.0050 |
| 3335122151 | All other grinding machines, including planer type, and thread grinding machines | | |
| 3335122122 | Surface grinding machines | 8460.11.0080 8460.19.0010 8460.19.0050 | 8460.11.0080 8460.19.0010 8460.19.0050 |

| | | | |
|------------|--|--------------|--------------|
| 3335122142 | Tool, cutter, and drill point grinding machines, including universal and special | 8460.31.0080 | 8460.31.0080 |
| | Honing and lapping machines (except gear honing and lapping): | | |
| 3335122156 | Internal, including combination bore, hone, and external (except flat surface lapping machines) | 8460.40.0060 | 8460.40.4060 |
| 3335122161 | Flat surface lapping machines (except gear lapping) | 8460.40.0080 | 8460.40.8080 |
| 3335122166 | Polishing and buffing machines (including speed lathes and multistation type) | 8460.90.0060 | 8460.90.4060 |
| | 8460.90.0080 | 8460.90.8080 | |
| | Lathes (turning machines): | | |
| 3335123131 | All lathes valued under \$3,025 each | 8458.19.0020 | 8458.19.0020 |
| | | 8458.99.5060 | 8458.99.5060 |
| | Machines valued at \$3,025 each or more: | | |
| | Horizontal spindle: | | |
| | Single spindle NC turning machine: | | |
| 3335123107 | Chuck sizes less than 10" | 8458.11.0050 | 8458.11.0050 |
| 3335123116 | Chuck sizes from 10" but less than 15" | 8458.11.0090 | 8458.11.0090 |
| 3335123127 | Chuck sizes 15" and over, and multiple spindle NC turning machines | 8458.11.0010 | 8458.11.0010 |
| 3335123126 | Vertical spindle | 8458.91.1060 | 8458.91.1060 |
| | | 8458.91.1080 | 8458.91.1080 |
| | | 8458.91.5050 | 8458.91.5050 |
| | | 8458.91.5070 | 8458.91.5070 |
| | Nonnumerically controlled turning machines valued at \$3,025 each or more | 8458.19.0030 | 8458.19.0030 |
| 3335123134 | | 8458.19.0050 | 8458.19.0050 |
| | | 8458.19.0070 | 8458.19.0070 |
| | | 8458.19.0090 | 8458.19.0090 |
| | | 8458.99.1050 | 8458.99.1050 |
| | | 8458.99.5090 | 8458.99.5090 |
| | Milling machines, excluding machining centers: | | |
| 3335124101 | All milling machines valued under \$3,025 each | 8459.59.0020 | 8459.59.0020 |
| | | 8459.69.0020 | 8459.69.0020 |
| 3335124125 | All milling machines valued at \$3,025 each or more | 8459.51.0080 | 8459.51.0080 |
| | | 8459.59.0030 | 8459.59.0030 |
| | | 8459.61.0080 | 8459.61.0080 |
| | | 8459.69.0050 | 8459.69.0050 |
| | | 8459.69.0070 | 8459.69.0070 |
| | | 8459.69.0090 | 8459.69.0090 |
| | Machining centers (multifunctions NC machines): | | |
| | Drill, mill, and bore, vertical (automatic tool change): | | |
| 3335127101 | Y-axis travel less than 20" | 8457.10.0015 | 8457.10.0015 |
| 3335127106 | Y-axis travel 20" through 26" | | |
| 3335127111 | Y-axis travel over 26" | 8457.10.0025 | 8457.10.0025 |
| | Machining centers (multifunctions NC machines) - Cont.: | | |
| | Drill, mill, and bore, horizontal (automatic tool change): | | |
| 3335127112 | Under 500mm pallet | 8457.10.0036 | 8457.10.0055 |
| 3335127113 | 500mm-800mm pallet | 8457.10.0039 | 8457.10.0060 |
| 3335127114 | Over 800mm pallet | | 8457.10.0065 |
| | | | 8457.10.0070 |
| 3335127146 | All other machining centers, including special machining centers, special adapting of standard machining centers, and machining centers with indexing turret | 8457.10.0045 | 8457.10.0075 |
| | Station type machines: | | |
| 3335128101 | Dial or rotary, trunnion, and center column | 8457.20.0010 | 8457.20.0010 |

| | | | |
|------------|---|--------------|--------------|
| 3335128106 | Transfer (free, palletized shuttle) | 8457.20.0090 | 8457.20.0090 |
| 3335128111 | Other station type | 8457.30.0010 | 8457.30.0010 |
| | | 8457.30.0090 | 8457.30.0090 |
| | Other metal cutting machine tools: | | |
| | | 8459.70.0060 | 8459.70.8060 |
| 3335129101 | Other metal cutting machine tools, valued under \$3,025 | 8461.20.0070 | 8461.20.8070 |
| | | 8461.30.0040 | 8461.30.8040 |
| | | 8461.50.0020 | 8461.50.8020 |
| | | 8461.90.6020 | 8461.90.6020 |
| | | 8461.90.6050 | 8461.90.6050 |
| | Machines valued at \$3,025 each or more: | | |
| 3335129106 | Broaching machines, including internal surface and all other broaching machines | 8461.30.0060 | 8461.30.4060 |
| | | 8461.30.0080 | 8461.30.8080 |
| | Sawing and cutoff machines: | | |
| 3335129122 | Band saws - vertical | 8461.50.0050 | 8461.50.4050 |
| 3335129123 | Band saws - horizontal | 8461.50.0090 | 8461.50.8090 |
| 3335129126 | All other sawing and cutoff machines | | |
| 3335129131 | Spark erosion, ultrasonic and electrolytic machines all types | 8456.20.0000 | 8456.20.1010 |
| | | 8456.30.0000 | 8456.20.1050 |
| | | 8456.90.3000 | 8456.30.1020 |
| | | | 8456.30.1050 |
| | | | 8456.30.1070 |
| | | | 8456.90.3000 |
| 3335129136 | Miscellaneous metal cutting machine tools, including rifling, centering, keyseating, pointing, chemfering, facing, shaving, grooving, countersinking, burring, reaming, screw and nut slotting machines, threading planers, and shapers | 8456.10.0002 | 8456.10.1010 |
| | | 8459.70.0020 | 8456.10.1020 |
| | | 8459.70.0080 | 8459.70.4000 |
| | | 8461.20.0010 | 8459.70.8080 |
| | | 8461.20.4000 | 8461.20.4000 |
| | | 8461.90.3040 | 8461.20.8090 |
| | | 8461.90.3080 | 8461.90.3040 |
| | | 8461.90.6030 | 8461.90.3080 |
| | | 8461.90.6090 | 8461.90.6030 |
| | | | 8461.90.6090 |
| | Punching and shearing machines: | | |
| 3335131101 | All punching and shearing machines valued under \$3,025 each | 8462.39.0020 | 8462.39.0020 |
| | | 8462.49.0020 | 8462.49.0020 |
| | Machines valued at \$3,025 or more: | | |
| | Power operated only: | | |
| | Plate shearing machines (squaring, slitting, etc.): | | |
| 3335131106 | Punches, including combination punching and shearing machines | 8462.39.0050 | 8462.39.0050 |
| | | 8462.41.0080 | 8462.41.0080 |
| 3335131111 | Punching machines fixed position and two axes positioning table | 8462.49.0050 | 8462.49.0050 |
| 3335131116 | Mechanical | | |
| 3335131121 | Hydraulic | 8462.31.0080 | 8462.31.0080 |
| 3335131126 | Other power operated punching & shearing machines | | |
| | Bending and forming machines: | | |
| 3335131131 | All bending and forming machines valued under \$3,025 | 8462.29.0020 | 8462.29.0020 |
| | Machines valued at \$3,025 each or more: | | |
| 3335131136 | Press brakes all types | 8462.29.0030 | 8462.29.0030 |
| 3335131145 | Roll bending machines, including sheet, plate, angles, bars, shapes, and tubes, and rotary bending and forming machines, including rotary head | 8462.29.0040 | 8462.29.0040 |
| | | 8462.29.0050 | 8462.29.0050 |
| 3335131161 | Other bending and forming machines, including folders | | |

| | | | |
|------------|---|--------------|--------------|
| | Presses except forging presses: | | |
| 3335133101 | All presses valued under \$3,025 each | 8462.99.0020 | 8462.99.8020 |
| | Machines valued at \$3,025 each or more: | | |
| 3335133109 | Mechanical presses: Gap or C-frame | 8462.99.0030 | 8462.99.4030 |
| | | 8462.99.0040 | 8462.99.8045 |
| | Vertical straight sided and arch frame, excluding knuckle joint, including cam and crank: Single action: | | |
| 3335133136 | Automatic presses, strip or coil field | 8462.99.0060 | 8462.99.8060 |
| 3335133143 | Vertical, automatic, and other mechanical presses, including end wheel type bulldozer, double and triple action, and transfer fed presses, four point and knuckle joint, excluding automated lines of standard equipment | | |
| | Hydraulic presses (metalworking only) | | |
| | Vertical single action, all tonnages | | |
| 3335133146 | Housing or straight side type | | |
| 3335133151 | Column type (open rod) | | |
| | Gap or C-frame: | | |
| 3335133156 | 15 tons and under | 8462.91.0060 | 8462.91.4060 |
| 3335133161 | 16 tons to 35 tons | 8462.91.0090 | 8462.91.8090 |
| 3335133166 | Over 35 tons | | |
| 3335133171 | Other hydraulic and pneumatic presses, including horizontal | | |
| | All other metal forming type machine tools: | | |
| 3335135101 | All other metal forming type machine tools valued under \$3,025 each | 8463.20.0060 | 8463.20.0060 |
| | | 8463.90.0060 | 8463.90.0060 |
| | Machines valued at \$3,025 each or more: | | |
| 3335135118 | Forging machines, including forging presses and die stamping presses, and die casting machines all types | 8462.10.0030 | 8462.10.0030 |
| 3335135121 | Riveting machines (except hand held portable types) | 8462.10.0035 | 8462.10.0035 |
| | | 8462.10.0055 | 8462.10.0055 |
| | | 8454.30.0010 | 8454.30.0010 |
| | | 8463.20.0080 | 8463.20.0080 |
| | | 8463.90.0080 | 8463.90.0080 |
| 3335135126 | All other metal forming type machine tools | | |

1/Source: 2007 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2007).

Historical Note

The Census Bureau has collected data on metalworking machinery since 1942.

Historical Current Industrial Reports data (called Facts for Industry before 1959) may be obtained from a Federal Depository Library. To locate a Federal Depository Library in your area, please visit <http://www.gpoaccess.gov/libraries.html>.