

U.S. Census Bureau  
Metalworking Machinery - 2008  
MQ333W(08)-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 Edward Hull, 301-763-1789.

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Table 1. Value of Shipments, Including Exports of Metalworking Machinery  
by Class of Product: 2008

[Thousands of dollars]

Product code	Product description	2008	2007
	Metalworking machinery.....	3,576,882	3,318,208
	Metal cutting type 1/ 2/ 3/ 4/.....	2,758,378	2,533,389
333512A1	Boring and drilling machines ..... a/	167,355	130,220
33351212	Gear cutting machines 1/.....	(D)	(D)
33351221	Grinding and polishing machines (excluding gear-tooth grinding, lapping, polishing, and buffing machines).....	304,588	237,928
33351231	Lathes 2/.....	320,515	375,871
33351241	Milling machines 3/.....	80,952	81,294
33351271	Machining centers (multifunction numerically controlled machines).....	766,791	807,425
33351281	Station type machines 4/.....	(D)	(D)
33351291	Other metal cutting machine tools (excluding those designed primarily for home workshops, laboratories, etc.)..... a/	608,576	585,522
3335126111	Remanufactured metal cutting machine tools.....	56,589 b/	81,004
	Metal forming type 5/.....	818,504	784,819
33351311 pt.	Punching and shearing machines.....	135,773	145,530
33351311 pt.	Bending and forming machines.....	272,795	264,261
33351331	Presses (excluding forging) 5/.....	142,282 a/	135,292
33351351	Other metal forming type machines 5/.....	219,706	209,309
3335137121	Remanufactured metal forming machine tools ..... b/	19,732 a/	10,382

(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 product code 3335123126, "Vertical NC turning machines" are included in total "Metal cutting type," but excluded from product code 33351231.

3/Data for product code 3335124101, "All milling machines valued under \$3,025 each" are included in total "Metal cutting type," but excluded from product code 33351241.

4/Data for "Station type machines" are included in total "Metal cutting type."

5/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.

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 2. Total Shipments and Unfilled Orders: 2008 and 2007  
(Quantity in units; value in thousands of dollars)

Product code	Product description	No. of cos.	2008			2007		
			Total shipments		Unfilled orders	Total shipments		Unfilled orders
			Quantity	Value	(value)	Quantity	Value	(value)
	Metalworking machinery.....	(X)	108,472	3,576,882	1,221,553	130,745	3,318,208	1,433,996
	Total metal cutting type machine tools.....	(X)	75,381	2,758,378	905,631	79,969	2,533,389	1,079,748
	Total metal forming type machine tools.....	(X)	33,091	818,504	315,922	50,776	784,819	354,248
	Metal cutting type machine tools valued at \$3,025 each or more 1/ 2/ 3/ 4/ 5/.....	(X)	29,940	2,653,814	879,150	32,163	2,405,834	1,023,117
	Metal cutting type machine tools valued under \$3,025 6/.....	(X)	42,687	47,975	390	46,999	46,551	943
333512A1	Boring and drilling machines.....	28	6,973	a/ 167,355	102,472	7,734	130,220	52,512
	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 (excluding boring lathes) .....	10	(D)	(D)	(D)	(D)	(D)	(D)
333512A105	Precision and jig boring machines, including horizontal and vertical machines .....	4	(D)	(D)	(D)	(D)	(D)	(D)
333512A111	All drilling machines valued under \$3,025 each.....	9	(D)	(D)	(D)	6,151	6,426	(D)
	Drilling machines valued at \$3,025 each or more:							
333512A113	Vertical upright drilling machines, including plain upright and heavy duty .....	4	(D)	(D)	(D)	(D)	(D)	(D)
333512A117	Deep hole drilling machines .....	5	(D)	(D)	(D)	(D)	(D)	(D)
333512A120	Multiple spindle drilling machines.....	8	a/ 59	b/ 4,507	(D) b/	201	c/ 10,874	1,207
333512A123	All other drilling machines.....	2	(D)	(D)	(X)	(D)	(D)	(X)
333512I200	Gear cutting machines, including gear hobbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines 1/ .....	3	(D)	(D)	(D)	(D)	(D) c/	90,727
33351221	Grinding, polishing, buffing, honing, and lapping machines.....	58	20,861	304,588	147,438	a/ 24,381	237,928	a/ 188,102
3335122101	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each.....	19	18,404	29,542	(D) a/	22,242	a/ 25,885	(D)
	All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more:							
3335122110	External cylindrical grinding machines.....	10	c/ 463	62,853	44,929	b/ 422	55,584	38,978
3335122120	Internal cylindrical grinding machines .....	2	(D)	(D)	(D)	(D)	(D)	(D)
3335122122	Surface grinding machines .....	9	b/ 316	6,298	1,915	b/ 457	b/ 12,096	(D)
3335122136	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders .....	4	(D)	(D)	(D)	(D)	(D)	6,369
3335122142	Tool, cutter, and drill point grinding machines .....	11	274	48,941	a/ 9,210	336	61,325	10,702
3335122151	All other grinding machines, including planer type, and thread							



3335129122	Horizontal .....	8	1,175	22,821	(D)	(D)	(D)	(D)					
3335129123	Vertical .....	6	1,134	20,977	(D)	1,049	20,822	(D)					
3335129126	All other sawing and cutoff machines .....	10	608	22,488	a/	4,007	(D)	(D) b/	2,575				
3335129131	Spark erosion, ultrasonic, and electrolytic machines, all types .....	2	(D)	(D)	(D)	(D)	(D)	(D)					
3335129134	Water jet cutting machines .....	2	(D)	(D)	(D)	(X)	(X)	(X)					
3335129135	Laser cutting machines .....	5	347	200,498	(D)	(X)	(X)	(X)					
3335129136	Miscellaneous metal cutting machine tools .....	21	(D)	(D)	b/	25,212	6,025	495,409 a/	99,547				
3335126111	Remanufactured metal cutting machine tools .....	16	2,754	56,589		26,091	c/	807 b/	81,004 b/	55,688			
	Metal forming type machine tools valued at \$3,025 or more .....	(X)	10,478	766,043		291,030		13,556	749,748	348,686			
	Metal forming type machine tools valued under \$3,025 7/.....	(X)	22,492	32,729		18,246		37,124	24,689	614			
33351311	Punching, shearing, bending, and forming machines .....	60	10,866	408,568		154,785		12,628	409,791	191,969			
3335131101	All punching and shearing machines valued under \$3,025 each.....	12	(D)	(D)	(D)			1,119	1,395	b/	103		
	All punching and shearing machines valued at \$3,025 each or more:												
	Power operated only:												
3335131106	Punches, including combination punching and shearing machines .....	16	3,270	48,577		1,799		4,514	63,294		2,847		
3335131111	Punching machines fixed position and two axes positioning table .....	3	220	63,195		(D)	b/	184	49,663		17,436		
	Plate shearing machines:												
3335131116	Mechanical .....	3	(D)	(D)	b/	911		(D)	(D)		(D)		
3335131121	Hydraulic .....	8	744	15,180	a/	2,642		1,010	19,291		3,811		
3335131126	Other power operated punching and shearing machines .....	5	(D)	(D)		(D)		(D)	(D)		(D)		
3335131131	All bending and forming machines, power operated valued at under \$3,025 each.....	6	(D)	(D)		(D)		(D)	(D)		54		
	All bending and forming machines, power operated valued at \$3,025 each or more:												
3335131136	Press brakes, all types .....	8	(D)	(D)		9,869		(D)	(D)		20,285		
3335131145	Roll bending machines including sheet, plate, angles, bars, shapes and tubes, and rotary bending and forming machines, including rotary head.....	16	1,436	123,832		84,670	b/	812	89,293		97,633		
3335131161	Other bending and forming machines, including folders and slide bending machines .....	20	1,437	67,482		41,923	b/	2,506	a/	92,759	47,709		
33351331	Presses (excluding forging) 7/.....	28	c/	958		142,282		71,590	b/	1,747	a/	135,292	82,405
3335133101	All presses valued under \$3,025 each 7/.....	7	(D)	(D)		(D)		(D)	(D)		(D)		
	All presses valued at \$3,025 each or more:												
3335133109	Mechanical presses: Gap or C-frame.....	7	(D)	(D)		(D)		(D)	(D)		(D)		
3335133136	Automatic presses, strip or coil fed .....	5	(D)	(D)		(D)		(D)	(D)		15,279		
3335133143	Vertical, automatic, and all other mechanical presses.....	7	(D)	(D)		(D)		(D)	(D)		29,993		
	Hydraulic presses:												
	Vertical single action, all tonnages:												
3335133146	Housing or straight side type .....	9	25	9,682		5,562		(D)	(D)		(D)		
3335133151	Column type (open rod) .....	7	26	9,310		(D)		(D)	(D)		16,214		
	Gap or C-frame:												
3335133156	15 tons and under .....	5	179	2,943		266		177	2,917		(D)		
3335133161	16 tons to 35 tons .....	5	(D)	(D)		489		(D)	(D)		1,356		
3335133166	Over 35 tons .....	7	48	a/	4,119	1,040		(D)	(D)	b/	1,821		

3335133171	Other hydraulic and pneumatic presses, including horizontal .....	11	b/	314	30,369	4,633	c/	1,122	b/	20,796	a/	12,428
33351351	All other metal forming type machine tools 7/.....	30		1,273	219,706	64,807		1,874		209,309		74,469
3335135101	All other metal forming type machine tools valued under \$3,025 each 7/.....	7		(D)	(D)	(D)		(D)		(D)		(D)
	All other metal forming type machine tools valued at \$3,025 each or more:											
3335135118	Forging machines, including forging presses and die stamping presses, and die casting machines, all types.....	5		(D)	(D)	(D)		(D)		(D)		(D)
3335135121	Riveting machines .....	5		(D)	(D)	(D)		(D)		(D)		(D)
3335135126	All other metal forming type machine tools .....	17		829	200,511	54,955		1,211		157,948		73,721
3335137121	Remanufactured metal forming machine tools .....	11	b/	121	19,732	6,646	a/	96	a/	10,382	c/	4,948

(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 code 3335123134 are included in the total for "Metal cutting type machine tools valued at \$3,025 each or more," but excluded from product class 33351231.

4/2008 "Unfilled orders (value)" for product class 33351241 are included in the total for "Metal cutting type machine tools valued at \$3,025 each or more."

5/"Quantity" and "Value" of shipments for product class 33351281 are included in the total for "Metal cutting type machine tools valued at \$3,025 each or more."

6/Product code 3335124101 is included in the total for "Metal cutting type machine tools valued under \$3,025," but excluded from product class 33351241.

7/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: 2008 and 2007  
 [Quantity in units. Value in thousands of dollars]

Product description	2008			2007		
	Shipments of numerically controlled machines		Export shipments	Shipments of numerically controlled machines		Export shipments
	Quantity	Value	(value) 1/	Quantity	Value	(value) 1/
Metalworking machinery.....	20,717	2,233,462	1,050,200	22,639	2,237,513	938,056
Metal cutting type machine tools 2/.....	19,344	1,979,597	778,151	21,643	1,992,233	705,200
Boring and drilling machines 2/.....	(D)	(D)	9,169	(D)	(D)	(D)
Gear cutting machines 2/.....	209	146,748	(D)	(D)	(D)	(D)
Grinding, polishing, buffing, and lapping machines .....	363	98,237	57,091	495	105,318	44,834
Valued under \$3,025 each, external cylindrical grinding machines (plain and universal), and surface grinding machines, all types .....	316	91,776	39,908	(D)	(D)	(D)
Honing, lapping, polishing and buffing machines .....	47	6,461	17,183	(D)	(D)	(D)
Horizontal NC turning machines, valued at \$3,025 or each or more .....	5,434	314,192	118,425	5,616	339,375	115,275
Single spindle NC turning machines:						
Chuck sizes less than 10 inches .....	3,112	134,021	(D)	3,327	145,881	(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.....	(X)	(X)	1,338	(X)	(X)	(D)
Milling machines 2/.....	546	70,142	(D)	735	70,999	(D)
Machining centers 2/3/.....	10,428	766,791	(D)	11,517	807,425	(D)
Drill, mill and bore, vertical (automatic tool change) 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
Y-axis travel less than 20 inches 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
Y-axis travel 20 inches through 26 inches 3/.....	(D)	(D)	(D)	4,261	300,847	107,733
Y-axis travel over 26 inches 3/.....	(D)	(D)	(D)	1,181	129,832	(D)
Drill, mill and bore, horizontal (automatic tool change) 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
Under 500mm pallet 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
500mm-800mm pallet 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
Over 800mm pallet 3/.....	(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 .....	1,598	391,218	144,242	2,090	418,608	146,914
Remanufactured metal cutting machines 2/.....	(D)	(D)	(D)	(D)	(D)	(D)
Metal forming type machine tools 4/.....	1,373	253,865	272,049	996	245,280	232,856
Punching, shearing, bending, and forming machines .....	1,201	161,883	121,614	783	126,877	76,501
Punching and shearing machines .....	794	71,005	35,632	362	54,879	29,926
All bending and forming machines, power operated .....	407	90,878	85,982	421	71,998	46,575
Presses (excluding forging) 4/.....	(D)	(D)	(D)	(D)	(D)	(D)
All other metal forming type machine tools 4/ .....	(D)	(D)	(D)	(D)	(D)	(D)
Remanufactured metal forming machines 4/ .....	(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/Data were included in total "Metal forming type machine tools."

Table 4. Shipments, Exports, and Imports of Metalworking Machinery: 2008 and 2007  
 [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/
<b>2008</b>						
Boring and drilling machines, excluding multifunction NC machines, machining centers:						
Boring machines valued at \$3,025 each or more.....	(D)	(D)	582	30,092	1,167	136,594
Drilling machines:						
Valued under \$3,025 each.....	(D)	(D)	9,681	8,048	67,525	15,286
Valued at \$3,025 each or more .....	(D)	(D)	3,137	91,573	1,914	134,531
Gear cutting machines .....	(D)	(D)	910	45,420	473	153,157
Grinding, polishing, buffing, honing, and lapping machinery (excluding gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	18,404	29,542	115,577	22,626	693,397	28,572
Valued at \$3,025 each or more .....	2,457	275,046	3,385	140,195	5,450	407,946
Lathes (turning machines) under \$3,025.....	(D)	(D)	3,134	3,992	13,886	8,987
Horizontal NC turning machines.....	5,434	314,192	785	95,904	6,745	851,770
Vertical NC turning machines.....	(D)	(D)	382	35,682	681	184,205
Nonnumerically controlled turning machines.....	(D)	(D)	1,279	40,850	3,996	93,364
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	4,245	6,548	9,280	6,128
Valued at \$3,025 each or more.....	1,166	80,952	826	43,175	7,791	217,865
Machining centers (multifunction NC machines).....	10,428	766,791	2,705	289,544	6,162	1,248,549
Drill, mill, and bore, vertical (automatic tool change):						
Y-axis travel less than 20 inches and 20 inches through 26 inches.....	(D)	(D)	1,924	193,471	2,813	300,040
Y-axis travel 26 inches and over.....	(D)	(D)	626	81,839	910	229,209
Drill, mill, and bore, horizontal (automatic tool change) .....	(D)	(D)	-	-	2,231	663,361
Other machining centers .....	(D)	(D)	155	14,234	208	55,940
Station type machines .....	(D)	(D)	-	-	637	174,884
Other metal cutting machine tools:						
Valued under \$3,025 each.....	(D)	(D)	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	3,415	273,832	3,616	111,160	24,152	530,580
Punching and shearing machines:						
Valued under \$3,025 each.....	(D)	(D)	10,720	8,492	11,520	4,668
Valued at \$3,025 each or more.....	(D)	(D)	2,871	114,611	2,178	134,783
Bending and forming machines:						
Valued under \$3,025 each.....	(D)	(D)	38,540	20,129	84,734	17,889
Valued at \$3,025 each or more.....	3,767	269,406	5,015	105,525	4,434	216,371
Presses (excluding forging presses).....	c/	958	142,282	22,976	85,912	33,391
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)	934	86,021	7,588	218,216
Other metal forming machines, excluding riveting .....	829	200,511	(NA)	(NA)	(NA)	(NA)
<b>2007</b>						
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 (excluding gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	a/	22,242	a/	25,885	80,378	20,966
Valued at \$3,025 each or more .....		2,139		212,043	2,940	116,478
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.....	c/	563	b/	6,138	1,625	57,383
					4,862	81,284



Table 4. Shipments, Exports, and Imports of Metalworking Machinery: 2008 and 2007  
 [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/
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).....	11,517	807,425	2,755	288,736	6,397	1,070,954
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.....	a/ 1,181	a/ 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 .....	(D)	(D)	-	-	416	116,812
Other metal cutting machine tools:						
Valued under \$3,025 each.....	a/ 16,610	b/ 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 (excluding forging presses).....	b/ 1,747	a/ 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, excluding riveting .....	1,211	157,948	(NA)	(NA)	(NA)	(NA)

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

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.

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.

Note: Details may not add to total due to independent rounding.

Table 5. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes and HTSUSA Import Codes: 2008

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 (excluding 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
333512A117	Deep hole drilling machines.....	8459.21.0080	8459.21.0080
333512A120	Multiple spindle drilling machines (cluster of spindles driven from one central power unit).....	8459.29.0040	8459.29.0040
333512A123	All other drilling machines, including bench type sensitive vertical and radial.....	8459.29.0050 8459.29.0090	8459.29.0050 8459.29.0090
3335121200	Gear cutting machines, including gear hobbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines.....	8461.40.1050 8461.40.1070 8461.40.1090 8461.40.5040 8461.40.5060	8461.40.1020 8461.40.1030 8461.40.1040 8461.40.1060 8461.40.5050 8461.40.5070
	Grinding, polishing, buffing, honing, and lapping machinery (excluding 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 AND		
3335122120	Internal cylindrical grinding machines AND		
3335122136	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders AND		
3335122151	All other grinding machines, including planer type, thread grinding, and deburring machines.....	8460.21.0080 8460.29.0010 8460.29.0030	8460.21.0080 8460.29.0010 8460.29.0030

		8460.29.0050	8460.29.0050
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 (excluding gear honing and lapping):		
3335122156	Internal, including combination bore, hone, and external (excluding flat surface lapping machines) AND		
3335122161	Flat surface lapping machines (excluding gear lapping) AND		
3335122166	Polishing and buffing machines (including speed lathes and multistation type).....	8460.40.0060 8460.40.0080 8460.90.0060 8460.90.0080	8460.40.4060 8460.40.8080 8460.90.4060 8460.90.8080
	Lathes (turning machines):		
3335123131	All lathes valued under \$3,025 each.....	8458.19.0020 8458.99.5060	8458.19.0020 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 8458.91.1080 8458.91.5050 8458.91.5070	8458.91.1060 8458.91.1080 8458.91.5050 8458.91.5070
3335123134	Nonnumerically controlled turning machines valued at \$3,025 each or more.....	8458.19.0030 8458.19.0050 8458.19.0070 8458.19.0090 8458.99.1050 8458.99.5090	8458.19.0030 8458.19.0050 8458.19.0070 8458.19.0090 8458.99.1050 8458.99.5090
	Milling machines, excluding machining centers:		
3335124101	All milling machines valued under \$3,025 each.....	8459.59.0020 8459.69.0020	8459.59.0020 8459.69.0020
3335124125	All milling machines valued at \$3,025 each or more.....	8459.51.0080 8459.59.0030 8459.61.0080 8459.69.0050 8459.69.0070 8459.69.0090	8459.51.0080 8459.59.0030 8459.61.0080 8459.69.0050 8459.69.0070 8459.69.0090
	Machining centers (multifunctions NC machines):		
	Drill, mill, and bore, vertical (automatic tool change):		
3335127101	Y-axis travel less than 20" AND		
3335127106	Y-axis travel 20" through 26" AND		
3335127111	Y-axis travel over 26".....	8457.10.0015 8457.10.0025	8457.10.0015 8457.10.0025
	Drill, mill, and bore, horizontal (automatic tool change):		
3335127112	Under 500mm pallet AND		
3335127113	500mm-800mm pallet AND		
3335127114	Over 800mm pallet.....	8457.10.0036	8457.10.0055

		8457.10.0039	8457.10.0060
			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 AND		
3335128106	Transfer (free, palletized shuttle) AND		
3335128111	Other station type.....	8457.20.0010	8457.20.0010
		8457.20.0090	8457.20.0090
		8457.30.0010	8457.30.0010
		8457.30.0090	8457.30.0090
	Other metal cutting machine tools:		
3335129101	Other metal cutting machine tools, valued under \$3,025.....	8459.70.0060	8459.70.8060
		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 AND		
3335129123	Band saws - horizontal AND		
3335129126	All other sawing and cutoff machines.....	8461.50.0050	8461.50.4050
		8461.50.0090	8461.50.8090
	Spark erosion, ultrasonic and electrolytic machines all types.....	8456.20.0000	8456.20.1010
3335129131		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 AND		
3335131111	Punching machines fixed position and two axes positioning table AND		
3335131116	Mechanical AND		
3335131121	Hydraulic AND		
3335131126	Other power operated punching & shearing machines.....	8462.39.0050	8462.39.0050
		8462.41.0080	8462.41.0080
		8462.49.0050	8462.49.0050
		8462.31.0080	8462.31.0080
	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 AND		
3335131145	Roll bending machines, including sheet, plate, angles, bars, shapes, and tubes, and rotary bending and forming machines, including rotary head AND		
3335131161	Other bending and forming machines, including folders.....	8462.29.0030	8462.29.0030
		8462.29.0040	8462.29.0040
		8462.29.0050	8462.29.0050
	Presses excluding 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
3335133136	Automatic presses, strip or coil field AND		
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.....	8462.99.0060	8462.99.8060
	Hydraulic presses (metalworking only)		
	Vertical single action, all tonnages		
3335133146	Housing or straight side type AND		
3335133151	Column type (open rod) AND		
	Gap or C-frame:		
3335133156	15 tons and under AND		
3335133161	16 tons to 35 tons AND		
3335133166	Over 35 tons AND		
3335133171	Other hydraulic and pneumatic presses, including horizontal.....	8462.91.0060	8462.91.4060
		8462.91.0090	8462.91.8090
	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 AND		
3335135121	Riveting machines (excluding hand held portable types) AND		
3335135126	All other metal forming type machine tools.....	8462.10.0030	8462.10.0030
		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

1/Source: 2008 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 (2008).

## 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>.