

Metalworking Machinery: First Quarter 2006

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U S C E N S U S B U R E A U

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U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

Table 1. Total Shipments and Unfilled Orders
 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	First quarter 2006				Fourth quarter 2005			
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)		
			Quantity	Value		Quantity	Value			
	Metalworking machinery.....	(X)	32,363	726,310	1,044,012	32,470	758,437	1,091,615		
	Total metal cutting type machine tools.....	(X)	20,538	520,591	724,771	20,479	558,480	742,784		
	Total metal forming type machine tools.....	(X)	11,825	205,719	319,241	11,991	199,957	348,831		
	Metal cutting type machine tools valued at \$3,025 each or more 1/ 2/.....	(X)	8,411	495,273	690,235	8,377	525,543	708,158		
	Metal cutting type machine tools valued under \$3,025 3/ 4/ 5/.....	(X)	11,980	8,539	927	r/ 11,936	r/ 8,473	r/ 632		
333512A1	Boring and drilling machines 3/.....	29	2,340	54,184	45,534	r/ 1,960	r/ 29,888	r/ 54,593		
333512A103	Boring machines valued at \$3,025 each or more: Horizontal boring, drilling, and milling machines, including floor, table, rail mounted, and all other nonprecision boring machines (except boring lathes).....	6	c/ 524	b/ 27,444	(D)	c/ 288	b/ 11,299	(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	1,555	1,809	(D)	r/ 1,464	r/ 1,572	(D)		
333512A113	Drilling machines valued at \$3,025 each or more: Vertical upright drilling machines, including plain upright and heavy duty.....	1	(D)	(D)	(D)	(D)	(D)	115		
333512A117	Deep hole drilling machines.....	5	c/ 67	c/ 18,997	b/ 3,618	c/r/ 45	c/r/ 10,768	(D)		
333512A120	Multiple spindle drilling machines.....	7	c/ 110	c/ 3,704	c/ 9,914	(D)	(D)	c/ 11,331		
333512A123	All other drilling machines.....	3	(D)	(D)	(X)	(D)	(D)	(X)		
3335121200	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)	(D)		
33351221	Grinding, polishing, buffing, honing, and lapping machines 4/.....	55	7,458	64,484	111,040	7,239	73,127	121,001		
3335122101	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each 4/.....	12	6,797	a/ 3,373	(D)	6,511	3,198	(D)		
3335122110	All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more: External cylindrical grinding machines.....	9	c/ 209	19,913	40,864	b/ 205	17,620	48,194		
3335122120	Internal cylindrical grinding machines.....	1	(D)	(D)	(D)	(D)	(D)	(D)		
3335122122	Surface grinding machines.....	6	b/ 137	c/ 3,287	(D)	b/r/ 136	c/r/ 3,415	c/r/ 5,283		
3335122136	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders.....	3	(D)	(D)	(D)	b/ 32	b/ 440	(D)		
3335122142	Tool, cutter, and drill point grinding machines.....	11	a/ 85	19,314	11,494	r/ 78	17,710	(D)		
3335122151	All other grinding machines, including planer type, and thread grinding machines.....	9	92	7,118	a/ 8,771	r/ 92	r/ 10,365	a/ 9,649		
3335122156	Honing and lapping machines (except flat surface lapping machines), internal, including combination bore, hone, and external.....	5	a/ 56	b/ 9,274	(D)	100	15,045	(D)		
3335122161	Flat surface lapping machines (except gear lapping).....	3	29	475	(D)	(D)	(D)	c/ 276		
3335122166	Polishing and buffing machines, including speed lathes and multistation type.....	9	a/ 36	b/ 1,395	c/ 14,816	a/ 62	4,836	(D)		
33351231	Lathes 2/5/.....	(X)	1,251	62,075	58,853	1,335	67,841	43,822		
	Numerically controlled: Horizontal.....	5	1,116	59,750	56,857	1,147	64,463	42,500		
3335123107	Single spindle NC turning machines: Chuck sizes less than 10 inches.....	4	694	29,006	26,783	737	34,932	19,227		
3335123116	Chuck sizes from 10 inches but less than 15 inches.....	4	(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/.....	3	(D)	(D)	(D)	(D)	(D)	(D)		
3335123131	All lathes (turning machines) valued under \$3,025 each 5/.....	2	(D)	(D)	(X)	(D)	(D)	(X)		
3335123134	All nonnumerically controlled lathes (turning machines) valued at \$3,025 each or more.....	7	c/ 135	c/ 2,325	b/ 1,996	c/r/ 188	c/r/ 3,378	b/ 1,322		
33351241	Milling machines 5/.....	7	271	11,958	40,200	479	15,500	45,019		
3335124101	All milling machines valued under \$3,025 each 5/.....	1	(D)	(D)	(X)	(D)	(D)	(X)		
3335124125	All milling machines valued at \$3,025 or more.....	6	b/ 271	a/ 11,958	40,200	a/ 479	15,500	45,019		
33351271	Machining centers.....	12	3,636	160,820	155,518	3,458	156,813	154,365		
	Drill, mill, and bore, vertical (automatic tool change): Y-axis travel less than 20 inches.....	3	(D)	(D)	23,442	1,252	42,514	22,379		
3335127101	Y-axis travel 20 inches through 26 inches.....	7	972	72,712	35,927	913	r/ 65,408	45,501		
3335127111	Y-axis travel over 26 inches.....	5	a/ 194	a/ 20,884	32,966	186	19,857	19,093		

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 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	First quarter 2006					Fourth quarter 2005				
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)				
			Quantity	Value		Quantity	Value					
	Drill, mill, and bore, horizontal (automatic tool change):											
3335127112	Under 500mm pallet and smaller.....	3 a/	73 a/	9,505	8,009	a/	75 a/	9,169	10,909			
3335127113	500 to 800mm pallet.....	3	(D)	(D)	(D)	(D)	(D)	(D)	7,761			
3335127114	Over 800mm pallet.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)			
3335127146	All other machining centers, including special machining, special adapting of standard machining, and machining centers with indexing turret.....	3	1,062 b/	6,832	(D)	(D)	982 c/	8,832	(D)			
33351281	Station type machines.....	4	7	7,962	108,622	(D)	28	29,168	93,395			
3335128101	Dial or rotary, trunnion, and center column.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)			
3335128106	Transfer.....	2	(D)	(D)	60,959	(D)	(D)	(D)	52,966			
3335128111	Other station type.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)			
33351291	Other metal cutting machine tools.....	47	4,905	102,713	77,191	r/	5,268	113,654	91,464			
3335129101	Other metal cutting machine tools, valued under \$3,025.....	12 c/	3,168 c/	3,029 b/	488 a/r/	a/r/	3,500 b/r/	3,372	214			
3335129106	Other metal cutting machine tools, valued at \$3,025 each or more:											
	Broaching machines.....	5 c/	9 b/	650 a/	2,821	c/	21 b/	1,919 a/	2,763			
	Sawing and cutoff machines:											
	Band saws:											
3335129122	Horizontal.....	7	268	3,743	(D)	r/	292 r/	5,636	(D)			
3335129123	Vertical.....	5	334	5,540	(D)	(D)	268	5,430	(D)			
3335129126	All other sawing and cutoff machines.....	8	170	5,169	5,778	(D)	149 r/	4,423	4,204			
3335129131	Spark erosion, ultrasonic, and electrolytic machines, all types.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)			
3335129136	Miscellaneous metal cutting machine tools.....	22	(D)	(D)	56,939	(D)	(D)	(D)	73,044			
3335126111	Remanufactured metal cutting machine tools.....	15 c/	147 b/	16,779 a/	33,609	(D)	166	24,464	33,994			
	Metal forming type machine tools valued at \$3,025 or more.....	(X)	3,705	197,440	314,727	(D)	3,086	191,309	342,920			
	Metal forming type machine tools valued under \$3,025 6/7/.....	(X)	8,116	7,867	735	(D)	8,905	8,648	650			
33351311	Punching, shearing, bending, and forming machines 6/.....	59	3,319	107,631	137,549	(D)	2,922	92,226	158,558			
3335131101	All punching and shearing machines valued under \$3,025 each.....	8 b/	387 a/	467	86	r/	336	395	148			
	All punching and shearing machines valued at \$3,025 each or more:											
	Power operated only:											
3335131106	Punches, including combination punching and shearing machines.....	14 a/	1,028 a/	11,825	2,306	a/	742 a/	9,124 b/r/	3,157			
3335131111	Punching machines fixed position and two axes positioning table.....	3	54	13,870	(D)	(D)	52	13,515	(D)			
	Plate shearing machines:											
3335131116	Mechanical.....	3 c/	36 b/	1,205 b/	2,541	c/	23 c/	805 c/	2,868			
3335131121	Hydraulic.....	7	230	3,843	5,150	(D)	209	3,596	4,236			
3335131126	Other power-operated punching and shearing machines.....	4	72	2,504	(D)	(D)	221	4,755	(D)			
3335131131	All bending and forming machines, power operated valued at under \$3,025 each 6/.....	4	427	817	(D)	(D)	400 r/	814	124			
	All bending and forming machines, power operated valued at \$3,025 each or more:											
3335131136	Press brakes, all types.....	7	170	13,751	12,120	(D)	149	12,677	11,430			
3335131145	Roll bending machines, including sheet, plate, angles, bars, shapes and tubes; and rotary bending and forming machines, including rotary head.....	15 c/	300 b/	29,160 b/	53,821	(D)	191	17,048	63,734			
3335131161	Other bending and forming machines, including folders and slide bending machines.....	16 b/	615 a/	30,189	49,298	b/	599 a/	29,497	59,779			
33351331	Presses (except forging) 7/.....	28	693	51,163	105,627	(D)	499	42,102	106,048			
3335133101	All presses valued under \$3,025 each 7/.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)			
	All presses valued at \$3,025 each or more:											
	Mechanical presses: gap or C-frame.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)			
3335133109	Automatic presses, strip or coil fed.....	6 a/	51	16,548	59,378	a/	43	14,544	33,344			
3335133136	Vertical, automatic, and all other mechanical presses.....	4	(D)	(D)	11,380	c/	62 a/	14,733	(D)			
	Hydraulic presses:											
	Vertical single action, all tonnages:											
3335133146	Housing or straight side type.....	-	(X)	(X)	5,473	(D)	(D)	(D)	5,244			
3335133151	Column type (open rod).....	3	6	1,283	12,298	(D)	8	1,774	14,784			
	Gap or C-frame:											
3335133156	15 tons and under.....	4	60	826	1,208	(D)	61	940	780			
3335133161	16 tons to 35 tons.....	4	27	1,176	875	(D)	24	1,219	1,169			
3335133166	Over 35 tons.....	4	22	1,399	2,391	c/	13	771	3,684			
3335133171	Other hydraulic and pneumatic presses, including horizontal.....	7 c/	281 b/	6,028 b/	8,463	c/	222 b/	4,741	11,038			

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 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	First quarter 2006			Fourth quarter 2005			Unfilled orders (value)			
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)				
			Quantity	Value		Quantity	Value					
33351351	All other metal forming type machine tools 7/8/.....	30	507	39,930	71,637	401	58,190	r/	78,586			
3335135101	All other metal forming type machine tools valued under \$3,025 each 7/.....	5	(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.....	5	b/	13	c/	2,514	(D)	a/	34	10,047	(D)	
3335135121	Riveting machines.....	5		173		3,398	(D)		72	1,958	(D)	
3335135126	All other metal forming type machine tools 8/...	18		321	a/	34,018	69,976		295	46,185	r/	77,454
3335137121	Remanufactured metal forming machine tools 8/.....	4	a/	4		412	3,779		(D)	(D)		5,261

D Withheld to avoid disclosing data for individual companies. r/Revised by 5 percent or more from previously published data. 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 333512A111 is included in the total for "Metal cutting type machine tools valued under \$3,025," but excluded from product class 333512A1.

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

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

6/"Unfilled orders (value)" for product code 3335131131 for the first quarter is included in the total for "Metal forming type machine tools valued under \$3,025," but excluded from product class 33351311.

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.

8/Product codes 3335135126 and 3335137121 were combined for shipments for the fourth quarter to avoid disclosing data for individual companies. Product code 3335137121 for shipments for the fourth quarter is included in product class 33351351.

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. Shipments of Numerically Controlled Machines and Exports
 [Quantity in units. Value in thousands of dollars]

Product description	First quarter 2006			Fourth quarter 2005		
	Shipments of numerically controlled machines		Export shipments (value) 1/	Shipments of numerically controlled machines		Export shipments (value) 1/
	Quantity	Value		Quantity	Value	
Metalworking machinery.....	6,171	464,457	173,490	6,075	475,989	184,406
Metal cutting type machine tools 2/.....	5,946	417,937	124,285	5,876	426,446	135,016
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	117	36,214	8,453	135	32,068	11,640
Valued under \$3,025 each, external cylindrical grinding machines (plain and universal), and surface grinding machines, all types	(D)	(D)	8,041	(D)	(D)	9,851
Honing, lapping, polishing and buffing machines	(D)	(D)	412	(D)	(D)	1,789
Horizontal NC turning machines, valued at \$3,025 or each or more 3/.....	1,116	59,750	19,513	1,147	64,463	20,424
Single spindle NC turning machines:						
Chuck sizes less than 10 inches	694	29,006	10,534	737	34,932	11,133
Chuck sizes over 10 inches but less than 15 inches 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
Chuck sizes 15 inches and over and multiple spindle 3/.....	(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)	272	(X)	(X)	281
Milling machines 2/.....	254	11,330	(D)	392	14,671	(D)
Machining centers 4/.....	3,636	160,820	44,896	3,458	156,813	40,692
Drill, mill and bore, vertical (automatic tool change) 4/.....	(D)	(D)	(D)	(D)	(D)	(D)
Y-axis travel less than 20 inches 4/.....	(D)	(D)	(D)	(D)	(D)	(D)
Y-axis travel 20 inches through 26 inches	972	72,712	19,654	913	65,408	17,609
Y-axis travel over 26 inches 4/.....	194	20,884	(D)	186	19,857	5,759
Drill, mill and bore, horizontal (automatic tool change) 4/.....	(D)	(D)	(D)	(D)	(D)	(D)
Under 500mm pallet 4/.....	73	9,505	(D)	75	9,169	(D)
500mm-800mm pallet 4/.....	(D)	(D)	(D)	(D)	(D)	(D)
Over 800mm pallet 4/.....	(D)	(D)	(X)	(D)	(D)	(X)
All other machining centers	1,062	6,832	(X)	982	8,832	(X)
Station type machines, and other metal cutting machine tools	429	73,904	22,852	440	88,335	30,050
Remanufactured metal cutting machines 2/.....	122	11,004	(D)	134	13,559	(D)
Metal forming type machine tools	225	46,520	49,205	199	49,543	49,390
Punching, shearing, bending, and forming machines	191	31,514	25,761	165	26,829	19,780
Punching and shearing machines	62	14,545	6,843	61	14,331	5,511
All bending and forming machines, power operated	129	16,969	18,918	104	12,498	14,269
Presses (except forgings)	(D)	(D)	6,099	6	2,285	7,799
All other metal forming type machine tools 5/.....	(D)	(D)	17,345	28	20,429	21,811
Remanufactured metal forming machines 5/.....	(X)	(X)	(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 "Horizontal NC turning machines, valued at \$3,025 each or more."

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

5/Data for "Remanufactured metal forming machines" for the fourth quarter and "Exports" for the first quarter were included in "All other metal forming type machine tools."

Table 3a. Shipments, Exports, and Imports of Metalworking Machinery: First Quarter 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/
Boring and drilling machines, excluding multifunction NC machines, machining centers:						
Boring machines valued at \$3,025 each or more.....	(D)	(D)	164	12,762	359	34,751
Drilling machines:						
Valued under \$3,025 each.....	1,555	1,809	2,807	2,035	34,224	4,516
Valued at \$3,025 each or more.....	(D)	(D)	162	6,394	475	68,028
Gear cutting machines.....	(D)	(D)	484	17,417	82	25,049
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	6,797	3,373	13,077	2,621	181,011	6,637
Valued at \$3,025 each or more.....	661	61,111	695	27,855	1,246	85,053
Lathes (turning machines) under \$3,025.....	(D)	(D)	884	935	3,670	2,708
Horizontal NC turning machines.....	1,116	59,750	154	14,760	1,802	199,198
Vertical NC turning machines.....	(D)	(D)	91	16,445	111	21,767
Nonnumerically controlled turning machines.....	135	2,325	397	10,733	942	15,340
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	707	1,149	1,824	2,184
Valued at \$3,025 each or more.....	271	11,958	412	12,355	1,127	37,430
Machining centers (multifunction NC machines).....	3,636	160,820	509	74,861	1,334	238,835
Drill, mill, and bore, vertical (automatic tool change):						
Y-axis travel less than 20 inches and 20 inches through 26 inches.....	(D)	(D)	353	50,217	678	61,600
Y-axis travel 26 inches and over.....	194	20,884	20	2,335	153	25,060
Drill, mill, and bore, horizontal (automatic tool change).....	(D)	(D)	-	-	441	126,937
Other machining centers.....	1,062	6,832	136	22,309	62	25,238
Station type machines.....	7	7,962	24	7,517	128	55,843
Other metal cutting machine tools:						
Valued under \$3,025 each.....	3,168	3,029	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	1,737	99,684	4,179	127,071	2,138	128,731
Punching and shearing machines:						
Valued under \$3,025 each.....	387	467	3,984	4,306	3,294	978
Valued at \$3,025 each or more.....	1,420	33,247	464	18,153	531	33,638
Bending and forming machines:						
Valued under \$3,025 each.....	427	817	4,231	1,771	19,336	3,428
Valued at \$3,025 each or more.....	1,085	73,100	1,511	51,082	1,908	84,657
Presses (except forging presses).....	693	51,163	2,402	27,640	3,006	41,106
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.....	13	2,514	557	21,554	1,911	77,018
Other metal forming machines.....	321	34,018	(NA)	(NA)	(NA)	(NA)

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

1/For a comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes, and HTSUSA import codes, see Table 4.

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 3b. Shipments, Exports, and Imports of Metalworking Machinery: Fourth Quarter 2005
 [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/
Boring and drilling machines, excluding multifunction NC machines, machining centers:						
Boring machines valued at \$3,025 each or more.....	(D)	(D)	111	2,808	200	25,472
Drilling machines:						
Valued under \$3,025 each.....	1,464	1,572	2,738	2,093	53,002	5,702
Valued at \$3,025 each or more.....	(D)	(D)	353	13,406	259	30,498
Gear cutting machines.....	(D)	(D)	144	13,841	242	39,393
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	6,511	3,198	29,319	3,165	262,118	8,689
Valued at \$3,025 each or more.....	728	69,929	432	20,483	1,462	93,160
Lathes (turning machines) under \$3,025.....	(D)	(D)	551	780	6,340	4,401
Horizontal NC turning machines.....	1,147	64,463	123	13,499	1,917	218,160
Vertical NC turning machines.....	(D)	(D)	4	802	132	25,644
Nonnumerically controlled turning machines.....	188	3,378	358	9,188	1,062	15,932
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	727	1,088	2,848	2,387
Valued at \$3,025 each or more.....	479	15,500	240	5,141	1,364	42,733
Machining centers (multifunction NC machines).....	3,458	156,813	334	45,869	1,578	274,417
Drill, mill, and bore, vertical (automatic tool change):						
Y-axis travel less than 20 inches and 20 inches through 26 inches.....	2,165	107,922	267	37,056	880	91,043
Y-axis travel 26 inches and over.....	186	19,857	17	3,440	152	21,657
Drill, mill, and bore, horizontal (automatic tool change).....	(D)	(D)	-	-	499	141,490
Other machining centers.....	982	8,832	50	5,373	47	20,228
Station type machines.....	28	29,168	34	10,108	92	56,719
Other metal cutting machine tools:						
Valued under \$3,025 each.....	3,500	3,372	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	1,768	110,282	3,440	100,331	2,022	129,540
Punching and shearing machines:						
Valued under \$3,025 each.....	336	395	2,906	1,052	3,645	1,266
Valued at \$3,025 each or more.....	1,247	31,795	549	21,479	565	30,521
Bending and forming machines:						
Valued under \$3,025 each.....	400	814	8,594	3,169	19,620	3,989
Valued at \$3,025 each or more.....	939	59,222	980	41,475	1,601	71,925
Presses (except forging presses).....	499	42,102	2,541	26,661	1,876	34,830
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.....	34	10,047	231	19,474	2,298	32,661
Other metal forming machines.....	295	46,185	(NA)	(NA)	(NA)	(NA)

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

1/For a comparison of North American Industry Classification System (NAICS)-based product codes with Schedule B export codes, and HTSUSA import codes, see Table 4.

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 4. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2006

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
	Multiple spindle drilling machines (cluster of spindles driven from one central power unit):		
333512A119	Adjustable joint and fixed center type AND		
333512A121	All other automatic multiple spindle drilling machines, including indexing turret head (fixed column and table).....	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
3335121100	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 8461.40.5040 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 AND		
3335122136	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders		
3335122151	All other grinding machines, including planer type, and thread grinding machines.....	8460.21.0080 8460.29.0010 8460.29.0030 8460.29.0050	8460.21.0080 8460.29.0010 8460.29.0030 8460.29.0050

Table 4. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
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
3335122156	Honing and lapping machines (except gear honing and lapping): Internal, including combination bore, hone, and external (except flat surface lapping machines) AND		
3335122161	Flat surface lapping machines (except 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
3335123131	Lathes (turning machines): 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
3335124101	Milling machines, excluding machining centers: 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
3335127101	Machining centers (multifunctions NC machines): Drill, mill, and bore, vertical (automatic tool change): 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

Table 4. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
3335127112	Drill, mill, and bore, horizontal (automatic tool change): Under 500mm pallet AND		
3335127113	500mm-800mm pallet AND		
3335127114	Over 800mm pallet.....	8457.10.0036 8457.10.0039	8457.10.0055 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
3335128101	Station type machines: Dial or rotary, trunnion, and center column AND		
3335128106	Transfer (free, palletized shuttle) AND		
3335128111	Other station type.....	8457.20.0010 8457.20.0090 8457.30.0010 8457.30.0090	8457.20.0010 8457.20.0090 8457.30.0010 8457.30.0090
3335129101	Other metal cutting machine tools: Other metal cutting machine tools, valued under \$3,025.....	8459.70.0060 8461.20.0070 8461.30.0040 8461.50.0020 8461.90.6020 8461.90.6050	8459.70.8060 8461.20.8070 8461.30.8040 8461.50.8020 8461.90.6020 8461.90.6050
3335129106	Machines valued at \$3,025 each or more: Broaching machines, including internal surface and all other broaching machines.....	8461.30.0060 8461.30.0080	8461.30.4060 8461.30.8080
3335129122	Sawing and cutoff machines: Band saws - vertical AND		
3335129123	Band saws - horizontal AND		
3335129126	All other sawing and cutoff machines.....	8461.50.0050 8461.50.0090	8461.50.4050 8461.50.8090
3335129131	Spark erosion, ultrasonic and electrolytic machines all types.....	8456.20.0000 8456.30.0000 8456.99.3005 8456.99.3040 8456.99.3060 8456.99.3080	8456.20.1010 8456.20.1050 8456.30.1020 8456.30.1050 8456.30.1070 8456.99.3005 8456.99.3040 8456.99.3060 8456.99.3080
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.....	8456.10.0000 8459.70.0020 8459.70.0080 8461.20.0010 8461.20.0090 8461.90.3040 8461.90.3080 8461.90.6030 8461.90.6090	8456.10.1010 8456.10.1020 8459.70.4000 8459.70.8080 8461.20.4000 8461.20.8090 8461.90.3040 8461.90.3080 8461.90.6030 8461.90.6090

Table 4. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
3335131101	Punching and shearing machines: All punching and shearing machines valued under \$3,025 each.....	8462.39.0020 8462.49.0020	8462.39.0020 8462.49.0020
	Machines valued at \$3,025 or more: Power operated only: Plate shearing machines (squaring, slitting, etc.):		
3335131116	Mechanical AND		
3335131121	Hydraulic AND		
3335131106	Punches, including combination punching and shearing machines AND		
3335131111	Punching machines fixed position and two axes positioning table AND		
3335131126	Other power operated punching and shearing machines.....	8462.31.0080 8462.39.0050 8462.41.0080 8462.49.0050	8462.31.0080 8462.39.0050 8462.41.0080 8462.49.0050
	Bending and forming machines: All bending and forming machines valued under \$3,025.....	8462.29.0020	8462.29.8025
	Machines valued at \$3,025 each or more: Press brakes all types AND		
3335131136	Roll bending machines, including sheet, plate, angles, bars, shapes, and tubes, and rotary bending and forming machines, including rotary head AND		
3335131145			
3335131161	Other bending and forming machines, including folders.....	8462.21.0080 8462.29.0030 8462.29.0040 8462.29.0050	8462.21.4085 8462.21.8085 8462.29.4085 8462.29.8035 8462.29.8045 8462.29.8055
	Presses except forging presses: All presses valued under \$3,025 each.....	8462.99.0020	8462.99.8020
3335133101			
	Machines valued at \$3,025 each or more: Mechanical presses: Gap or C-frame.....	8462.99.0030 8462.99.0040	8462.99.4030 8462.99.8045
3335133109			
	Vertical straight sided and arch frame, excluding knuckle joint, including cam and crank: Single action: Automatic presses, strip or coil field AND		
3335133136	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
3335133143			
	Hydraulic presses (metalworking only): Vertical single action, all tonnages: Housing or straight side type AND		
3335133146	Column type (open rod) AND		
3335133151	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 8462.91.0090	8462.91.4060 8462.91.8090

Table 4. Comparison of the North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2006

Product code	Product description	Export code 1/	Import code 2/
3335135101	All other metal forming type machine tools:		
	All other metal forming type machine tools valued under \$3,025 each.....	8463.20.0060 8463.90.0060	8463.20.0060 8463.90.0060
3335135118	Machines valued at \$3,025 each or more: Forging machines, including forging presses and die stamping preses, and die casting machines all types AND		
3335135121	Riveting machines (except 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: 2006 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 (2006).