

# Metalworking Machinery

## Summary

1999

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Information about the scope of the survey, methodology, explanation of terms and historical notes for this survey may be found in the introduction of the 1997 Manufacturing Profiles, issued August 1999.

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/econ/www/manumenu.html>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR's)," clicking on "Report Number Index;" from the "Industrial Products by Numeric Index," choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available through the U.S. Department of Commerce and STAT-USA Electronic Bulletin Board by subscription. To access, dial 202-482-3870 and follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information. The Internet address is: [www.stat-usa.gov/](http://www.stat-usa.gov/).

NOTE: Data are now published on the new North American Industry Classification System (NAICS) basis and therefore are not always comparable to the old Standard Industrial Classification (SIC) code. For further information on NAICS, see [www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html).

Current  
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Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Larry Blumberg, 301-457-4744.

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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. Value of Shipments, Including Exports of Metalworking Machinery  
by Class of Product: 1990 to 1999  
[Thousands of dollars]

Product code	Product description	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
	Metalworking machinery.....	3,783,336	4,817,066	5,010,262	4,607,757	4,547,133	3,780,074	3,222,456	3,073,862	3,171,748	3,426,081
333512A1	Metal cutting type 1/.....	2,512,638	3,481,754	3,583,298	3,141,128	3,036,592	2,463,001	2,084,864	1,999,668	2,138,713	2,371,266
333512A1	Boring machines 2/.....	53,822	73,583	80,161	88,929	172,417	129,835	84,667	97,975	77,655	(D)
33351211	Drilling machines 2/.....	50,649	102,930	89,219	99,453	78,936	51,987	37,076	37,472	37,374	184,118
33351220	Gear cutting machines.....	132,046	197,672	213,507	164,258	137,121	100,612	87,662	79,600	115,226	102,678
	Grinding and polishing machines (except gear-tooth grinding, lapping, polishing, buffing machines).....	477,132	535,508	595,014	541,277	549,580	443,262	360,894	335,121	378,946	433,574
33351230	Lathes 3/.....	297,398	472,943	480,672	451,115	478,003	390,407	305,488	258,885	317,087	355,632
33351240	Milling machines 4/.....	200,495	281,101	280,158	199,667	194,757	138,852	180,174	210,403	201,137	214,254
33351270	Machining centers (multi-function numerically controlled machines).....	597,862	897,331	931,566	779,433	698,780	552,358	485,375	377,941	361,799	436,999
33351280	Station type machines.....	407,136	571,038	551,870	498,592	477,021	455,138	374,772	434,705	450,366	502,066
33351290	Other metal cutting machine tools (except those designed primarily for home workshops, laboratories, etc.).....	291,742	344,562	358,299	315,977	246,237	200,114	166,248	166,535	195,654	141,945
	Metal forming type.....	1,270,698	1,335,312	1,426,964	1,466,629	1,510,541	1,317,073	1,139,581	1,073,994	1,033,035	1,080,181
33351310 pt.	Punching and shearing machines.....	219,988	254,323	319,208	331,382	326,318	294,441	213,402	172,872	180,756	200,050
33351310 pt.	Bending and forming machines....	265,754	262,748	258,479	283,020	256,882	253,219	255,299	270,044	204,357	222,861
33351330	Presses (except forging).....	433,736	399,489	422,396	401,990	379,203	376,398	345,653	288,248	297,889	308,338
33351350 pt.	Forging machines 5/.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	73,947
33351350 pt.	Other metal forming type machines 5/.....	351,220	418,752	426,881	450,237	548,138	393,015	325,227	342,830	350,033	274,985

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

1/Data for "All lathes (turning machines)" and "All milling machines, valued at under \$3,025 each" are included in total "Metal cutting type" for 1995 through 1999.

2/The 1990 data for "Boring machines" was combined with "Drilling machines" to avoid disclosing individual company data.

3/For 1991 through 1999 product code 33351230, "Lathes", excludes the value for product code 3335123031, "All Lathes valued under \$3,025 each."

4/For 1991 through 1999 product code 33351240, "Milling machines", excludes the value for product code 3335124001, "All Milling machines valued under \$3,025 each."

5/For 1991 through 1999 data for "Forging machines" have been combined with "Other metal forming machines" to avoid disclosing individual company data.

Table 2. Total Shipments and Unfilled Orders: 1999 and 1998  
 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1999			1998		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
	Metalworking machinery.....	(X)	182,317	3,783,336	1,917,570	205,059	4,817,066	2,139,958
	Total metal cutting type machine tools.....	(X)	103,729	2,512,638	1,274,057	123,583	3,481,754	1,418,250
	Total metal forming type machine tools.....	(X)	78,588	1,270,698	643,513	81,476	1,335,312	721,708
	Metal cutting type machine tools valued at \$3,025 each or more.....	(X)	31,717	2,467,476	1,270,787	37,491	3,434,208	1,415,614
	Metal cutting type machine tools valued under \$3,025 1/ 2/ 3/.....	(X)	72,012	45,162	3,270	86,092	47,546	2,636
333512A1	Boring and drilling machines.....	36	5,096	104,471	56,991	5,812	176,513	106,539
333512A101	All boring machines valued under \$3,025 each .....	-	(X)	(X)	(X)	(X)	(X)	(X)
	Boring machines valued at \$3,025 each or more:							
333512A103	Horizontal boring, drilling, and milling machines, including floor, table and rail mounted 4/.....	5	(D)	(D)	(D)	215 a/	20,711	(D)
333512A105	Precision boring machines, including horizontal and vertical boring machines 4/ 5/.....	7 b/	1,089	53,822	40,892	(D)	(D) b/	52,010
333512A107	Jig boring and all other boring machines, excluding boring lathes 5/.....	-	(X)	(X)	(X)	745	52,872	(X)
333512A111	All drilling machines valued under \$3,025 each.....	13 b/	3,431 a/	6,949	163 b/	4,067 a/	7,816	179
	Drilling machines valued at \$3,025 each or more:							
333512A113	Vertical upright drilling machines, including plain-upright and heavy duty 6/.....	4	138	1,000	(D)	141 a/	1,582	434
333512A115	Radial drilling machines, including plain and universal.....	-	(X)	(X)	(X)	(X)	(X)	(X)
333512A117	Deep hole drilling machines 6/.....	4 b/	73 c/	10,675 b/	980 a/	99 b/	14,380 a/	933
	Multiple spindle drilling machines:							
333512A119	Adjustable joint and fixed center types 7/.....	6	(D)	(D)	(D)	(D)	(D) b/	743
333512A121	All other automatic multiple spindle drilling machines 8/.....	5 c/	74 b/	16,175 b/	10,369 c/	273 b/	14,018	(D)
333512A123	All other drilling machines, n.e.c. 7/ 8/.....	5 b/	291 b/	15,850	4,587 a/	272 a/	65,134 a/	52,240
3335121100	Gear cutting machines, including gear hobbbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines.....	8	325	132,046	101,550	500	197,672	94,044
33351220	Grinding, polishing, buffing, honing, and lapping machines.....	82	55,129	477,132	270,059	68,389	535,508	223,195
3335122001	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each.....	19	48,612	18,670	104	61,186	20,768	399
	All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more:							
	External cylindrical grinding machines:							
3335122006	Plain, including angular wheel types 9/.....	2	(D)	(D)	(D)	(D)	(D)	(D)
3335122011	Universal 9/.....	4 b/	115	19,468	9,180	121	24,609	7,939
3335122016	Roll, chucking, centerless, and other cylindrical grinding machines .....	11 b/	730	192,959	144,876 b/	557 a/	149,965	123,470
3335122021	Surface grinding machines, rotary table type, horizontal and vertical 10/.....	6	(D)	(D)	(D)	(D)	(D)	(D)
3335122026	Surface grinding machines, reciprocating table type, including face grinders, horizontal and vertical 11/.....	5	(D)	(D)	(D)	(D)	(D) c/	432
3335122031	Surface grinding machines, reciprocating table type, including face grinders, hand surface type 11/.....	2 b/	780 b/	7,473	480 a/	893 a/	10,852 b/	779
3335122036	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders 10/.....	5 b/	2,006 c/	23,049 c/	17,169 b/	1,727 b/	48,636 b/	6,338
3335122041	Tool and cutter grinding machines.....	13 a/	519	76,524	9,384 a/	653 a/	115,798	12,294
3335122046	Drill point grinders 12/.....	3	(D)	(D)	(X)	(D)	(D)	(D)
3335122051	All other grinding machines, n.e.c., including internal cylindrical type, planer type, and thread grinding machines 12/.....	19	1,095 a/	67,883	28,248 b/	1,912 b/	92,046	25,290
3335122056	Honing and lapping machines, internal, including combination bore, hone, and external 13/.....	6	(D)	(D)	(D)	(D)	(D)	(D)
3335122061	Flat surface lapping machines (except gear lapping) 13/.....	4	820	32,223	20,967	888	30,259 b/	13,285
3335122066	All other honing and lapping or polishing and buffing machines, including speed lathes and multistation type.....	15	452	38,883	39,651	452	42,575	32,969

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Product code	Product description	No. of cos.	1999			1998		
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
33351230	Lathes.....	(X)	3,807	297,398	70,230	5,089	472,943	80,146
	Numerically controlled:							
	Horizontal.....	11	2,550	225,509	40,089	3,829	351,773	34,951
3335123001	Multiple spindle NC turning machines 14/ 15/.....	3	(D)	(D)	(D)	(D)	(D)	(D)
	Single spindle NC turning machines:							
	Chuck sizes up to and including 6 inches 15/ 16/.....	2	(D)	(D)	(D)	(D)	(D)	(D)
3335123011	Chuck sizes over 6 inches but less than 10 inches 16/.....	7	1,834	146,257	19,046	2,404	201,496	16,079
3335123016	Chuck sizes from 10 inches but less than 15 inches.....	8	628	59,022	16,682	1,013	104,611	7,597
3335123021	Chuck sizes 15 inches and over 14/ 15/.....	2	88	20,230	4,361	a/ 412	45,666	11,275
3335123026	Vertical NC turning machines.....	6	147	54,328	18,454	228	86,902	29,550
3335123099	Nonnumerically controlled turning machines 1/.....	9	1,110	17,561	11,687	1,032	34,268	15,645
3335123031	All lathes (turning machines) valued under \$3,025 each 1/.....	2	(D)	(D)	(X)	(D)	(D)	(D)
	All lathes (turning machines) valued at \$3,025 each or more:							
	Engine or toolroom lathes, all types 16/.....	3	(D)	(D)	(D)	(D)	(D)	(D)
	Automatic lathes:							
	Single spindle.....	-	(X)	(X)	(X)	(X)	(X)	(X)
	Multiple spindle:							
	Bar (screw) machines 17/.....	2	(D)	(D)	(D)	(D)	(D)	(D)
3335123051	Chucking machines 17/.....	-	(X)	(X)	(X)	(D)	(D)	(X)
3335123056	All other horizontal turning machines, including turret lathes and automatic between center lathes 17/.....	4	(D)	(D)	(D)	(D)	(D)	(X)
3335123061	All vertical turning machines 17/.....	1	b/ 1,110	17,561	11,687	b/ 1,032	34,268	15,645
33351240	Milling machines 2/.....	23	2,749	200,495	71,637	3,416	281,101	174,928
3335124001	All milling machines valued under \$3,025 each 2/.....	4	(D)	(D)	(D)	(D)	(D)	(D)
	All milling machines valued at \$3,025 or more:							
	General purpose, knee milling machines, all types 18/.....	7	(D)	(D)	(D)	(D)	(D)	(D)
	Automatic:							
	Single spindle, multiple spindle and special purpose machines 18/.....	6	(D)	(D)	b/ 1,852	a/ 100	14,103	b/ 5,964
3335124016	Profile machines and duplicators 18/.....	3	(D)	(D)	(D)	(D)	(D)	(D)
3335124021	All other milling machines, n.e.c., including planer type and thread milling machines 18/.....	12	2,749	200,495	69,785	3,316	b/ 266,998	c/ 168,964
33351270	Machining centers.....	24	7,071	597,862	149,489	9,175	897,331	182,012
	Drill, mill, and bore, vertical (automatic tool change):							
	Y-axis travel less than 20 inches.....	9	2,347	137,235	9,157	3,775	237,779	10,416
3335127006	Y-axis travel 20 inches through 26 inches.....	8	2,156	158,588	27,806	2,899	233,672	13,918
3335127011	Y-axis travel over 26 inches.....	7	411	59,129	12,789	604	87,100	14,265
	Drill, mill, and bore, horizontal (automatic tool change):							
	400mm pallet and smaller 19/.....	4	(D)	(D)	(D)	284	64,643	13,913
3335127021	401mm-500mm pallet.....	4	226	44,382	4,369	333	84,372	14,224
3335127026	501mm-630mm pallet 19/.....	3	(D)	(D)	(D)	(D)	(D)	(D)
3335127031	631mm-800mm pallet 19/.....	3	250	86,313	15,525	145	78,131	18,746
3335127036	801mm-1000mm pallet 20/.....	3	(D)	(D)	(D)	(D)	(D)	4,213
3335127041	Over 1000mm pallet 20/.....	4	67	50,911	35,948	66	69,611	31,743
3335127046	All other machining centers, including special machining, special adapting of standard machining and machining centers with indexing turret.....	7	b/ 1,614	61,304	43,895	b/ 1,069	42,023	c/ 60,574
33351280	Station type machines.....	18	272	407,136	480,391	422	571,038	499,105
3335128001	Dial or rotary, trunnion, and center column.....	10	97	116,283	95,573	124	119,210	60,259
3335128006	Transfer 21/.....	10	(D)	(D)	340,450	(D)	(D)	(D)
3335128011	Other station type, n.e.c. 21/.....	4	175	290,853	44,368	298	b/ 451,828	b/ 438,846

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			Total shipments		Unfilled orders (value)		Total shipments		Unfilled orders (value)	
			Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
33351290	Other metal cutting machine tools 3/.....	62	23,836	291,742	70,707	25,858	344,562	56,223		
3335129001	Other metal cutting machine tools, n.e.c. valued under \$3,025 3/.....	17	b/ 14,525	c/ 15,187	(D) a/	15,917	c/ 13,876	(D)		
	Other metal cutting machine tools, n.e.c. valued at \$3,025 each or more:									
3335129006	Broaching machines.....	7	a/ 84	a/ 18,894	a/ 19,936	b/ 77	b/ 11,600	b/ 6,851		
	Sawing and cutoff machines:									
3335129011	Power hack saws 22/.....	2	(D)	(D)	(D)	(D)	(D)	(D)		
3335129016	Circular cutoff saws (cold) 22/.....	3	(D)	(D)	(D)	(D)	(D)	(D)		
3335129021	Band saws 22/.....	11	b/ 4,293	a/ 50,732	(D)	4,401	61,070	b/ 9,177		
3335129026	All other sawing and cutoff machines 22/.....	10	726	36,519	a/ 19,352	908	35,645	9,197		
3335129031	Spark erosion, ultrasonic, and electrolytic machines, all types.....	7	929	63,653	7,484	1,217	93,498	6,330		
3335129036	Miscellaneous metal cutting machine tools.....	24	c/ 3,279	106,757	23,935	c/ 3,338	128,873	24,668		
	Metal forming type machine tools valued at \$3,025 or more.....	(X)	20,713	1,224,479	640,631	20,331	1,288,160	719,256		
	Metal forming type machine tools valued under \$3,025 23/.....	(X)	57,875	46,219	2,882	61,145	47,152	2,452		
33351310	Punching, shearing, bending, and forming machines.....	77	16,319	485,742	171,968	16,353	517,071	176,000		
3335131001	All punching and shearing machines valued under \$3,025 each.....	11	b/ 646	b/ 1,535	b/ 102	c/ 650	b/ 1,218	b/ 107		
	All punching and shearing machines valued at \$3,025 each or more:									
	Power operated only:									
3335131006	Punches, including combination punching and shearing machines.....	17	a/ 3,833	a/ 43,856	3,334	b/ 3,976	a/ 48,443	4,086		
3335131011	Punching machines fixed position and two axes positioning table 24/.....	5	(D)	(D)	(D)	484	108,015	11,947		
	Plate shearing machines:									
3335131016	Mechanical 24/ 25/.....	5	525	127,043	30,419	(D)	(D)	(D)		
3335131021	Hydraulic.....	11	a/ 1,273	24,011	4,495	a/ 1,266	26,545	5,381		
3335131026	Other power operated punching and shearing machines 25/.....	11	b/ 1,710	b/ 23,543	8,350	b/ 1,969	a/ 70,102	43,999		
3335131031	All bending and forming machines, power operated valued at under \$3,025 each 23/.....	7	2,279	3,256	260	2,456	3,081	(D)		
	All bending and forming machines, power operated valued at \$3,025 each or more:									
3335131036	Press brakes, all types.....	8	a/ 973	72,752	17,183	996	66,507	15,515		
3335131041	Bending rolls, sheet, and plate.....	7	b/ 573	b/ 6,770	b/ 1,614	c/ 576	c/ 10,378	a/ 2,434		
3335131046	Bending rolls, angles, bars, shapes, and tubes 26/.....	5	(D)	(D)	(D)	(D)	(D)	(D)		
3335131051	Rotary bending and forming machines, including rotary head 26/.....	12	a/ 909	81,312	19,925	b/ 885	81,290	b/ 15,394		
3335131056	Ram and press bending machines 27/.....	4	(D)	(D)	(D)	(D)	(D)	(D)		
3335131061	Other bending and forming machines, including folders 27/.....	18	3,598	101,664	86,286	3,095	101,492	77,137		
33351330	Presses (except forgings).....	43	12,301	433,736	293,974	12,559	399,489	389,549		
3335133001	All presses valued under \$3,025 each 23/.....	7	a/ 8,752	a/ 5,169	86	b/ 9,198	b/ 6,297	(D)		
	All presses valued at \$3,025 each or more:									
	Mechanical presses:									
	Open back inclinable, gap type:									
3335133006	50 tons and under.....	7	a/ 348	b/ 9,677	c/ 2,065	498	a/ 9,424	a/ 2,101		
3335133011	51 tons to 120 tons 28/.....	6	b/ (D)	(D)	b/ 1,128	b/ 116	b/ 6,756	c/ 1,935		
3335133016	121 tons and over 28/.....	1	(D)	(D)	(D)	(D)	(D)	(D)		
	Vertical straight sided and arch frame single action:									
3335133021	Single point 29/.....	3	(D)	(D)	(D)	(D)	(D)	(D)		
	Two point:									
3335133026	300 tons and under 29/.....	3	b/ 225	a/ 17,329	b/ 12,063	109	a/ 23,315	c/ 13,547		
3335133031	301 tons and over 28/.....	2	(D)	(D)	(D)	(D)	(D)	(D)		
3335133036	Automatic presses, strip or coil fed 28/.....	7	(D)	(D)	(D)	(D)	(D)	38,809		
3335133041	All other mechanical presses 28/.....	4	b/ 769	287,282	221,779	554	254,278	278,827		
	Hydraulic presses:									
	Vertical single action, all tonnages:									
3335133046	Housing or straight side type 30/.....	5	35	c/ 27,017	(D)	(D)	(D)	16,256		
3335133051	Column type (open rod) 30/.....	8	a/ 73	b/ 23,407	37,523	a/ 154	39,338	14,654		
	Gap or C-frame:									
3335133056	15 tons and under.....	8	707	11,588	2,202	766	11,784	870		
3335133061	16 tons to 35 tons 31/.....	6	142	6,836	(D)	118	4,535	1,039		
3335133066	Over 35 tons 31/.....	8	168	12,046	a/ 4,094	134	9,595	b/ 6,384		
3335133071	Other hydraulic and pneumatic presses, including horizontal.....	11	b/ 1,082	b/ 33,385	13,034	c/ 912	a/ 34,167	15,127		

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Product code	Product description	No. of cos.	1999			1998		
			Quantity	Value	Unfilled orders (value)	Quantity	Value	Unfilled orders (value)
3335135076	Forging machines, including forging presses and die stamping presses 32/.....	5	(D)	(D)	(D)	(D)	(D)	(D)
33351350	All other metal forming type machine tools.....	41	49,968	351,220	177,571	52,564	418,752	156,159
3335135001	All other metal forming type machine tools valued under \$3,025 each.....	5	a/ 46,198	a/ 36,259	2,434	a/ 48,841	a/ 36,556	1,819
	All other metal forming type machine tools valued at \$3,025 each or more:							
3335135006	Thread rolling machinery 32/.....	5	(D)	(D)	6,900	a/ 115	b/ 29,003	5,387
3335135011	Metal container-making machinery.....	5	201	38,644	21,074	380	63,558	23,952
3335135016	Die casting machines, all types 32/.....	4	(D)	(D)	(D)	(D)	(D)	(D)
3335135021	Riveting machines.....	9	b/ 1,098	c/ 30,304	c/ 3,121	a/ 1,128	30,830	b/ 2,975
3335135026	All other metal forming type machine tools, n.e.c. 32/.....	20	b/ 2,471	246,013	a/ 144,042	b/ 2,100	258,805	122,026

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. X Not applicable.

- 1/Product code 3335123031 is included in the total for "Metal cutting type machine tools valued under \$3,025."
- 2/Product code 3335124001 is included in the total for "Metal cutting type machine tools valued under \$3,025."
- 3/"Unfilled orders (value)" for product code 3335129001 is included in the total for "Metal cutting type machine tools valued under \$3,025."
- 4/Product codes 333512A103 and 333512A105 for 1999 and "Unfilled orders (value)" for 1998 are combined to avoid disclosing individual company data.
- 5/Product codes 333512A105 and 333512A107 for "Total shipments" for 1998 were combined to avoid disclosing individual company data.
- 6/"Unfilled orders (value)" for product codes 333512A113 and 333512A117 for 1999 are combined to avoid disclosing individual company data.
- 7/Product codes 333512A119 and 333512A123 for 1999, and shipments for 1998 are combined to avoid disclosing individual company data.
- 8/"Unfilled orders (value)" for product codes 333512A121 and 333512A123 for 1998 were combined to avoid disclosing individual company data.
- 9/Product codes 3335122006 and 3335122011 are combined to avoid disclosing individual company data.
- 10/Product codes 3335122021 and 3335122036 are combined to avoid disclosing individual company data.
- 11/Product codes 3335122026 and 3335122031 for 1999 and "Total shipments" for 1998 are combined to avoid disclosing individual company data.
- 12/Product codes 3335122046 and 3335122051 are combined to avoid disclosing individual company data.
- 13/Product codes 3335122056 and 3335122061 are combined to avoid disclosing individual company data.
- 14/Product codes 3335123001 and 3335123021 for 1999 are combined to avoid disclosing individual company data.
- 15/Product codes 3335123001, 3335123006 and 3335123021 for 1998 were combined to avoid disclosing individual company data.
- 16/Product codes 3335123006 and 3335123011 for 1999 are combined to avoid disclosing individual company data.
- 17/Product codes 3335123036, 3335123046, 3335123056, and 3335123061 for 1998 and 1999, and product code 3335123051 for 1998 are combined to avoid disclosing individual company data.
- 18/Product codes 3335124006, 3335124016, and 3335124021 for 1998 and 1999 and "Total shipments" for product code 3335124011 for 1999, are combined to avoid disclosing individual company data.
- 19/Product codes 3335127016, 3335127026 and 3335127031 are combined for 1999, and 3335127026 and 3335127031 were combined for 1998 to avoid disclosing individual company data.
- 20/Product codes 3335127036 and 3335127041 are combined for 1999 and "Total shipments" for 1998 to avoid disclosing individual company data.
- 21/Product codes 3335128006 and 3335128011 for 1998 and "Total shipments" for 1999 are combined to avoid disclosing individual company data.
- 22/Product codes 3335129011, 3335129016, and 3335129026, and product code 3335129021 for 1999 "Unfilled orders (value)" were combined to avoid disclosing individual company data.
- 23/"Unfilled orders (value)" for product codes 3335131031 and 3335133001 for 1998 were included in the total for "Metal forming type machine tools valued under \$3,025."
- 24/Product codes 3335131011 and 3335131016 for 1999 are combined to avoid disclosing individual company data.
- 25/Product codes 3335131016 and 3335131026 for 1998 were combined to avoid disclosing individual company data.
- 26/Product codes 3335131046 and 3335131051 are combined to avoid disclosing individual company data.
- 27/Product codes 3335131056 and 3335131061 are combined to avoid disclosing individual company data.
- 28/Product codes 3335133016, 3335133031, 3335133036, and 3335133041, and product code 3335133011 for "Total shipments" for 1999, and product codes 333513016, 3335133036, and 3335133041 for 1998 are combined to avoid disclosing individual company data.
- 29/Product codes 3335133021 and 3335133026 are combined to avoid disclosing individual company data.
- 30/"Unfilled orders (value)" for product codes 333513046 and 333513051 for 1999, and "Total shipments" for 1998 are combined to avoid disclosing individual company data.
- 31/"Unfilled orders (value)" for product codes 3335133061 and 3335133066 for 1999 are combined to avoid disclosing individual company data.
- 32/Product codes 3335135076, 3335135016, and 3335135026, and product code 3335135006 for "Total shipments" for 1999, and product codes 3335135076, 3335135016, and 3335135026 for 1998 are combined to avoid disclosing individual company data.

Note: The 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 All Export Shipments  
 [Quantity in units. Value in thousands of dollars]

Product description	1999			1998		
	Shipments of numerically controlled machines		Export shipments (value) 1/	Shipments of numerically controlled machines		Export shipments (value) 1/
	Quantity	Value		Quantity	Value	
Metalworking machinery.....	13,969	1,883,769	491,942	18,235	2,571,845	643,535
Metal cutting type machine tools 2/.....	12,445	1,619,557	327,738	16,945	2,318,124	424,169
Boring and drilling machines 2/.....	27	21,131	(D)	118	38,346	(D)
Gear cutting machines 2/.....	312	129,470	(D)	435	180,099	(D)
Grinding, polishing, buffing, and lapping lapping machines.....	910	279,560	60,697	1,276	264,408	58,030
Valued under \$3,025 each, external cylindrical grinding machines (plain and universal), and surface grinding machines, all types.....	835	275,106	48,901	1,196	259,563	48,676
Honing, lapping, polishing and buffing machines.....	75	4,454	11,796	80	4,845	9,354
Horizontal NC turning machines, valued at \$3,025 or more.....	2,550	225,509	39,263	3,829	351,773	56,433
Single spindle NC turning machines:						
Chuck sizes up to and including 6 inches 3/ 4/.....	(D)	(D)	(D)	(D)	(D)	(D)
Chuck sizes over 6 inches but less than 10 inches 4/.....	1,834	146,257	27,022	2,404	201,496	40,083
Chuck sizes over 10 inches but less than 15 inches.....	628	59,022	5,791	1,013	104,611	10,730
Chuck sizes 15 inches and over and multiple spindle 3/.....	88	20,230	6,450	412	45,666	5,620
Vertical NC turning machines, valued at \$3,025 or more.....	147	54,328	1,147	228	86,902	3,529
Nonnumerically controlled turning machines, valued at \$3,025 or more 2/.....	(X)	(X)	(D)	(X)	(X)	2,124
Milling machines.....	876	164,007	36,156	1,127	239,750	20,841
Machining centers.....	7,071	597,862	94,103	9,175	897,331	155,088
Drill, mill and bore, vertical (automatic tool change).....	4,914	354,952	64,878	7,278	558,551	102,153
Y-axis travel less than 20 inches.....	2,347	137,235	26,330	3,775	237,779	49,754
Y-axis travel 20 inches through 26 inches.....	2,156	158,588	29,010	2,899	233,672	39,976
Y-axis travel over 26 inches.....	411	59,129	9,538	604	87,100	12,423
Drill, mill and bore, horizontal (automatic tool change) 5/.....	543	181,606	29,225	828	296,757	52,935
400mm pallet and smaller 5/ 6/.....	(D)	(D)	(D)	284	64,643	(D)
401mm-500mm pallet 5/.....	226	44,382	(D)	333	84,372	(D)
501mm-630mm pallet 5/ 6/.....	(D)	(D)	(D)	(D)	(D)	(D)
631mm-800mm pallet 5/ 6/.....	250	86,313	(D)	145	78,131	(D)
801mm-1000mm pallet 5/ 7/.....	(D)	(D)	(D)	(D)	(D)	(D)
Over 1000mm pallet 5/ 7/.....	67	50,911	(D)	66	69,611	(D)
All other machining centers 2/.....	1,614	61,304	(D)	1,069	42,023	(D)
Station type machines, and other metal cutting machine tools, n.e.c.....	552	147,690	47,508	757	259,515	52,000
Metal forming type machine tools.....	1,524	264,212	164,204	1,290	253,721	219,366
Punching, shearing, bending, and forming machines.....	1,070	143,329	78,652	914	168,184	75,608
Punching and shearing machines.....	411	92,030	29,859	529	114,756	29,619
All bending and forming machines, power operated.....	659	51,299	48,793	385	53,428	45,989
Presses (except forgings).....	169	44,101	12,632	207	51,166	30,594
Forging machines, and all other metal forming type machine tools.....	285	76,782	72,920	169	34,371	113,164

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. X Not applicable.

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

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

3/ Data for 1998 included in "Chuck sizes 15 inches and over, and multiple spindle."

4/ Data for 1999 included in "Chuck sizes over 6 inches but less than 10 inches."

5/ Data for export shipments included in "Drill, mill and bore, horizontal (automatic tool change)."

6/ Data included in "631mm-800mm pallet."

7/ Data included in "Over 1000mm pallet."

Table 4a. Shipments, Exports, and Imports of Metalworking Machinery: 1999  
 [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 under \$3,025 each.....	(X)	(X)	69,773	2,733	734	1,152
Valued at \$3,025 each or more .....	1,089	53,822	297	14,596	1,488	99,432
Drilling machines:						
Valued under \$3,025 each.....	3,431	6,949	4,924	3,688	152,196	16,750
Valued at \$3,025 each or more.....	576	43,700	864	32,575	1,669	68,707
Gear cutting machines.....	325	132,046	3,920	37,921	1,241	75,348
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	48,612	18,670	44,232	7,794	975,539	33,367
Valued at \$3,025 each or more.....	6,517	458,462	3,740	104,677	9,045	402,083
Lathes (turning machines) under \$3,025.....	(D)	(D)	1,514	2,001	17,704	11,535
Horizontal NC turning machines.....	2,550	225,509	438	48,184	5,985	629,256
Vertical NC turning machines.....	147	54,328	56	8,956	712	99,289
Nonnumerically controlled turning machines:						
Engine or toolroom lathes, all types 5/.....	(D)	(D)	74	1,229	4,548	37,669
Single spindle automatic lathes .....	(X)	(X)	72	1,600	248	6,295
Multiple spindle automatic lathes 5/.....	(D)	(D)	9	690	169	19,646
All other horizontal turning machines .....	(X)	(X)	2,919	23,128	575	15,298
All vertical lathes and vertical boring machines 5/.....	1,110	17,561	338	7,817	474	23,339
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	4,209	5,895	9,934	7,681
Valued at \$3,025 each or more.....	2,749	200,495	2,056	59,251	6,183	136,283
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.....	4,503	295,823	285	36,133	2,906	244,690
Y-axis travel 26 inches and over.....	411	59,129	8	1,794	639	95,250
Drill, mill, and bore, horizontal (automatic tool change).....	543	181,606	57	16,222	1,976	470,746
Other machining centers.....	1,614	61,304	550	41,601	88	29,778
Station type machines.....	272	407,136	147	67,182	469	217,678
Other metal cutting machine tools:						
Valued under \$3,025 each.....	14,525	15,187	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	9,311	276,555	4,857	122,576	9,401	302,153
Punching and shearing machines:						
Valued under \$3,025 each.....	646	1,535	4,379	1,856	7,850	3,380
Valued at \$3,025 each or more.....	7,136	228,533	2,289	94,465	2,763	178,672
Bending and forming machines:						
Valued under \$3,025 each.....	2,279	3,256	5,648	4,770	52,505	5,769
Valued at \$3,025 each or more.....	6,053	262,498	2,121	74,893	6,439	276,368
Presses (except forging presses).....	12,301	433,736	10,256	87,349	17,572	255,972
Forging machines, including presses 6/.....	(D)	(D)	385	82,243	5,953	120,325
All other metal forming type machine tools:						
Valued under \$3,025 each.....	42,407	31,421	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines 6/.....	(D)	(D)	1,182	20,671	1,037	76,285
Thread rolling machines 6/.....	(D)	(D)	56	1,882	172	14,404
Other metal forming machines 6/.....	2,471	246,013	(NA)	(NA)	(NA)	(NA)

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

1/For a comparison of NAICS-based product codes, schedule B export numbers, and HTSUSA import numbers, see Table 4 in the first quarter 2000 report for this series, MQ333W(00)-1, issued June 2000.

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

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

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

5/Data included with "All vertical lathes and vertical boring machines."

6/Data included with "Other metal forming machines."



Table 4b. Shipments, Exports, and Imports of Metalworking Machinery: 1998  
 [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 under \$3,025 each.....	(X)	(X)	6,871	629	3,633	900
Valued at \$3,025 each or more .....	960	73,583	469	22,769	938	103,026
Drilling machines:						
Valued under \$3,025 each.....	4,067	7,816	5,384	4,031	177,669	19,710
Valued at \$3,025 each or more.....	785	95,114	1,055	32,884	1,821	66,547
Gear cutting machines.....	500	197,672	2,257	49,340	1,038	74,222
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	61,186	20,768	41,119	9,493	889,288	33,332
Valued at \$3,025 each or more.....	7,203	514,740	3,656	132,544	10,064	396,261
Lathes (turning machines) under \$3,025.....	(D)	(D)	1,199	1,949	17,766	14,642
Horizontal NC turning machines.....	3,829	351,773	487	49,334	9,948	935,924
Vertical NC turning machines.....	228	86,902	49	6,966	597	118,795
Nonnumerically controlled turning machines:						
Engine or toolroom lathes, all types 5/.....	(D)	(D)	81	943	5,007	50,184
Single spindle automatic lathes .....	(X)	(X)	44	1,552	253	4,279
Multiple spindle automatic lathes 5/.....	(D)	(D)	22	1,970	106	18,678
All other horizontal turning machines 5/.....	(D)	(D)	403	7,684	700	15,299
All vertical lathes and vertical boring machines 5/.....	1,032	34,268	469	10,814	718	29,338
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	6,713	9,912	12,349	11,248
Valued at \$3,025 each or more.....	3,416	281,101	1,002	50,473	8,030	129,969
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.....	6,674	471,451	682	81,992	4,796	383,815
Y-axis travel 26 inches and over.....	604	87,100	18	4,324	1,081	140,311
Drill, mill, and bore, horizontal (automatic tool change).....	828	296,757	45	9,649	2,488	628,115
Other machining centers.....	1,069	42,023	516	42,245	124	56,412
Station type machines.....	422	571,038	133	67,369	348	140,315
Other metal cutting machine tools:						
Valued under \$3,025 each.....	15,917	13,876	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	9,941	330,686	5,456	131,909	8,722	338,266
Punching and shearing machines:						
Valued under \$3,025 each.....	650	1,218	2,935	1,469	8,589	3,691
Valued at \$3,025 each or more.....	7,347	258,598	2,439	110,080	2,539	193,559
Bending and forming machines:						
Valued under \$3,025 each.....	2,456	3,081	9,773	4,611	37,819	5,386
Valued at \$3,025 each or more.....	5,552	259,667	2,798	88,848	9,370	288,626
Presses (except forging presses).....	12,559	399,489	9,073	92,732	22,998	283,981
Forging machines, including presses 6/.....	(D)	(D)	471	88,342	2,061	94,975
All other metal forming type machine tools:						
Valued under \$3,025 each.....	42,407	31,421	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines 6/.....	(D)	(D)	1,543	32,515	5,320	84,688
Thread rolling machines .....	115	29,003	341	9,346	146	15,620
Other metal forming machines 6/.....	2,100	258,805	(NA)	(NA)	(NA)	(NA)

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

1/For a comparison of SIC-based product codes, schedule B export numbers, and HTSUSA import numbers, see Table 4 in the first quarter 1999 report for this series, MQ333W(99)-1, issued June 8, 1999.

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

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

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

5/Data included with "All vertical lathes and vertical boring machines."

6/Data included with "Other metal forming machines."

Table 5. Comparison of the North American Industry Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
	Boring machines, excluding multifunction NC machines, machining centers:		
333512A101	All boring machines valued under \$3,025 each	8459.39.0020 8459.40.0020	8459.39.0020 8459.40.0020
	Machines valued at \$3,025 each or more:		
333512A103	Horizontal boring, drilling, and milling machines, includes floor, table and rail mounted	8459.31.0010 8459.31.0040 8459.39.0040	8459.31.0010 8459.31.0040 8459.39.0040
		8459.10.0000	8459.10.0000
333512A105	Precision boring machines, including horizontal, vertical, and all other precision boring machines	8459.31.0070 8459.39.0050	8459.31.0070 8459.39.0050
333512A107	Jig boring and all other boring machines (except boring lathes)	8459.40.0040 8459.40.0050 8459.40.0070 8459.40.0080	8459.40.0040 8459.40.0050 8459.40.0070 8459.40.0080
	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
333512A115	Radial drilling machines, including plain and universal	8459.29.0050	8459.29.0050
	Multiple spindle drilling machines (cluster of spindles driven from one central power unit):		
333512A119	Adjustable joint and fixed center type	8459.29.0040	8459.29.0040
333512A121	All other automatic multiple spindle drilling machines, including indexing turret head (fixed column and table)		
333512A117	Deep hole drilling machines		
333512A123	All other drilling machines, n.e.c., including bench type sensitive, vertical n.e.c., radial n.e.c.	8459.21.0080 8459.29.0090	8459.21.0080 8459.29.0090
3335121100	Gear cutting machines, includes 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):		
3335122001	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

Continued

Table 5. Comparison of the North American Industry Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
	Machines valued at \$3,025 each or more:		
	External cylindrical grinding machines:		
3335122006	Plain, including angular wheel types	8460.21.0080	8460.21.0080
3335122011	Universal	8460.29.0010	8460.29.0010
3335122016	Roll, chucking, centerless, and other cylindrical grinding machines	8460.29.0030	8460.29.0030
3335122036	All other disc grinders, includes bench, floor, snag, double spindle grinders, and abrasive belt grinders		
3335122051	All other grinding machines n.e.c., including internal cylindrical type, planer type, and thread grinding machines	8460.29.0050	8460.29.0050
	Surface grinding machines:		
	Reciprocating table type, including face grinders:		
3335122026	Horizontal and vertical	8460.11.0080	8460.11.0080
3335122031	Hand surface type	8460.19.0010	8460.19.0010
3335122021	Rotary table type, horizontal and vertical	8460.19.0050	8460.19.0050
3335122041	Tool and cutter grinding machines, including universal and special	8460.31.0080	8460.31.0080
3335122046	Drill point grinders	8460.39.0050	8460.39.0050
	Honing and lapping machines, except gear honing and lapping:		
3335122056	Internal, including combination bore, hone, and external	8460.40.0060	8460.40.4060
		8460.40.0080	8460.40.8080
3335122061	Flat surface lapping machines, except gear lapping	8460.90.0060	8460.90.4060
3335122066	All other honing and lapping or polishing and buffing machines (including speed lathes and multistation type)	8460.90.0080	8460.90.8080
	Lathes (turning machines):		
3335123031	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:		
3335123001	Multiple spindle NC turning machine	8458.11.0010	8458.11.0010
	Single spindle NC turning machine:		
3335123006	Chuck sizes up to and including 6"	8458.11.0030	8458.11.0030
3335123011	Chuck sizes over 6" but less than 10"	8458.11.0050	8458.11.0050
3335123016	Chuck sizes from 10" but less than 15"	8458.11.0090	8458.11.0090
3335123021	Chuck sizes 15" and over		
3335123026	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		
	Horizontal spindle:		
3335123036	Engine or toolroom lathes all types	8458.19.0030	8458.19.0030
	Automatic lathes:		
3335123041	Single spindle	8458.19.0050	8458.19.0050
	Multiple spindle:		
3335123046	Bar (screw) machines		
3335123051	Chucking machines	8458.19.0070	8458.19.0070
3335123056	All other horizontal turning machines	8458.19.0090	8458.19.0090
	Vertical spindle:	8458.99.1050	8458.99.1050

Table 5. Comparison of the North American Industry Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
3335123061	All vertical turning machines	8458.99.5090	8458.99.5090
	Milling machines, excluding machining centers:		
3335124001	All milling machines valued under \$3,025 each	8459.59.0020	8459.59.0020
	Machines valued at \$3,025 each or more:	8459.69.0020	8459.69.0020
3335124006	General purpose, knee milling machines all types	8459.51.0080	8459.51.0080
	Automatic and manufacturing bed type:	8459.59.0030	8459.59.0030
3335124011	Single spindle, multiple spindle and special purpose machines	8459.61.0080	8459.61.0080
3335124016	Profile machines and duplicators, including spar and skin millers	8459.69.0050	8459.69.0050
		8459.69.0070	8459.69.0070
3335124021	All other milling machines, n.e.c., (including planer type and thread milling machines)	8459.69.0090	8459.69.0090
	Machining centers (multifunctions NC machines):		
	Drill, mill, and bore, vertical (automatic tool change):		
3335127001	Y-axis travel less than 20"	8457.10.0015	8457.10.0015
3335127006	Y-axis travel 20" through 26"		
3335127011	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):		
3335127016	400mm pallet and smaller	8457.10.0035	8457.10.0055
3335127021	401mm-500mm pallet		8457.10.0060
3335127026	501mm-630mm pallet		8457.10.0065
3335127031	631mm-800mm pallet		8457.10.0070
3335127036	801mm-1000mm pallet		
3335127041	Over 1000mm pallet		
3335127046	All other machining centers, incld. special machining centers, special adapting of standard machining centers, and machining centers with indexing turret	8457.10.0045	8457.10.0075
	Station type machines:		
3335128001	Dial or rotary, trunnion, and center column	8457.20.0010	8457.20.0010
3335128006	Transfer (free, palletized shuttle)	8457.20.0090	8457.20.0090
3335128011	Other station type n.e.c.	8457.30.0010	8457.30.0010
		8457.30.0090	8457.30.0090
	Other metal cutting machine tools:	8459.70.0060	8459.70.8060
3335129001	Other metal cutting machine tools n.e.c. valued under \$3,025	8461.10.0040	8461.10.8040
		8461.20.0070	8461.20.8070
		8461.30.0040	8461.30.8040
		8461.50.0020	8461.50.8020
		8461.90.0020	8461.90.8020
	Machines valued at \$3,025 each or more:		
3335129006	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:		
3335129011	Power hack saws	8461.50.0050	8461.50.4050
3335129016	Circular cutoff saws (cold)	8461.50.0090	8461.50.8090
3335129021	Band saws		

Continued

Table 5. Comparison of the North American Industry Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
3335129026	All other sawing and cutoff machines	8456.20.0000	8456.20.1010
3335129031	Spark erosion, ultrasonic and electrolytic machines all types	8456.30.0000 8456.99.3005 8456.99.3040 8456.99.3060 8456.99.3080	8456.20.1050 8456.30.1020 8456.30.1050 8456.30.1070 8456.99.3005 8456.99.3040 8456.99.3060 8456.99.3080
3335129036	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	8459.70.0020 8459.70.0080 8461.10.0060 8461.10.0080 8461.20.0010 8461.20.0090 8461.90.0040 8461.90.0080	8459.70.4000 8459.70.8080 8461.10.4060 8461.10.8080 8461.20.4000 8461.20.8090 8461.90.4040 8461.90.8080
3335131001	Punching and shearing machines: All punching and shearing machines valued under \$3,025 each Machines valued at \$3,025 or more: Power operated only: Plate shearing machines (squaring, slitting, etc.):	8462.39.0020 8462.49.0020	8462.39.0020 8462.49.0020
3335131016	Mechanical		
3335131021	Hydraulic	8462.31.0080	8462.31.0080
3335131006	Punches, including combination punching and shearing machines	8462.39.0050 8462.41.0080	8462.39.0050 8462.41.0080
3335131011	Punching machines fixed position and two axes positioning table	8462.49.0050	8462.49.0050
3335131026	Other power operated punching & shearing mach.		
3335131031	Bending and forming machines: All bending and forming machines valued under \$3,025 Machines valued at \$3,025 each or more:	8462.29.0020	8462.29.8025
3335131036	Press brakes all types	8462.21.0080	8462.21.4085
3335131041	Bending rolls, sheet, and plate	8462.29.0030	8462.21.8085
3335131046	Bending rolls, angles, bars, shapes, and tubes	8462.29.0040	8462.29.4085
3335131051	Rotary bending and forming machines, including rotary head	8462.29.0050	8462.29.8035 8462.29.8045
3335131056	Ram and press bending machines (pipe, bar, etc.)		8462.29.8055
3335131061	Other bending and forming machines, incld. folders		
3335133001	Presses except forging presses: All presses valued under \$3,025 each Machines valued at \$3,025 each or more: Mechanical Open back inclinable (gap type):	8462.99.0020	8462.99.8020
3335133006	50 tons and under	8462.99.0030	8462.99.4030
3335133011	51 tons to 120 tons	8462.99.0040	8462.99.8035
3335133016	121 tons and over		8462.99.8045

Continued

Table 5. Comparison of the North American Industry Classification-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
	Machines valued at \$3,025 each or more, continued:		
	Vertical straight sided and arch frame, excluding knuckle joint, including cam and crank:		
	Single action:		
3335133021	Single point	8462.99.0060	8462.99.8060
	Two point:		
3335133026	300 tons and under		
3335133031	301 tons and over		
3335133036	Automatic presses, strip or coil field		
3335133041	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		
3335133046	Housing or straight side type		
3335133051	Column type (open rod)		
	Gap or C-frame:		
3335133056	15 tons and under	8462.91.0060	8462.91.4060
3335133061	16 tons to 35 tons	8462.91.0090	8462.91.8090
3335133066	Over 35 tons		
3335133071	Other hydraulic and pneumatic presses, including horizontal		
3335135076	Forging machines, (including forging presses and die stamping presses)	8462.10.0030	8462.10.0030
		8462.10.0050	8462.10.0050
	All other metal forming type machine tools:		
3335135001	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:		
3335135016	Die casting machines all types	8454.30.0010	8454.30.0010
3335135006	Thread rolling machinery	8463.20.0080	8463.20.0080
3335135011	Metal container-making machinery		
3335135021	Riveting machines, except hand held portable types	8463.90.0080	8463.90.0080
3335135026	All other metal forming type machine tools n.e.c.		

n.e.c. Not elsewhere classified.

1/Source: 1996 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 (2000).