

Metalworking Machinery

Summary

2000

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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 1998 Manufacturing Profiles, issued December 2000.

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/.

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.

Current
Industrial
Reports

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.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-457-4673.

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: 1991 to 2000
[Thousands of dollars]

Product code	Product description	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
	Metalworking machinery.....	3,632,410	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
	Metal cutting type 1/.....	2,552,370	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
333512A1	Boring machines	87,200	53,822	73,583	80,161	88,929	172,417	129,835	84,667	97,975	77,655
333512A1	Drilling machines	23,694	50,649	102,930	89,219	99,453	78,936	51,987	37,076	37,472	37,374
33351211	Gear cutting machines.....	180,616	132,046	197,672	213,507	164,258	137,121	100,612	87,662	79,600	115,226
33351212	Grinding and polishing machines (except gear-tooth grinding, lapping, polishing, buffing machines).....	454,313	477,132	535,508	595,014	541,277	549,580	443,262	360,894	335,121	378,946
33351230	Lathes 2/.....	287,021	297,398	472,943	480,672	451,115	478,003	390,407	305,488	258,885	317,087
33351240	Milling machines 3/.....	150,503	200,495	281,101	280,158	199,667	194,757	138,852	180,174	210,403	201,137
33351270	Machining centers (multi-function numerically controlled machines).....	629,717	597,862	897,331	931,566	779,433	698,780	552,358	485,375	377,941	361,799
33351280	Station type machines.....	401,772	407,136	571,038	551,870	498,592	477,021	455,138	374,772	434,705	450,366
3351290	Other metal cutting machine tools (except those designed primarily for home workshops, laboratories, etc.).....	333,204	291,742	344,562	358,299	315,977	246,237	200,114	166,248	166,535	195,654
	Metal forming type.....	1,080,040	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
33351310 pt.	Punching and shearing machines.....	203,813	219,988	254,323	319,208	331,382	326,318	294,441	213,402	172,872	180,756
33351310 pt.	Bending and forming machines...	262,372	265,754	262,748	258,479	283,020	256,882	253,219	255,299	270,044	204,357
33351330	Presses (except forging).....	303,146	433,736	399,489	422,396	401,990	379,203	376,398	345,653	288,248	297,889
33351350 pt.	Forging machines 4/.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
33351350 pt.	Other metal forming type machines 4/.....	310,709	351,220	418,752	426,881	450,237	548,138	393,015	325,227	342,830	350,033

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 2000.

2/For 1991 through 2000 product code 33351230, "Lathes," excludes the value for product code 3335123031, "All Lathes valued under \$3,025 each."

3/For 1991 through 2000 product code 33351240, "Milling machines," excludes the value for product code 3335124001, "All milling machines valued under \$3,025 each."

4/Data for "Forging machines" have been combined with "Other metal forming machines" to avoid disclosing data for individual companies.

Table 2. Total Shipments and Unfilled Orders: 2000 and 1999
 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2000			1999			Unfilled orders (value)
			Total shipments		Unfilled orders (value)	Total shipments			
			Quantity	Value		Quantity	Value		
	Metalworking machinery.....	(X)	171,283	3,632,410	1,588,257	182,317	3,783,336	1,917,570	
	Total metal cutting type machine tools.....	(X)	99,957	2,552,370	1,110,423	103,729	2,512,638	1,274,057	
	Total metal forming type machine tools.....	(X)	71,326	1,080,040	477,834	78,588	1,270,698	643,513	
	Metal cutting type machine tools valued at \$3,025 each or more.....	(X)	32,241	2,509,292	1,106,647	31,717	2,467,476	1,270,787	
	Metal cutting type machine tools valued under \$3,025 1/2/3/.....	(X)	67,716	43,078	3,776	72,012	45,162	3,270	
333512A1	Boring and drilling machines 4/.....	39	4,277	110,894	95,791	5,096	104,471	56,991	
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 5/.....	5	(D)	(D)	(D)	(D)	(D)	(D)	
333512A105	Precision boring machines, including horizontal and vertical boring machines 5/.....	7 c/	1,239 b/	87,200 b/	93,455 b/	1,089	53,822	40,892	
333512A107	Jig boring and all other boring machines, excluding boring lathes.....	-	(X)	(X)	(X)	(X)	(X)	(X)	
333512A111	All drilling machines valued under \$3,025 each.....	14 b/	2,740	5,660	141 b/	3,431 a/	6,949	163	
	Drilling machines valued at \$3,025 each or more:								
333512A113	Vertical upright drilling machines, including plain-upright and heavy duty 6/.....	5	221	957	(D)	138	1,000	(D)	
333512A115	Radial drilling machines, including plain and universal.....	-	(X)	(X)	(X)	(X)	(X)	(X)	
333512A117	Deep hole drilling machines 6/.....	4 b/	77 c/	17,077 c/	1,258 b/	73 c/	10,675 b/	980	
	Multiple spindle drilling machines:								
333512A119	Adjustable joint and fixed center types 4/.....	7	(D)	(D)	(D)	(D)	(D)	(D)	
333512A121	All other automatic multiple spindle drilling machines 4/.....	5	(D)	(D)	(D) c/	74 b/	16,175 b/	10,369	
333512A123	All other drilling machines, n.e.c. 4/.....	5	(D)	(D) b/	937 b/	291 b/	15,850	4,587	
3335121100	Gear cutting machines, including gear hobbors, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines 4/.....	8 a/	730	180,616	105,307	325	132,046	101,550	
33351220	Grinding, polishing, buffing, honing, and lapping machines.....	74	50,938	454,313	227,414	55,129	477,132	270,059	
3335122001	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each.....	17	45,882	17,954	59	48,612	18,670	104	
	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 7/.....	1	(D)	(D)	(D)	(D)	(D)	(D)	
3335122011	Universal 7/.....	2	(D)	(D)	(D) b/	115	19,468	9,180	
3335122016	Roll, chucking, centerless, and other cylindrical grinding machines 7/.....	11 b/	726	172,092	115,333 b/	730	192,959	144,876	
3335122021	Surface grinding machines, rotary table type, horizontal and vertical 8/.....	4	(D)	(D)	(D)	(D)	(D)	(D)	
3335122026	Surface grinding machines, reciprocating table type, including face grinders, horizontal and vertical 9/.....	5	(D)	(D)	(D)	(D)	(D)	(D)	
3335122031	Surface grinding machines, reciprocating table type, including face grinders, hand surface type 9/.....	2 b/	745	7,787	1,799 b/	780 b/	7,473	480	
3335122036	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders 8/.....	4 b/	474 a/	25,777 c/	7,372 b/	2,006 c/	23,049 c/	17,169	
3335122041	Tool and cutter grinding machines.....	13	620	89,782	12,053 a/	519	76,524	9,384	
3335122046	Drill point grinders 10/.....	2	(D)	(D)	(D)	(D)	(D)	(X)	
3335122051	All other grinding machines, n.e.c., including internal cylindrical type, planer type, and thread grinding machines 10/.....	14	966 a/	58,750	25,927	1,095 a/	67,883	28,248	
3335122056	Honing and lapping machines, internal, including combination bore, hone, and external 11/.....	6	778 a/	46,219	(D)	(D)	(D)	(D)	
3335122061	Flat surface lapping machines (except gear lapping) 11/.....	4 a/	340 a/	8,437 c/	25,611	820	32,223	20,967	
3335122066	All other honing and lapping or polishing and buffing machines, including speed lathes and multistation type.....	16	407 a/	27,515 c/	39,260	452	38,883	39,651	
33351230	Lathes.....	(X)	3,278	287,021	67,899	3,807	297,398	70,230	
	Numerically controlled:								
	Horizontal.....	9	2,605	221,132	35,013	2,550	225,509	40,089	

Table 2. Total Shipments and Unfilled Orders: 2000 and 1999
 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2000			1999			Unfilled orders (value)
			Total shipments		Unfilled orders (value)	Total shipments			
			Quantity	Value		Quantity	Value		
3335123001	Multiple spindle NC turning machines 12/..	3	(D)	(D)	(D)	(D)	(D)	(D)	
3335123006	Single spindle NC turning machines: Chuck sizes up to and including								
3335123011	6 inches 13/.....	2	(D)	(D)	(D)	(D)	(D)	(D)	
3335123016	Chuck sizes over 6 inches but less than 10 inches 13/.....	6	1,734	136,559	23,231	1,834	146,257	19,046	
3335123021	Chuck sizes from 10 inches but less than 15 inches 12/.....	6	(D)	(D)	(D)	628	59,022	16,682	
3335123026	Chuck sizes 15 inches and over 12/.....	1	871	84,573	11,782	88	20,230	4,361	
3335123099	Vertical NC turning machines.....	7	107	46,641 a/	26,766	147	54,328	18,454	
3335123031	Nonnumerically controlled turning machines 1/.....	9	566	19,248	6,120	1,110	17,561	11,687	
3335123036	All lathes (turning machines) valued under \$3,025 each 1/.....	2	(D)	(D)	(X)	(D)	(D)	(X)	
3335123036	All lathes (turning machines) valued at \$3,025 each or more: Engine or toolroom lathes, all types 14/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	
3335123041	Automatic lathes: Single spindle.....	-	(X)	(X)	(X)	(X)	(X)	(X)	
3335123046	Multiple spindle: Bar (screw) machines 14/.....	2	(D)	(D)	(D)	(D)	(D)	(D)	
3335123051	Chucking machines	-	(X)	(X)	(X)	(X)	(X)	(X)	
3335123056	All other horizontal turning machines, including turret lathes and automatic between center lathes 14/.....	3	(D)	(D)	(X)	(D)	(D)	(D)	
3335123061	All vertical turning machines 14/.....	1 b/	566 b/	19,248 c/	6,120 b/	1,110	17,561	11,687	
33351240	Milling machines 2/.....	21	3,545	150,503	46,134	2,749	200,495	71,637	
3335124001	All milling machines valued under \$3,025 each 2/.....	4	(D)	(D)	(D)	(D)	(D)	(D)	
3335124006	All milling machines valued at \$3,025 or more: General-purpose, knee milling machines, all types 15/.....	7	(D)	(D)	(D)	(D)	(D)	(D)	
3335124011	Automatic: Single spindle, multiple spindle and special-purpose machines 15/.....	5	(D)	(D)	(D)	(D)	(D) b/	1,852	
3335124016	Profile machines and duplicators 15/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	
3335124021	All other milling machines, n.e.c., including planer type and thread milling machines 15/.....	9 a/	3,545 a/	150,503	46,134	2,749	200,495	69,785	
33351270	Machining centers.....	24	9,054	629,717	160,916	7,071	597,862	149,489	
3335127001	Drill, mill, and bore, vertical (automatic tool change): Y-axis travel less than 20 inches.....	8	3,394	161,858	19,431	2,347	137,235	9,157	
3335127006	Y-axis travel 20 inches through 26 inches	8	2,900	213,228	(D)	2,156	158,588	27,806	
3335127011	Y-axis travel over 26 inches	8	600	77,520	40,981	411	59,129	12,789	
3335127016	Drill, mill, and bore, horizontal (automatic tool change): 400mm pallet and smaller 16/17/18/.....	2	(D)	(D)	(D)	(D)	(D)	(D)	
3335127021	401mm-500mm pallet 16/17/.....	5	(D)	(D)	(D)	226	44,382	4,369	
3335127026	501mm-630mm pallet 16/17/18/.....	3	(D)	(D) b/	11,951	(D)	(D)	(D)	
3335127031	631mm-800mm pallet 16/18/19/.....	2	(D)	(D)	(D)	250	86,313	15,525	
3335127036	801mm-1000mm pallet 16/19/20/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	
3335127041	Over 1000mm pallet 16/19/20/.....	3	417	127,886	(D)	67	50,911	35,948	
3335127046	All other machining centers, including special machining, special adapting of standard machining and machining centers with indexing turret 19/.....	8	1,743	49,225	88,553 b/	1,614	61,304	43,895	
33351280	Station type machines.....	16	288	401,772	345,999	272	407,136	480,391	
3335128001	Dial or rotary, trunnion, and center column 21/.....	9	(D)	(D)	146,881	97	116,283	95,573	
3335128006	Transfer 21/.....	8	(D)	(D)	187,453	(D)	(D)	340,450	
3335128011	Other station type, n.e.c. 21/.....	5	288	401,772 b/	11,665	175	290,853	44,368	
33351290	Other metal cutting machine tools 3/.....	63	22,409	333,204	57,387	23,836	291,742	70,707	
3335129001	Other metal cutting machine tools, n.e.c. valued under \$3,025 3/.....	15 b/	13,656 c/	15,134	(D) b/	14,525 c/	15,187	(D)	
3335129006	Other metal cutting machine tools, n.e.c. valued at \$3,025 each or more: Broaching machines.....	7 b/	68 b/	16,181 c/	9,957 a/	84 a/	18,894 a/	19,936	
3335129011	Sawing and cutoff machines: 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/	4,582 b/	52,969 b/	3,120 b/	4,293 a/	50,732	(D)	
3335129026	All other sawing and cutoff machines 22/...	12	656	31,983 a/	6,830	726	36,519 a/	19,352	
3335129031	Spark erosion, ultrasonic, and electrolytic machines, all types.....	6	981	66,106	7,332	929	63,653	7,484	
3335129036	Miscellaneous metal cutting machine tools.....	25 b/	2,466	150,831 c/	30,148 c/	3,279	106,757	23,935	

Table 2. Total Shipments and Unfilled Orders: 2000 and 1999
 [Quantity in units. Value in thousands of dollars]

Product code	Product description	No. of cos.	2000		Unfilled orders (value)	1999		Unfilled orders (value)
			Quantity	Value		Quantity	Value	
	Metal forming type machine tools valued at \$3,025 or more.....	(X)	19,391	1,035,185	476,124	20,713	1,224,479	640,631
	Metal forming type machine tools valued under \$3,025	(X)	51,935	44,855	1,710	57,875	46,219	2,882
33351310	Punching, shearing, bending, and forming machines.....	76	14,953	466,185	185,232	16,319	485,742	171,968
3335131001	All punching and shearing machines valued under \$3,025 each.....	9 b/	698 b/	1,318 b/	32 b/	646 b/	1,535 b/	102
	All punching and shearing machines valued at \$3,025 each or more:							
	Power operated only:							
3335131006	Punches, including combination punching and shearing machines	17 b/	4,153 b/	39,310	2,887 a/	3,833 a/	43,856	3,334
3335131011	Punching machines fixed position and two axes positioning table 23/.....	5	(D)	(D)	(D)	(D)	(D)	(D)
	Plate shearing machines:							
3335131016	Mechanical 23/.....	5 a/	536	119,725	34,615	525	127,043	30,419
3335131021	Hydraulic.....	11 a/	1,141	23,969	(D) a/	1,273	24,011	4,495
3335131026	Other power-operated punching and shearing machines.....	11	1,298	19,491	7,180 b/	1,710 b/	23,543	8,350
3335131031	All bending and forming machines, power operated valued at under \$3,025 each	7	2,027	3,028	220	2,279	3,256	260
	All bending and forming machines, power operated valued at \$3,025 each or more:							
3335131036	Press brakes, all types.....	7 a/	932	74,673	9,661 a/	973	72,752	17,183
3335131041	Bending rolls, sheet, and plate.....	6 c/	371 b/	5,058 c/	1,152 b/	573 b/	6,770 b/	1,614
3335131046	Bending rolls, angles, bars, shapes, and tubes 24/.....	6	(D)	(D)	(D)	(D)	(D)	(D)
3335131051	Rotary bending and forming machines, including rotary head 24/.....	12 b/	764 a/	67,956 a/	45,106 a/	909	81,312	19,925
3335131056	Ram and press bending machines 25/.....	4	(D)	(D)	(D)	(D)	(D)	(D)
3335131061	Other bending and forming machines, including folders 25/.....	19 a/	3,033	111,657	84,379	3,598	101,664	86,286
33351330	Presses (except forgings).....	41	11,079	303,146	139,119	12,301	433,736	293,974
3335133001	All presses valued under \$3,025 each	7	7,579 a/	6,241 c/	19 a/	8,752 a/	5,169	86
	All presses valued at \$3,025 each or more:							
	Mechanical presses:							
	Open back inclinable, gap type:							
3335133006	50 tons and under.....	6 b/	322 c/	7,742 c/	1,844 a/	348 b/	9,677 c/	2,065
3335133011	51 tons to 120 tons 26/.....	4 c/	66 b/	3,395 a/	716 b/	(D)	(D) b/	1,128
3335133016	121 tons and over 26/.....	1	(D)	(D)	(D)	(D)	(D)	(D)
	Vertical straight sided and arch frame single action:							
3335133021	Single point 27/.....	3	(D)	(D)	(D)	(D)	(D)	(D)
	Two point:							
3335133026	300 tons and under 27/.....	3 b/	170 a/	20,792 a/	5,984 b/	225 a/	17,329 b/	12,063
3335133031	301 tons and over 26/.....	-	(X)	(X)	(X)	(D)	(D)	(D)
3335133036	Automatic presses, strip or coil field 26/.....	6	(D)	(D)	(D)	(D)	(D)	(D)
3335133041	All other mechanical presses 26/.....	4	443	161,924	72,872 b/	769	287,282	221,779
	Hydraulic presses:							
	Vertical single action, all tonnages:							
3335133046	Housing or straight side type 28/.....	6	(D)	(D)	(D)	35 c/	27,017	(D)
3335133051	Column type (open rod) 28/.....	6 a/	241	35,976 b/	39,524 a/	73 b/	23,407	37,523
	Gap or C-frame:							
3335133056	15 tons and under.....	7	788	12,890	2,043	707	11,588	2,202
3335133061	16 tons to 35 tons 29/.....	6	141	5,422	(D)	142	6,836	(D)
3335133066	Over 35 tons 29/.....	7	165	10,872 b/	5,115	168	12,046 a/	4,094
3335133071	Other hydraulic and pneumatic presses, including horizontal	10 b/	1,164 a/	37,892 b/	11,002 b/	1,082 b/	33,385	13,034
3335135076	Forging machines, including forging presses and die stamping presses 30/.....	5	(D)	(D)	(D)	(D)	(D)	(D)
33351350	All other metal forming type machine tools.....	41	45,294	310,709	153,483	49,968	351,220	177,571
3335135001	All other metal forming type machine tools valued under \$3,025 each.....	6 b/	41,631 a/	34,268 b/	1,439 a/	46,198 a/	36,259	2,434
	All other metal forming type machine tools valued at \$3,025 each or more:							
3335135006	Thread rolling machinery 30/.....	4	93	13,859	6,180	(D)	(D)	6,900
3335135011	Metal container-making machinery.....	5	96	24,625	13,087	201	38,644	21,074
3335135016	Die casting machines, all types 30/.....	4	(D)	(D)	(D)	(D)	(D)	(D)
3335135021	Riveting machines.....	9 b/	1,038 a/	16,230	6,834 b/	1,098 c/	30,304 c/	3,121
3335135026	All other metal forming type machine tools, n.e.c. 30/.....	20 b/	2,436	221,727	125,943 b/	2,471	246,013 a/	144,042

- 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."

Table 2. Total Shipments and Unfilled Orders: 2000 and 1999
[Quantity in units. Value in thousands of dollars]

- 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 333512A119, 333512A121, 333512A123, and 3335121100 were combined for 2000 to avoid disclosing data for individual companies. Product codes 333512A119, 333512A121, and 333512A123 were not included with 333512A1 "Boring and drilling machines." Product codes 333512A119 and 333512A123 for 1999 were combined to avoid disclosing data for individual companies.
- 5/Product codes 333512A103 and 333512A105 were combined to avoid disclosing data for individual companies.
- 6/ "Unfilled orders (value)" for product codes 333512A113 and 333512A117 were combined to avoid disclosing data for individual companies.
- 7/Product codes 3335122006, 3335122011, and 3335122016 for 2000, and product codes 3335122006, and 3335122011 for 1999 were combined to avoid disclosing data for individual companies.
- 8/Product codes 3335122021 and 3335122036 were combined to avoid disclosing data for individual companies.
- 9/Product codes 3335122026 and 3335122031 were combined to avoid disclosing data for individual companies.
- 10/Product codes 3335122046 and 3335122051 were combined to avoid disclosing data for individual companies.
- 11/Product codes 3335122056 and 3335122061 were combined to avoid disclosing data for individual companies.
- 12/Product codes 3335123001, 3335123016, and 3335123021 for 2000, and product codes 3335123001 and 3335123021 for 1999 were combined to avoid disclosing data for individual companies.
- 13/Product codes 3335123006 and 3335123011 were combined to avoid disclosing data for individual companies.
- 14/Product codes 3335123036, 3335123046, 3335123056, and 3335123061 were combined to avoid disclosing data for individual companies.
- 15/Product codes 3335124006, 3335124016, and 3335124021 for 2000 and 1999, and product code 3335124011 for 2000 and "Total shipments" for 1999" were combined to avoid disclosing data for individual companies.
- 16/"Total shipments" for product codes 3335127016, 3335127021, 3335127026, 3335127031, 3335127036, and 3335127041 were combined for 2000 to avoid disclosing data for individual companies.
- 17/ "Unfilled orders (value)" for product codes 3335127016, 3335127021, and 3335127026 were combined for 2000 to avoid disclosing data for individual companies.
- 18/Product codes 3335127016, 3335127026, and 3335127031 were combined for 1999 to avoid disclosing data for individual companies.
- 19/"Unfilled orders (value)" for 3335127031, 3335127036, 3335127041, and 3335127046 were combined for 2000 to avoid disclosing data for individual companies.
- 20/Product codes 3335127036 and 3335127041 were combined for 1999 to avoid disclosing data for individual companies.
- 21/"Total shipments" for product codes 3335128001, 3335128006, and 3335128011 for 2000 and "Total shipments" for product codes 3335128006 and 3335128011 for 1999 were combined to avoid disclosing data for individual companies.
- 22/Product codes 3335129011, 3335129016, and 3335129026, and product code 3335129021 for 1999 "Unfilled orders (value)" were combined to avoid disclosing data for individual companies.
- 23/Product codes 3335131011 and 3335131016 were combined to avoid disclosing data for individual companies.
- 24/Product codes 3335131046 and 3335131051 were combined to avoid disclosing data for individual companies.
- 25/Product codes 3335131056 and 3335131061 were combined to avoid disclosing data for individual companies.
- 26/Product codes 3335133016, 3335133031, 3335133036, and 3335133041, and product code 3335133011 for "Total shipments" for 1999 were combined to avoid disclosing data individual companies.
- 27/Product codes 3335133021 and 3335133026 were combined to avoid disclosing data for individual companies.
- 28/Product codes 333513046 and 333513051 for 2000, and "Unfilled orders (value)" for 1999 were combined to avoid disclosing data for individual companies.
- 29/"Unfilled orders (value)" for product codes 3335133061 and 3335133066 were combined to avoid disclosing data for individual companies.
- 30/Product codes 3335135076, 3335135016, and 3335135026, and product code 3335135006 for "Total shipments" for 1999 were combined to avoid disclosing data for individual companies.

Note: 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, All Export Shipments: 2000 and 1999
 [Quantity in units. Value in thousands of dollars]

Product description	2000			1999		
	Shipments of numerically controlled machines		Export shipments (value) 1/	Shipments of numerically controlled machines		Export shipments (value) 1/
	Quantity	Value		Quantity	Value	
Metalworking machinery.....	15,940	1,944,133	505,675	13,969	1,883,769	491,942
Metal cutting type machine tools 2/.....	14,489	1,675,202	345,240	12,445	1,619,557	327,738
Boring and drilling machines 2/.....	(D)	(D)	(D)	27	21,131	(D)
Gear cutting machines 2/.....	(D)	(D)	(D)	312	129,470	(D)
Grinding, polishing, buffing, and lapping lapping machines 2/.....	772	244,764	(D)	910	279,560	60,697
Valued under \$3,025 each, external cylindrical grinding machines (plain and universal) and surface grinding machines, all types 2/.....	681	239,471	(D)	835	275,106	48,901
Honing, lapping, polishing and buffing machines 2/.....	91	5,293	(D)	75	4,454	11,796
Horizontal NC turning machines, valued at \$3,025 or more 3/.....	2,605	221,132	41,774	2,550	225,509	39,263
Single spindle NC turning machines: Chuck sizes up to and including 6 inches 4/5/.....	(D)	(D)	(D)	(D)	(D)	(D)
Chuck sizes over 6 inches but less than 10 inches 4/.....	1,734	136,559	24,881	1,834	146,257	27,022
Chuck sizes over 10 inches but less than 15 inches 3/.....	(D)	(D)	(D)	628	59,022	5,791
Chuck sizes 15 inches and over, and multiple spindle 5/.....	79	12,561	6,787	88	20,230	6,450
Vertical NC turning machines, valued at \$3,025 or more 2/.....	107	46,641	(D)	147	54,328	1,147
Nonnumerically controlled turning machines, valued at \$3,025 or more 2/.....	(X)	(X)	(D)	(X)	(X)	(D)
Milling machines	856	116,393	15,545	876	164,007	36,156
Machining centers.....	9,054	629,717	106,105	7,071	597,862	94,103
Drill, mill, and bore, vertical (automatic tool change)	6,894	452,606	88,884	4,914	354,952	64,878
Y-axis travel less than 20 inches	3,394	161,858	36,442	2,347	137,235	26,330
Y-axis travel 20 inches through 26 inches 6/...	2,900	213,228	(D)	2,156	158,588	29,010
Y-axis travel over 26 inches 6/.....	600	77,520	(D)	411	59,129	9,538
Drill, mill, and bore, horizontal (automatic tool change) 7/.....	417	127,886	17,221	543	181,606	29,225
400mm pallet and smaller 7/8/.....	(D)	(D)	(D)	(D)	(D)	(D)
401mm-500mm pallet 7/.....	(D)	(D)	(D)	226	44,382	(D)
501mm-630mm pallet 7/8/.....	(D)	(D)	(D)	(D)	(D)	(D)
631mm-800mm pallet 7/8/.....	(D)	(D)	(D)	250	86,313	(D)
801mm-1000mm pallet 7/9/.....	(D)	(D)	(D)	(D)	(D)	(D)
Over 1000mm pallet 7/9/.....	59	57,331	(X)	67	50,911	(D)
All other machining centers 2/.....	1,743	49,225	(D)	1,614	61,304	(D)
Station type machines, and other metal cutting machine tools, n.e.c.....	718	251,625	85,166	552	147,690	47,508
Metal forming type machine tools.....	1,451	268,931	160,435	1,524	264,212	164,204
Punching, shearing, bending, and forming machines.....	868	152,610	64,844	1,070	143,329	78,652
Punching and shearing machines.....	438	95,725	21,494	411	92,030	29,859
All bending and forming machines, power operated.....	430	56,885	43,350	659	51,299	48,793

Table 3. Shipments of Numerically Controlled Machines, All Export Shipments: 2000 and 1999
 [Quantity in units. Value in thousands of dollars]

Product description	2000			1999		
	Shipments of numerically controlled machines		Export shipments (value) 1/	Shipments of numerically controlled machines		Export shipments (value) 1/
	Quantity	Value		Quantity	Value	
Presses (except forgings).....	178	43,877	30,013	169	44,101	12,632
Forging machines, and all other metal forming type machine tools.....	405	72,444	65,578	285	76,782	72,920

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 2000 included in "Horizontal NC turning machines, valued at \$3,025 or more."

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

5/Data for export shipments included in "Chuck sizes 15 inches and over and multiple spindle."

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

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

8/Data included in "631mm-800mm pallet" for 1999.

9/Data included in over "1000mm pallet."

Table 4a. Shipments, Exports, and Imports of Metalworking Machinery: 2000
 [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)	17,781	682	1,628	653
Valued at \$3,025 each or more	1,239	87,200	292	14,372	873	94,657
Drilling machines:						
Valued under \$3,025 each.....	2,740	5,660	12,015	6,178	214,179	19,772
Valued at \$3,025 each or more.....	298	18,034	1,029	30,050	1,577	59,387
Gear cutting machines.....	730	180,616	923	24,307	612	64,640
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	45,882	17,954	46,948	8,186	991,586	34,618
Valued at \$3,025 each or more.....	5,056	436,359	3,984	110,689	9,669	352,298
Lathes (turning machines) under \$3,025.....	(D)	(D)	2,140	2,439	22,948	16,186
Horizontal NC turning machines.....	2,605	221,132	460	47,266	6,830	713,708
Vertical NC turning machines.....	107	46,641	56	11,878	548	91,774
Nonnumerically controlled turning machines:						
Engine or toolroom lathes, all types 5/.....	(D)	(D)	67	931	4,903	42,762
Single spindle automatic lathes	(X)	(X)	14	265	149	3,210
Multiple spindle automatic lathes 5/.....	(D)	(D)	32	2,078	281	31,150
All other horizontal turning machines	(X)	(X)	468	7,490	416	10,726
All vertical lathes and vertical boring machines 5/.....	566	19,248	355	6,753	393	24,232
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	4,114	6,037	13,301	11,162
Valued at \$3,025 each or more.....	3,545	150,503	1,106	36,347	6,844	110,698
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.....	6,294	375,086	497	53,598	3,793	355,250
Y-axis travel 26 inches and over.....	600	77,520	31	5,613	681	94,409
Drill, mill, and bore, horizontal (automatic tool change).....						
Other machining centers.....	417	127,886	43	9,456	2,088	538,259
Station type machines.....	1,743	49,225	501	43,218	96	29,806
Other metal cutting machine tools:	288	401,772	70	29,264	572	239,975
Valued under \$3,025 each.....	13,656	15,134	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	8,753	318,070	6,161	144,045	11,651	396,538
Punching and shearing machines:						
Valued under \$3,025 each.....	698	1,318	2,649	2,182	11,952	3,818
Valued at \$3,025 each or more.....	7,128	202,495	2,711	110,310	2,686	197,430
Bending and forming machines:						
Valued under \$3,025 each.....	2,027	3,028	8,324	5,723	62,149	6,927
Valued at \$3,025 each or more.....	5,100	259,344	2,645	83,671	7,705	328,070
Presses (except forging presses).....	11,079	303,146	8,635	92,979	19,167	382,024
Forging machines, including presses 6/.....	(D)	(D)	315	58,310	2,575	153,425
All other metal forming type machine tools:						
Valued under \$3,025 each.....	41,631	34,268	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines 6/.....	(D)	(D)	906	19,805	1,502	70,147
Thread rolling machines	93	13,859	141	3,487	110	9,995
Other metal forming machines 6/.....	2,436	221,727	(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 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/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: 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	1,191
Valued at \$3,025 each or more	1,089	53,822	297	14,596	1,488	103,032
Drilling machines:						
Valued under \$3,025 each.....	3,431	6,949	4,924	3,688	152,196	17,395
Valued at \$3,025 each or more.....	576	43,700	864	32,575	1,669	71,272
Gear cutting machines.....	325	132,046	3,920	37,921	1,241	79,055
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	34,712
Valued at \$3,025 each or more.....	6,517	458,462	3,740	104,677	9,045	418,738
Lathes (turning machines) under \$3,025.....	(D)	(D)	1,514	2,001	17,704	12,001
Horizontal NC turning machines.....	2,550	225,509	438	48,184	5,985	655,521
Vertical NC turning machines.....	147	54,328	56	8,956	712	103,090
Nonnumerically controlled turning machines:						
Engine or toolroom lathes, all types 5/.....	(D)	(D)	74	1,229	4,548	39,084
Single spindle automatic lathes	(X)	(X)	72	1,600	248	6,466
Multiple spindle automatic lathes 5/.....	(D)	(D)	9	690	169	20,234
All other horizontal turning machines	(X)	(X)	2,919	23,128	575	15,944
All vertical lathes and vertical boring machines 5/.....	1,110	17,561	338	7,817	474	24,279
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	4,209	5,895	9,934	7,981
Valued at \$3,025 each or more.....	2,749	200,495	2,056	59,251	6,183	141,605
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	254,312
Y-axis travel 26 inches and over.....	411	59,129	8	1,794	639	98,698
Drill, mill, and bore, horizontal (automatic tool change).....						
543	181,606	57	16,222	1,976	489,589	
Other machining centers.....	1,614	61,304	550	41,601	88	30,966
Station type machines.....	272	407,136	147	67,182	469	224,061
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	312,507
Punching and shearing machines:						
Valued under \$3,025 each.....	646	1,535	4,379	1,856	7,850	3,500
Valued at \$3,025 each or more.....	7,341	218,453	2,289	94,465	2,763	185,747
Bending and forming machines:						
Valued under \$3,025 each.....	2,279	3,256	5,648	4,770	52,505	6,009
Valued at \$3,025 each or more.....	6,053	262,498	2,121	74,893	6,439	285,477
Presses (except forging presses).....	12,301	433,736	10,256	87,349	17,572	264,884
Forging machines, including presses 6/.....	(D)	(D)	385	82,243	5,953	125,197
All other metal forming type machine tools:						
Valued under \$3,025 each.....	46,198	36,259	(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	15,027
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 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/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 System-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2001

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, including floor, table and rail mounted	8459.31.0010 8459.31.0040 8459.39.0040 8459.10.0000	8459.31.0010 8459.31.0040 8459.39.0040 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	8459.21.0080	8459.21.0080
333512A123	All other drilling machines, n.e.c., including bench type sensitive, vertical, n.e.c., radial, n.e.c.	8459.29.0090	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
	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, including 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

Continued

Table 5. Comparison of the North American Industry Classification System-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2001

Product code	Product description	Export number 1/	Import number 2/
	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 8460.40.0080	8460.40.4060 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 8458.99.5060	8458.19.0020 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 inches	8458.11.0030	8458.11.0030
3335123011	Chuck sizes over 6 inches but less than 10 inches	8458.11.0050	8458.11.0050
3335123016	Chuck sizes from 10 inches but less than 15 inches	8458.11.0090	8458.11.0090
3335123021	Chuck sizes 15 inches and over		
3335123026	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
	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:		
3335123061	All vertical turning machines	8458.99.1050 8458.99.5090	8458.99.1050 8458.99.5090
	Milling machines, excluding machining centers:		
3335124001	All milling machines valued under \$3,025 each	8459.59.0020 8459.69.0020	8459.59.0020 8459.69.0020
	Machines valued at \$3,025 each or more:		
3335124006	General-purpose, knee milling machines, all types	8459.51.0080 8459.59.0030	8459.51.0080 8459.59.0030
	Automatic and manufacturing bed type:		
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 8459.69.0070	8459.69.0050 8459.69.0070
3335124021	All other milling machines, n.e.c., including planer type and thread milling machines	8459.69.0090	8459.69.0090

Continued

Table 5. Comparison of the North American Industry Classification System-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2001

Product code	Product description	Export number 1/	Import number 2/
Machining centers (multifunctions NC machines):			
Drill, mill, and bore, vertical (automatic tool change):			
3335127001	Y-axis travel less than 20 inches	8457.10.0015	8457.10.0015
3335127006	Y-axis travel 20 inches through 26 inches		
3335127011	Y-axis travel over 26 inches	8457.10.0025	8457.10.0025
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, 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:			
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		
3335129026	All other sawing and cutoff machines		
Spark erosion, ultrasonic and electrolytic machines, all types			
3335129031		8456.20.0000	8456.20.1010
		8456.30.0000	8456.20.1050
		8456.99.3005	8456.30.1020
		8456.99.3040	8456.30.1050
		8456.99.3060	8456.30.1070
		8456.99.3080	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	8459.70.4000
		8459.70.0080	8459.70.8080
		8461.10.0060	8461.10.4060
		8461.10.0080	8461.10.8080
		8461.20.0010	8461.20.4000
		8461.20.0090	8461.20.8090
		8461.90.0040	8461.90.4040
		8461.90.0080	8461.90.8080
Punching and shearing machines:			
3335131001	All punching and shearing machines, valued under \$3,025 each	8462.39.0020	8462.39.0020
		8462.49.0020	8462.49.0020

Continued

Table 5. Comparison of the North American Industry Classification System-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2001

Product code	Product description	Export number 1/	Import number 2/
	Machines valued at \$3,025 or more:		
	Power operated only:		
	Plate shearing machines (squaring, slitting, etc.):		
3335131016	Mechanical		
3335131021	Hydraulic	8462.31.0080	8462.31.0080
3335131006	Punches, including combination punching and shearing machines	8462.39.0050	8462.39.0050
3335131011	Punching machines fixed position and two axes positioning table	8462.41.0080	8462.41.0080
3335131026	Other power-operated punching and shearing machines		
	Bending and forming machines:		
3335131031	All bending and forming machines, valued under \$3,025	8462.29.0020	8462.29.8025
	Machines valued at \$3,025 each or more:		
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
3335131056	Ram and press bending machines (pipe, bar, etc.)		8462.29.8045
3335131061	Other bending and forming machines, including folders		8462.29.8055
	Presses (except forging presses):		
3335133001	All presses valued under \$3,025 each	8462.99.0020	8462.99.8020
	Machines valued at \$3,025 each or more:		
	Mechanical		
	Open back inclinable (gap type):		
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
	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
	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

Continued

Table 5. Comparison of the North American Industry Classification System-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2001

Product code	Product description	Export number 1/	Import number 2/
	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: 2001 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 (2001).