

Metalworking Machinery: Fourth Quarter 2003

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

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

Product code	Product description	No. of cos.	Fourth quarter 2003				Third quarter 2003							
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)						
			Quantity	Value		Quantity	Value							
	Metalworking machinery.....	(X)	28,947	560,179	737,337	27,204	r/	446,868	695,366					
	Total metal cutting type machine tools.....	(X)	16,375	396,091	510,129	15,534	r/	321,364	464,902					
	Total metal forming type machine tools.....	(X)	12,572	164,088	227,208	11,670	r/	125,504	230,464					
	Metal cutting type machine tools valued at \$3,025 each or more 1/.....	(X)	5,914	381,570	499,323	4,577	r/	305,667	446,100					
	Metal cutting type machine tools valued under \$3,025 2/ 3/ 4/.....	(X)	10,376	6,075	399	10,856		6,039	310					
333512A1	Boring and drilling machines 2/.....	29	930	40,103	66,007	618	r/	29,793	27,075					
333512A101	All boring machines valued under \$3,025 each 2/.....	-	(X)	(X)	(X)	(D)		(D)	(X)					
333512A103	Boring machines valued at \$3,025 each or more: Horizontal boring, drilling, and milling machines, including floor, table, rail mounted, and all other nonprecision boring machines (except boring lathes) 5/.....	6	(D)	(D)	(D)	(D)		(D)	(D)					
333512A105	Precision and jig boring machines, including horizontal and vertical machines 5/.....	3	c/	547	c/	17,331	49,179	c/	262	a/	19,216	r/	16,643	
333512A111	All drilling machines valued under \$3,025 each.....	9	b/	262	a/	483	97	b/	270	a/	500			
333512A113	Drilling machines valued at \$3,025 each or more: Vertical upright drilling machines, including plain upright and heavy duty 6/.....	1	(D)	(D)	(D)	(D)		(D)	(D)	(D)				
333512A117	Deep hole drilling machines 6/.....	4	c/	79	c/	19,901	b/	4,569	c/	35	c/	6,461	b/	4,703
333512A119	Multiple spindle drilling machines: Adjustable joint and fixed center types 7/.....	4		19		921	(D)	(D)	(D)	(D)				
333512A121	All other automatic multiple spindle drilling machines 7/.....	4		7		1,082	(D)	(D)	(D)	(D)				
333512A123	All other drilling machines, n.e.c. 7/.....	4	c/	16	c/	385	12,162	c/	51		3,616		5,677	
3335121100	Gear cutting machines, including gear hobbers, shapers, teeth finishing, bevel gear generators, and all other gear cutting machines 8/.....	6	b/	150	b/	69,398	195,963	r/	97	r/	71,315	r/	188,166	
33351221	Grinding, polishing, buffing, honing, and lapping machines.....	56		7,832		39,131	73,073		7,948		33,199		81,416	
3335122101	All grinding, polishing, buffing, honing, and lapping machines valued under \$3,025 each.....	12		7,189	b/	2,767	85		7,399	b/	2,520		31	
3335122108	All grinding, polishing, buffing, honing, and lapping machines valued at \$3,025 each or more: External cylindrical grinding machines: Plain and universal, including angular wheel types 9/.....	4		(D)		(D)	5,563		(D)		(D)		5,913	
3335122116	Roll, chucking, centerless, and other cylindrical grinding machines 9/.....	8	c/	203	a/	15,152	(D)	r/	109		5,988		(D)	
3335122120	Internal cylindrical grinding machines 9/.....	1		(D)		(D)	(D)		(X)		(X)		(X)	
3335122122	Surface grinding machines 10/.....	8	c/	100	c/	3,449	(D)		(D)		(D)		(D)	
3335122136	All other disc grinders, including bench, floor, snag, double spindle grinders, and abrasive belt grinders 10/.....	3		22		316	c/	2,384	a/	112	b/	2,712	c/	2,344
3335122142	Tool, cutter, and drill point grinding machines 9/.....	10	c/	33	c/	5,375	(D)		45		7,731		3,887	
3335122151	All other grinding machines, n.e.c., including planer type, and thread grinding machines 9/.....	10		109		5,436	38,949		98	r/	4,425		35,338	
3335122156	Honing and lapping machines (except flat surface lapping machines), internal, including combination bore, hone, and external 11/12/.....	4		(D)		(D)	(D)		(D)		(D)		(D)	
3335122161	Flat surface lapping machines (except gear lapping) 11/12/.....	3		142		5,767	(D)	r/	151	r/	8,323		(D)	
3335122166	Polishing and buffing machines, including speed lathes and multistation type 12/.....	7		34		869	b/	26,092	r/	34	r/	1,500	c/	33,903
33351231	Lathes 1/3/.....	(X)		734		39,766	22,020		626		40,113		17,931	
	Numerically controlled: Horizontal.....	5		577		33,459	22,020		421		27,187		17,931	
3335123101	Multiple spindle NC turning machines 13/.....	1		(D)		(D)	(D)		(X)		(X)		(D)	
	Single spindle NC turning machines: Chuck sizes less than 10 inches.....	3		407		18,928	11,423		285		15,269		12,195	
3335123107	Chuck sizes from 10 inches but less than 15 inches 13/.....	4		(D)		(D)	(D)		(D)		(D)		(D)	
3335123116	Chuck sizes 15 inches and over 13/.....	1		170		14,531	10,597		136		11,918		5,736	
3335123121	Vertical NC turning machines 1/.....	3		9		3,629	(D)		16		9,579		(D)	

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

Product code	Product description	No. of cos.	Fourth quarter 2003				Third quarter 2003			
			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)		
			Quantity	Value		Quantity	Value			
3335123131	All lathes (turning machines) valued under \$3,025 each 3/.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335123134	All nonnumerically controlled lathes (turning machines) valued at \$3,025 each or more 1/.....	6 c/	148 c/	2,678	(D)	b/	189 c/	3,347	(D)	
33351241	Milling machines 4/.....	10	163	9,398	6,522	226 r/	10,599 r/	7,769		
3335124101	All milling machines valued under \$3,025 each 4/.....	2	(D)	(D)	(X)	(D)	(D)	(X)		
3335124106	All milling machines valued at \$3,025 or more: General-purpose, knee milling machines, all types 14/.....	2	(D)	(D)	(D)	(D)	(D)	(D)		
3335124111	Automatic: Single spindle, multiple spindle and special-purpose machines 14/.....	3	(D)	(D)	(D)	(D)	(D)	(D)		
3335124121	All other milling machines, n.e.c., including planer type and thread milling machines 14/...	4 a/	163 c/	9,398	6,522	a/	226 c/r/	10,599 r/	7,769	
33351271	Machining centers.....	14	1,881	115,944	73,746	1,336	76,388	r/	68,058	
	Drill, mill, and bore, vertical (automatic tool change):									
3335127101	Y-axis travel less than 20 inches 15/.....	5	821	25,100	(D)	(D)	(D)	(D)	13,582	
3335127106	Y-axis travel 20 inches through 26 inches 15/....	5	512	36,744	33,655	1,028	50,055	11,455		
3335127111	Y-axis travel over 26 inches	5	117	12,204	5,642	81	7,963	4,807		
	Drill, mill, and bore, horizontal (automatic tool change):									
3335127112	Under 500mm pallet and smaller 16/.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335127113	500 to 800mm pallet 16/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335127114	Over 800mm pallet 16/.....	- a/	32	12,462	23,396	a/	28 a/	3,691	26,532	
3335127146	All other machining centers, including special machining, special adapting of standard machining and machining centers with indexing turret	4	399 c/	29,434 c/	11,053	199	14,679 c/r/	11,682		
33351281	Station type machines 8/.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335128101	Dial or rotary, trunnion, and center column 8/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335128106	Transfer 8/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335128111	Other station type, n.e.c. 8/.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
33351291	Other metal cutting machine tools 2/.....	51	4,139	73,574	44,738	4,121	49,968	40,477		
3335129101	Other metal cutting machine tools, n.e.c. valued under \$3,025 2/.....	13 c/	2,464 c/	2,494	(D)	c/	2,719 c/	2,678	(D)	
3335129106	Other metal cutting machine tools, n.e.c. valued at \$3,025 each or more: Broaching machines	5 c/	9	279	b/	2,115 c/	10	904	b/	1,895
	Sawing and cut-off machines: Band saws:									
3335129122	Horizontal 17/.....	8	(D)	(D)	(D)	c/	355 c/	3,892	(D)	
3335129123	Vertical 17/.....	5 b/	608 c/	8,341 c/	1,767	b/	200 c/	3,346	c/	2,403
3335129126	All other sawing and cutoff machines.....	10	104	3,844	b/	1,158	103	2,979	4,019	
3335129131	Spark erosion, ultrasonic, and electrolytic machines, all types 18/.....	4	143	10,560	(D)	91	6,479	r/	2,985	
3335129136	Miscellaneous metal cutting machine tools 18/..	24 b/	811	48,056	39,698	643	29,690	29,175		
3335126111	Remanufactured metal cutting machine tools	17	85 b/	8,446 b/	10,407	101 b/r/	9,658 b/r/	18,492		
	Metal forming type machine tools valued at \$3,025 or more.....	(X)	2,887	148,949	220,411	2,539 r/	114,342	224,509		
	Metal forming type machine tools valued under \$3,025 19/.....	(X)	9,654	12,918	643	9,103 r/	9,844	618		
33351311	Punching, shearing, bending, and forming machines 19/.....	59	2,216	67,050	120,273	r/	1,856	47,135	110,425	
3335131101	All punching and shearing machines valued under \$3,025 each 19/.....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335131106	All punching and shearing machines valued at \$3,025 each or more: Power operated only: Punches, including combination punching and shearing machines	12 c/	735 a/	13,925 b/	1,071 c/	491 b/	5,532 b/	1,736		
3335131111	Punching machines fixed position and two axes positioning table 20/.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
	Plate shearing machines:									
3335131116	Mechanical	5	27	1,231	b/	874	24	1,318	b/	1,133
3335131121	Hydraulic	7	175	3,214	1,617	160	2,410	1,661		

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			Total shipments		Unfilled orders (value)	Total shipments		Unfilled orders (value)						
			Quantity	Value		Quantity	Value							
3335131126	Other power-operated punching and shearing machines 20/.....	5	250	13,521	10,857	204	7,866	8,522						
3335131131	All bending and forming machines, power operated valued at under \$3,025 each	6	311	520	216	324	525	112						
3335131136	All bending and forming machines, power operated valued at \$3,025 each or more:													
3335131142	Press brakes, all types 21/.....	7	116	10,355	(D)	74	5,651	(D)						
3335131151	Roll bending machines, including sheet, plate, angles, bars, shapes, and tubes 22/.....	7	(D)	(D)	(D)	(D)	(D)	(D)						
3335131161	Rotary bending and forming machines, including rotary head 22/.....	8	b/	132	7,905	23,123	159	12,971	16,253					
33351331	Other bending and forming machines, including folders and slide bending machines 21/.....	18	470	16,379	82,515	r/	420	10,862	81,008					
3335133101	Presses (except forging)	28	1,484	40,260	53,891	1,435	r/	33,527	56,706					
3335133106	All presses valued under \$3,025 each	6	c/	1,041	c/	623	c/	89	c/	936	c/	546	c/	49
3335133106	All presses valued at \$3,025 each or more:													
3335133106	Mechanical presses:													
3335133106	Gap or C-frame:													
3335133106	50 tons and under 23/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335133113	Over 50 tons 23/.....	1	c/	55	c/	735	b/	151	c/	59	c/	902	a/	259
3335133121	Vertical straight sided and arch frame single action:													
3335133121	Single point 24/.....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335133128	Two point:													
3335133133	150 tons and under 24/.....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335133136	151 tons and over	-	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	
3335133141	Automatic presses, strip or coil fed 24/.....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	
3335133141	All other mechanical presses 24/.....	-	c/	85	19,078	17,737	c/	76	a/	14,617	23,964			
3335133146	Hydraulic presses:													
3335133146	Vertical single action, all tonnages:													
3335133151	Housing or straight side type	5	7	4,188	9,942	r/	6	r/	2,252	11,802				
3335133151	Column type (open rod)	6	b/	19	a/	4,416	13,104	b/	26	b/r/	3,261	11,418		
3335133156	Gap or C-frame:													
3335133161	15 tons and under 25/.....	6	(D)	(D)	339	68	r/	4,871	163					
3335133166	16 tons to 35 tons 25/.....	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)					
3335133171	Over 35 tons 25/.....	4	83	8,104	c/	4,568	c/	27	c/	3,029	c/	5,244		
3335135176	Other hydraulic and pneumatic presses, including horizontal	5	c/	194	b/	3,116	7,961	c/	237	b/	4,049	a/	3,807	
3335135176	Forging machines, including forging presses and die stamping presses 26/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)					
3335135101	All other metal forming type machine tools 19/.....	34	539	42,782	46,552	r/	508	r/	34,751	r/	57,539			
3335135106	All other metal forming type machine tools valued under \$3,025 each 19/.....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)					
3335135106	All other metal forming type machine tools valued at \$3,025 each or more:													
3335135111	Thread rolling machinery 26/.....	3	c/	11	c/	1,068	(D)	(D)	(D)	(D)				
3335135116	Metal container-making machinery 26/.....	4	30	8,626	(D)	20	5,723	14,143						
3335135121	Die casting machines, all types 26/.....	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)					
3335135126	Riveting machines 26/.....	8	b/	154	4,385	(D)	a/r/	178	r/	4,696	r/	4,606		
3335137121	All other metal forming type machine tools, n.e.c. 26/.....	18	344	28,703	46,552	a/	310	a/	24,332	a/	38,790			

- Represents zero. D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/"Unfilled orders (value)" for product codes 3335123126 and 3335123134 are included in the total for "Metal cutting type machine tools valued at \$3,025 each or more," but excluded from product class 33351231.

2/"Unfilled orders (value)" for product codes 3335129101 and 333512A101 for third quarter shipments are included in the total for "Metal cutting type machine tools valued under \$3,025," but excluded from product classes 333512A1 and 33351291.

3/Product code 3335123131 is included in the total for "Metal cutting type machine tools valued under \$3,025" but excluded from product class 33351231.

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

5/Product codes 333512A103 and 333512A105 were combined to avoid disclosing data for individual companies.

6/Product codes 333512A113 and 333512A117 were combined to avoid disclosing data for individual companies.

7/Product codes 333512A119 and 333512A121, and 333512A123 for the third quarter, and "Unfilled orders (value)" for the fourth quarter were combined to avoid disclosing data for individual companies.

8/Product codes 3335121100, 3335128101, 3335128106, and 3335128111 were combined to avoid disclosing data for individual companies.

9/Product codes 3335122120 and 3335122151, and 3335122108 for shipments, and 3335122116 for "Unfilled orders (value), and 3335122142 for "Unfilled orders (value)" for the fourth quarter were combined to avoid disclosing data for individual companies.

10/Product codes 3335122122 and 3335123136 for the third quarter, and "Unfilled orders (value)" for the fourth quarter were combined to avoid disclosing data for individual companies.

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

- 11/Product codes 3335122156 and 3335122161 for shipments were combined to avoid disclosing data for individual companies.
- 12/"Unfilled orders (value)" for product codes 3335122156, 3335122161, and 3335122166 were combined to avoid disclosing data for individual companies.
- 13/Product codes 3335123101, 3335123116, and 3335123121 were combined to avoid disclosing data for individual companies.
- 14/Product codes 3335124106, 3335124111, and 3335124121 were combined to avoid disclosing data for individual companies.
- 15/Product codes 3335127101 and 3335127106 for shipments for the third quarter, and "Unfilled orders (value)" for the fourth quarter were combined to avoid disclosing data for individual companies.
- 16/Product codes 3335127112, 3335127113, and 3335127114 were combined to avoid disclosing data for individual companies.
- 17/Product codes 3335129122 and 3335129123 for the fourth quarter and "Unfilled orders (value)" for the third quarter were combined to avoid disclosing data for individual companies.
- 18/"Unfilled orders (value)" for product codes 3335129131 and 3335129136 for the fourth quarter were combined to avoid disclosing data for individual companies.
- 19/Product codes 3335131101 and 3335135101 are included in the total for "Metal forming type machine tools valued under \$3,025" but excluded from product classes 33351311 and 33351351 respectively.
- 20/Product codes 3335131111 and 3335131126 were combined to avoid disclosing data for individual companies.
- 21/"Unfilled orders (value)" for product codes 3335131136 and 3335131161 were combined to avoid disclosing data for individual companies.
- 22/Product codes 3335131142 and 3335131151 were combined to avoid disclosing data for individual companies.
- 23/Product codes 3335133106 and 3335133113 were combined to avoid disclosing data for individual companies.
- 24/Product codes 3335133121, 3335133128, 3335133136, and 3335133141 were combined to avoid disclosing data for individual companies.
- 25/Product codes 3335133161 and 3335133166; and 3335133156 for shipments for the fourth quarter were combined to avoid disclosing data for individual companies.
- 26/Product codes 3335135176, 3335135116, and 3335135126; and 3335135106 for the third quarter and "Unfilled orders (value)" for the fourth quarter, and 3335135111 and 3335135121 for "Unfilled orders (value)" for the fourth quarter were combined to avoid disclosing data for individual companies.

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

Table 2. Shipments of Numerically Controlled Machines and Exports
 [Quantity in units. Value in thousands of dollars]

Product description	Fourth quarter 2003			Third quarter 2003		
	Shipments of numerically controlled machines		Export shipments (value) 1/	Shipments of numerically controlled machines		Export shipments (value) 1/
	Quantity	Value		Quantity	Value	
Metalworking machinery.....	3,582	330,972	105,433	2,633	247,144	90,211
Metal cutting type machine tools 2/.....	3,398	292,733	80,003	2,510	220,143	68,524
Boring and drilling machines 2/.....	(D)	(D)	(D)	(D)	(D)	(D)
Gear cutting machines 2/.....	(D)	(D)	(D)	(D)	(D)	(D)
Grinding, polishing, buffing, and lapping machines	144	22,319	5,221	146	17,287	6,999
Valued under \$3,025 each, external cylindrical grinding machines (plain and universal), and surface grinding machines, all types	133	21,953	4,505	124	15,995	5,049
Honing, lapping, polishing and buffing machines	11	366	716	22	1,292	1,950
Horizontal NC turning machines, valued at \$3,025 or more.....	577	33,459	10,029	421	27,187	8,938
Single spindle NC turning machines:						
Chuck sizes less than 10 inches	407	18,928	5,880	285	15,269	5,113
Chuck sizes over 10 inches but less than 15 inches 3/.....	(D)	(D)	(D)	(D)	(D)	(D)
Chuck sizes 15 inches and over and multiple spindle 3/.....	170	14,531	4,149	136	11,918	3,825
Vertical NC turning machines, valued at \$3,025 or more 2/.....	9	3,629	(D)	16	9,579	(D)
Nonnumerically controlled turning machines, valued at \$3,025 or more 2/.....	(X)	(X)	(D)	(X)	(X)	(D)
Milling machines 2/.....	129	8,478	(D)	181	8,868	(D)
Machining centers 4/.....	1,881	115,944	21,524	1,336	76,388	16,239
Drill, mill and bore, vertical (automatic tool change) 5/.....	1,450	74,048	20,742	1,109	58,018	15,089
Y-axis travel less than 20 inches 5/6/.....	821	25,100	(D)	(D)	(D)	(D)
Y-axis travel 20 inches through 26 inches 6/..	512	36,744	16,927	1,028	50,055	13,331
Y-axis travel over 26 inches 5/.....	117	12,204	(D)	81	7,963	(D)
Drill, mill and bore, horizontal (automatic tool change) 4/.....	32	12,462	(D)	28	3,691	(D)
Under 500mm pallet 4/7/.....	(D)	(D)	(D)	(D)	(D)	(D)
500mm-800mm pallet 4/7/.....	(D)	(D)	(D)	(D)	(D)	(X)
Over 800mm pallet 4/7/.....	32	12,462	(X)	28	3,691	(D)
All other machining centers	399	29,434	(X)	199	14,679	(X)
Station type machines, and other metal cutting machine tools, n.e.c. 8/.....	282	57,356	20,408	176	39,647	14,508
Remanufactured metal cutting machines 8/.....	64	6,664	(D)	76	6,857	(D)
Metal forming type machine tools.....	184	38,239	25,430	123	27,001	21,687
Punching, shearing, bending, and forming machines.....	140	20,892	9,365	75	10,106	10,726
Punching and shearing machines.....	56	11,717	2,707	26	5,532	1,827
All bending and forming machines, power operated.....	84	9,175	6,658	49	4,574	8,899
Presses (except forgings).....	9	2,326	4,894	10	2,623	3,780
Forging machines, and all other metal forming type machine tools 9/.....	35	15,021	11,171	38	14,272	7,181
Remanufactured metal forming machines 9/.....	(D)	(D)	(D)	(D)	(D)	(D)

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 were included in total "Metal cutting type machine tools."

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

4/Data for export shipments included in "Machining centers."

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

6/Data for shipments of numerically controlled machines included in "Y-axis travel 20 inches through 26 inches."

7/Data for shipments of numerically controlled machines included in "Over 800mm pallet."

8/Data for "Remanufactured metal cutting machines" exports included in "Station type machines, and all other metal cutting type machine tools."

9/Data for "Remanufactured metal forming machines" included in "Forging machines, and all other metal forming type machine tools."

Table 3a. Shipments, Exports, and Imports of Metalworking Machinery: Fourth Quarter 2003
 [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)	335	228	39	50
Valued at \$3,025 each or more	547	17,331	93	7,454	75	9,632
Drilling machines:						
Valued under \$3,025 each.....	262	483	1,937	1,340	54,339	3,993
Valued at \$3,025 each or more	121	22,289	355	13,600	167	7,685
Gear cutting machines 5/.....	150	69,398	262	11,406	46	7,326
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	7,189	2,767	7,911	2,664	243,249	8,507
Valued at \$3,025 each or more	643	36,364	792	20,185	1,233	63,707
Lathes (turning machines) under \$3,025.....	(D)	(D)	318	362	4,073	2,845
Horizontal NC turning machines.....	577	33,459	86	10,421	1,040	116,278
Vertical NC turning machines.....	9	3,629	16	3,654	96	14,424
Nonnumerically controlled turning machines.....	148	2,678	336	3,729	740	20,155
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	1,032	1,595	2,072	1,373
Valued at \$3,025 each or more.....	163	9,398	230	8,191	871	22,779
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.....	1,333	61,844	234	26,398	459	39,366
Y-axis travel 26 inches and over.....	117	12,204	5	814	98	19,647
Drill, mill, and bore, horizontal (automatic tool change).....	32	12,462	4	1,489	245	61,966
Other machining centers.....	399	29,434	45	3,769	67	19,082
Station type machines 5/.....	(D)	(D)	13	3,462	100	29,074
Other metal cutting machine tools:						
Valued under \$3,025 each.....	2,464	2,494	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	1,675	71,080	2,602	80,212	1,192	62,929
Punching and shearing machines:						
Valued under \$3,025 each.....	(D)	(D)	477	380	2,883	982
Valued at \$3,025 each or more.....	1,187	31,891	302	13,170	455	22,905
Bending and forming machines:						
Valued under \$3,025 each.....	311	520	1,881	1,057	27,271	2,284
Valued at \$3,025 each or more.....	718	34,639	560	24,028	4,614	60,678
Presses (except forging presses).....	1,484	40,260	1,291	15,532	3,507	36,524
Forging machines, including presses 6/.....	(D)	(D)	79	14,401	373	54,511
All other metal forming type machine tools:						
Valued under \$3,025 each.....	(D)	(D)	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines 6/.....	(D)	(D)	166	4,799	1,114	12,115
Thread rolling machines	11	1,068	7	150	28	1,134
Other metal forming machines 6/.....	344	28,703	(NA)	(NA)	(NA)	(NA)

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

1/For a comparison of North American Industry Classification System (NAICS)-based product codes, Schedule B export codes, and HTSUSA import codes, see Table 4 of the first quarter report for this series, MQ333W(03)-1, "Metalworking Machinery," issued June 2003.

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

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

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

5/Data for "Gear cutting machines" are combined with "Station type machines" for manufacturers' shipments.

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

Table 3b. Shipments, Exports, and Imports of Metalworking Machinery: Third Quarter 2003
 [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.....	(D)	(D)	134	102	205	33
Valued at \$3,025 each or more	262	19,216	77	4,321	102	7,931
Drilling machines:						
Valued under \$3,025 each.....	270	500	1,412	1,484	72,386	4,729
Valued at \$3,025 each or more	86	10,077	201	3,444	161	10,292
Gear cutting machines 5/.....	97	71,315	3,037	9,283	70	10,005
Grinding, polishing, buffing, honing, and lapping machinery (except gear tooth grinding, lapping, polishing, and buffing machines):						
Valued under \$3,025 each.....	7,399	2,520	10,767	5,063	208,822	9,490
Valued at \$3,025 each or more	549	30,679	432	18,105	931	54,978
Lathes (turning machines) under \$3,025.....	(D)	(D)	206	236	6,348	2,974
Horizontal NC turning machines.....	421	27,187	90	11,526	880	89,358
Vertical NC turning machines.....	16	9,579	13	1,139	87	13,898
Nonnumerically controlled turning machines.....	189	3,347	125	2,208	679	9,410
Milling machines:						
Valued under \$3,025 each.....	(D)	(D)	966	1,374	2,679	1,696
Valued at \$3,025 each or more.....	226	10,599	340	7,371	1,002	24,629
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.....	1,028	50,055	165	17,882	426	34,423
Y-axis travel 26 inches and over.....	81	7,963	2	270	89	11,126
Drill, mill, and bore, horizontal (automatic tool change).....	28	3,691	13	3,558	228	57,379
Other machining centers.....	199	14,679	77	4,714	45	14,905
Station type machines 5/.....	(D)	(D)	16	3,855	61	33,432
Other metal cutting machine tools:						
Valued under \$3,025 each.....	2,719	2,678	(NA)	(NA)	(NA)	(NA)
Valued at \$3,025 each or more.....	1,402	47,290	2,073	74,093	1,561	60,462
Punching and shearing machines:						
Valued under \$3,025 each.....	(D)	(D)	1,873	1,282	3,374	1,175
Valued at \$3,025 each or more.....	879	17,126	420	9,806	326	16,741
Bending and forming machines:						
Valued under \$3,025 each.....	324	525	3,864	1,492	21,555	1,626
Valued at \$3,025 each or more.....	653	29,484	498	18,191	2,190	58,361
Presses (except forging presses).....	1,435	33,527	1,761	15,887	2,644	30,564
Forging machines, including presses 6/.....	(D)	(D)	39	7,242	583	42,115
All other metal forming type machine tools:						
Valued under \$3,025 each.....	(D)	(D)	(NA)	(NA)	(NA)	(NA)
Machines valued at \$3,025 each or more:						
Die casting machines 6/.....	(D)	(D)	251	2,414	419	12,904
Thread rolling machines	(D)	(D)	2	40	5	522
Other metal forming machines 6/.....	310	24,332	(NA)	(NA)	(NA)	(NA)

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

1/For a comparison of North American Industry Classification System (NAICS)-based product codes, Schedule B export codes, and HTSUSA import codes, see Table 4 of the first quarter report for this series, MQ333W(03)-1, "Metalworking Machinery," issued June 2003.

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

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

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

5/Data for "Gear cutting machines" are combined with "Station type machines" for manufacturers' shipments.

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