

(Formerly Series No. MA35P)

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/.

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.

SUMMARY OF FINDINGS

In 1999, manufacturers' shipments for pumps and compressors totaled \$8,272.0 million, a decrease of 6 percent from the 1998 figure of \$8,759.2 million. Pumps (except vacuum pumps), including parts, decreased 6 percent from the 1998 total of \$5,165.0 million to \$4,854.4 million in 1999. Vertical turbine pumps (except drivers) decreased by 12 percent in 1999 to \$184.2 million, from \$209.7 million in 1998. Domestic water systems, including drivers, increased 11 percent, from \$414.5 million in 1998 to \$461.8 million in 1999. Domestic sump pumps, including drivers, increased by 3 percent from \$145.8 million in 1998 to \$149.9 million in 1999. Oil well and oil field pumps decreased 37 percent from \$364.3 million in 1998 to \$227.8 million in 1999. Parts for pumps made by manufacturers of complete pumps decreased by 8 percent from \$995.9 million in 1998 to \$914.9 million in 1999.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Keeley Voor, 301-457-4746.

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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Table 1. Summary of Quantity and Value of Shipments of Pumps and Compressors: 1999 and 1998
 [Quantity in number of units. Value in thousands of dollars]

Product description	1999		1998	
	Quantity	Value	Quantity	Value
Total.....	28,207,801	8,272,016	26,634,476	8,759,209
Pumps (except vacuum pumps), including parts.....	24,039,059	4,854,381	22,895,871	5,165,011
Industrial pumps.....	11,959,883	2,806,351	12,172,588	2,968,182
Drivers, reported.....	(X)	554,461	(X)	509,873
Centrifugal pumps (except drivers).....	7,400,708	1,631,154	7,374,395	1,729,506
Submersible, reported.....	832,078	289,744	703,204	252,851
Other, reported.....	6,218,498	1,302,333	6,321,526	1,434,628
Estimated from pre-1995-basis reports.....	350,132	39,077	349,665	42,027
Vertical turbine pumps (except drivers).....	53,132	184,190	54,894	209,705
Reported.....	52,776	182,034	54,526	207,250
Estimated from pre-1995-basis reports.....	356	2,156	368	2,455
Reciprocating pumps (except drivers), reported.....	(D)	(D)	(D)	(D)
Diaphragm pumps (except drivers), reported.....	2,069,340	239,471	1,877,899	226,620
Rotary pumps (except drivers), reported.....	(D)	(D)	(D)	(D)
Other (except drivers), reported.....	808,333	114,592	1,058,715	139,984
Estimated from other sources (potentially including drivers).....	68,876	22,093	70,101	23,367
Domestic water systems, including drivers.....	2,599,271	461,751	2,365,290	414,497
Reported.....	2,594,062	460,876	2,360,670	413,727
Estimated from other sources.....	5,209	875	4,620	770
Domestic sump pumps, including drivers.....	2,655,779	149,906	2,601,680	145,784
Reported.....	2,648,581	149,500	2,594,629	145,389
Estimated from other sources.....	7,198	406	7,051	395
Oil well and oil field pumps.....	47,649	227,756	56,608	364,325
Drivers, reported.....	(X)	81,653	(X)	112,481
Except drivers, reported.....	40,220	118,304	43,951	150,037
Reported.....	6,750,210	292,512	5,677,611	246,097
Estimated from other sources.....	26,268	1,246	22,094	1,048
Parts (reported; made by manufacturers of complete pumps).....	(X)	914,859	(X)	995,918
Compressors, including vacuum pumps and parts.....	4,168,742	2,859,997	3,738,605	3,081,098
Air and gas compressors (but not vacuum pumps).....	3,800,561	2,317,466	3,394,550	2,519,762
Drivers (except for one category of gas compressor), reported.....	(X)	284,239	(X)	270,860
Air compressors (except drivers), new, stationary, reported.....	750,430	791,197	763,094	926,985
Air compressors (except drivers), new, portable, reported.....	2,919,395	704,011	2,515,390	635,457
Gas compressors (usually except drivers), new, stationary, reported....	2,181	401,909	2,627	492,991
Other compressors (except drivers), reported.....	57,333	102,383	49,691	109,400
Laboratory vacuum pumps (potentially including drivers; reported).....	12,736	3,177	14,264	3,227
Vacuum pumps (except laboratory).....	355,445	206,980	329,791	228,849
Drivers, reported.....	(X)	21,480	(X)	22,565
Except drivers, reported.....	355,445	185,500	329,791	206,284
Estimated from other sources (potentially including drivers).....	22,079	14,759	20,485	16,318
Parts (reported; made by manufacturers of complete compressors).....	(X)	335,551	(X)	332,487

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

Table 2. Quantity and Value of Shipments of Pumps and Compressors: 1999 and 1998
 [Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1999		1998	
			Quantity	Value	Quantity	Value
3339111 pt.	Pumps and compressors 1/.....	(X)	28,207,801	8,272,016	26,634,476	8,759,209
	Industrial pumps (except hydraulic fluid power pumps).....	(X)	11,959,883	2,806,351	12,172,588	2,968,182
3339111401	Value of drivers 2/.....	126	(X) a/	554,461	(X)	509,873
	Centrifugal pumps:					
	Sewage type (nonsubmersible), vertical or horizontal with nonclog impeller:	(X)	9,103	45,809	10,703	35,867
3339111411	12" and under.....	23 a/	8,868	a/ 38,877	10,577	33,685
3339111412	Over 12".....	8 a/	235	6,932	126	2,182
	Submersible effluent pumps (less than 1" solids handling capacity).....	(X)	339,389	60,646	288,707	55,082
3339111424	Less than 1 hp.....	17	322,744	35,541	273,349	30,854
3339111425	1 hp and over.....	16	16,645	c/ 25,105	15,358	24,228
	Submersible solids handling pumps, (solids 1" to 2" inclusive).....	(X)	402,660	95,947	330,591	73,598
3339111428	1/2 hp and under.....	18	352,021	66,626	283,599	46,413
3339111429	Over 1/2 hp.....	22	50,639	29,321	46,992	27,185
	Submersible nonclog pumps (greater than 2" solids handling capacity).....	(X)	47,300	88,533	42,185	77,391
333911142C	3" discharge and under.....	16	26,629	b/ 16,849	22,851	15,289
333911142E	Discharge more than 3" but less than 7".....	23 b/	19,650	c/ 58,952	18,439	53,346
333911142G	7" discharge and over.....	11 c/	1,021	b/ 12,732	895	8,756
	Submersible grinder pumps (incorporating a hardened stainless steel cutter mechanism to macerate the solids into a fine slurry).....	(X)	42,729	44,618	41,721	46,780
333911142K	2 hp and below.....	10	35,625	33,990	34,560	36,087
333911142M	Over 2 hp.....	6	7,104	10,628	7,161	10,693
	Single and two stage, single and end suction, close coupled with driver.....	(X)	863,755	217,023	r/ 794,667	r/ 204,137
3339111444	1" discharge and under.....	41 a/	343,534	b/ 49,320	r/ 291,524	r/ 44,629
3339111445	Discharge more than 1", up to 2".....	46	446,043	a/ 108,975	r/ 429,416	r/ 103,123
3339111447	Over 2" discharge.....	44 b/	74,178	b/ 58,728	r/ 73,727	56,385
	Single and two stage, single suction, in-line, close coupled with driver.....	(X)	1,745,435	51,916	1,744,066	51,908
3339111449	2" discharge and under.....	15	(D)	(D)	(D)	(D)
333911144A	Over 2" discharge.....	16	(D)	(D)	(D)	(D)
	Single stage, single suction, vertical, in-line frame.....	(X)	351,178	64,576	368,375	59,230
333911144C	2" discharge and under.....	19	341,100	a/ 36,130	358,490	28,593
333911144D	Over 2" discharge.....	16	10,078	a/ 28,446	9,885	30,637
	Single stage, single suction, frame or foot mounted, metallic pumps (built to National or International Standards ANSI B73.1 or ISO 2858).....	(X)	62,579	145,700	67,218	160,858
333911144F	2" discharge and under.....	27 a/	25,195	a/ 55,654	28,056	62,370
333911144G	Over 2" discharge.....	26	37,384	a/ 90,046	39,162	98,488
	Single stage, single suction, frame or foot mounted, nonmetallic pumps (built to National or International Standards ANSI B73.1 or ISO 2858).....	(X)	33,612	19,506	40,953	23,158
333911144J	2" discharge and under.....	13 b/	31,889	b/ 10,068	39,695	16,190
333911144K	Over 2" discharge.....	10	1,723	b/ 9,438	1,258	6,968
	Single stage, single suction, frame or foot mounted, non-ANSI, non-ISO, with or without recessed impeller.....	(X)	72,387	81,375	r/ 74,140	r/ 100,799
333911144M	1" discharge and under.....	19	17,009	4,240	14,869	4,740
333911144N	Discharge more than 1", up to 2".....	23 a/	26,404	a/ 18,705	r/ 27,995	r/ 20,354
333911144R	Over 2" discharge.....	29 b/	28,974	b/ 58,430	31,276	75,705
	Single stage, single suction, replaceable elastomer lined or hard metal, frame or foot mounted.....	(X)	6,858	58,741	7,057	66,054
3339111451	1" discharge and under.....	4	(D)	(D)	(D)	(D)
3339111452	Discharge more than 1", up to 2".....	7	(D)	(D)	(D)	(D)
3339111454	Over 2" discharge.....	8 b/	2,643	b/ 38,607	2,768	40,734
	Single stage, single suction, centerline mounted.....	(X)	27,937	70,909	28,356	86,838
3339111456	2" discharge and under.....	9	24,908	b/ 21,376	24,774	24,476
3339111457	Over 2" discharge.....	11 c/	3,029	c/ 49,533	3,582	62,362
	Single stage, axially split, double suction.....	(X)	16,374	91,341	17,040	109,227
3339111459	4" discharge and under.....	16	5,236	a/ 10,065	4,383	10,001
333911145A	Discharge more than 4", up to 8".....	18 a/	8,464	b/ 46,928	9,772	52,318
333911145C	Over 8" discharge.....	16	2,674	b/ 34,348	2,885	46,908
	Single stage, radially split, double suction impeller pumps, API-610 compliant.....	(X)	295	19,521	294	21,519

Table 2. Quantity and Value of Shipments of Pumps and Compressors: 1999 and 1998
 [Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1999		1998	
			Quantity	Value	Quantity	Value
333911145E	4" discharge and under.....	5 c/	36 a/	1,551	25	1,561
333911145F	Discharge more than 4", up to 8".....	7 b/	152 a/	8,174	160	12,275
333911145H	Over 8" discharge.....	5 b/	107 b/	9,796	109	7,683
	Single stage, radially split, double suction impeller pumps, non-API compliant.....	(X)	(D)	(D)	(D)	(D)
333911145K	4" discharge and under.....	4	(D)	(D)	(D)	(D)
333911145L	Discharge more than 4", up to 8".....	2	(D)	(D)	(D)	(D)
333911145N	Over 8" discharge.....	2	(D)	(D)	(D)	(D)
	Multistage, single or double suction, diffuser design, radially split case.....	(X)	42,254	41,454	20,039 r/	46,532
3339111461	4" discharge and under.....	15	(D)	(D)	(D)	(D)
3339111464	Discharge more than 4", up to 8".....	8 c/	168 b/	10,213	239	13,137
3339111467	Over 8" discharge.....	3	(D)	(D)	(D)	(D)
	Multistage, single or double suction, volute or diffuser design, axially split case.....	(X)	1,376	51,005	1,883	76,443
333911146C	4" discharge and under.....	12 c/	1,154 c/	29,492	1,559	39,455
333911146E	Discharge more than 4", up to 8".....	7 c/	209 c/	20,013	310	34,721
333911146H	Over 8" discharge.....	4	13	1,500	14	2,267
	Sealless centrifugal pumps, magnetic drive.....	(X)	144,553	41,135 r/	149,393 r/	73,957
3339111471	1" discharge and under.....	14	139,692	24,755	125,226	26,758
3339111474	Discharge more than 1", up to 2".....	10	4,151	11,012	(D)	(D)
3339111477	Over 2" discharge.....	8 b/	710 b/	5,368	(D)	(D)
	Sealless centrifugal pumps, canned motor.....	(X)	(D)	(D)	(D)	(D)
333911147C	1" discharge and under.....	8 c/	18,555 b/	10,867	16,399	10,537
333911147E	Discharge more than 1", up to 2".....	4	(D)	(D)	(D)	(D)
333911147H	Over 2" discharge.....	4 a/	258	1,265	(D)	(D)
	Propeller and mixed flow, horizontal and vertical, including vertical turbine over 36".....	(X)	3,163	63,814	3,826	81,480
3339111481	36" and under.....	18 c/	2,144 c/	41,909	2,267	45,453
3339111484	Over 36".....	14 c/	1,019 c/	21,905	1,559	36,027
	All other centrifugal pumps.....	(X)	2,815,443	215,659	2,993,516	236,621
333911148K	6" discharge and under.....	40	2,813,976	197,379	2,989,008	200,587
333911148M	Over 6" discharge.....	13 c/	1,467 b/	18,280	4,508	36,034
	Centrifugal pumps, n.s.k.	12	350,132	39,077	349,665	42,027
	Vertical turbine pumps not exceeding 36" discharge, including deep-well:					
	Pump with submersible motor.....	(X)	29,692	53,534	31,235	67,554
3339111493	Bowl diameter 6" and under.....	21	17,727 b/	24,786	17,402	31,101
3339111498	Bowl diameter over 6".....	19 c/	11,965 c/	28,748	13,833	36,453
333911149F	Pump and bowl assemblies through 36" (all column and shaft lengths, including FM or UL approved vertical turbine fire pumps; deep well and short coupled pumps, except can and pot type).....	17	21,060 b/	96,993	21,389	103,634
333911149N	Can and pot type (pump and bowl assemblies, suction can and pot type).....	7 c/	2,024 c/	31,507	1,902	36,062
	Vertical turbine pumps, n.s.k.	1	356	2,156	368	2,455
	Reciprocating pumps:					
33391114C3	Direct-acting steam-driven.....	1	(D)	(D)	(D)	(D)
33391114C7	Driven by electric motor, engine, or steam turbine:					
	Reciprocating piston, plunger or diaphragm (not air operated) pumps.....	38 a/	438,068 b/	223,938	579,399	226,112
33391114D5	Diaphragm pumps (air operated).....	22	2,069,340	239,471	1,877,899	226,620
	Rotary pumps:					
	100-PSI and under, designed pressure.....	(X)	867,844	284,270	853,757	255,053
33391114R1	10 GPM and under, designed capacity.....	33	567,685	98,017	620,249	69,033
33391114R3	11 to 99 GPM, designed capacity.....	28	258,031 c/	131,432	194,175	131,778
33391114R5	100 to 299 GPM, designed capacity.....	15	(D)	(D)	(D)	(D)
33391114R7	300 GPM and over, designed capacity.....	10	(D)	(D)	(D)	(D)
	101 to 249 PSI, designed pressure.....	(X)	121,634	66,479	192,431	79,607
33391114RA	10 GPM and under, designed capacity.....	13	80,728	19,465	151,599	29,344
33391114RC	11 to 99 GPM, designed capacity.....	14	28,740	25,150	26,842	25,848
33391114RE	100 GPM and over, designed capacity.....	9	12,166	21,864	13,990	24,415
	250 to 500 PSI, designed pressure:					
33391114RJ	10 GPM and under, designed capacity.....	11	121,349	13,998	80,255	9,289
33391114RM	11 GPM and over, designed capacity.....	10	5,419	7,953	5,311	8,074
33391114RR	Over 500 PSI, designed pressure.....	8	(D)	(D)	(D)	(D)
33391114T5	Other industrial pumps, n.e.c.	28	808,333	114,592	1,058,715	139,984
	Industrial pumps, n.s.k. 3/.....	67	68,876	22,093	70,101	23,367
	Domestic water systems, including drivers.....	(X)	2,599,271	461,751	2,365,290	414,497
3339111167	Nonsubmersible pump systems (jet and nonjet, including drivers).....	16	1,216,112	190,454	1,078,674	167,590

Table 2. Quantity and Value of Shipments of Pumps and Compressors: 1999 and 1998
 [Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1999		1998	
			Quantity	Value	Quantity	Value
	Submersible pump systems, 5 hp and under, including drivers.....	(X)	1,356,283	266,630	1,262,141	243,671
3339111172	Up to 1 hp.....	19 a/	1,022,002	a/ 192,593	946,297	172,891
3339111175	Over 1 hp to 3 hp.....	15 b/	226,330	b/ 54,597	222,249	53,721
3339111178	Over 3 hp to 5 hp.....	15 c/	107,951	b/ 19,440	93,595	17,059
3339111190	Domestic hand and windmill pumps, pump jacks, and cylinders (sold separately, including drivers).....	4	21,667	3,792	r/ 19,855	r/ 2,466
	Domestic water systems and related pumps, n.s.k.	3	5,209	875	4,620	770
3339111 pt.	Domestic sump pumps, 1 hp and under, including drivers.....	(X)	2,655,779	149,906	2,601,680	145,784
3339111235	Pedestal, including drivers.....	18 b/	306,863	b/ 15,977	270,491	14,132
	Submersible, including drivers.....	(X)	2,341,718	133,523	2,324,138	131,257
3339111238	1/3 hp and under.....	19 b/	2,055,558	a/ 110,140	2,117,016	112,778
3339111239	Over 1/3 hp.....	7 a/	286,160	b/ 23,383	207,122	18,479
	Domestic sump pumps, n.s.k. 3/.....	5	7,198	406	7,051	395
3339111330	Oil well and oil field pumps (except boiler feed).....	(X)	47,649	227,756	56,608	364,325
3339111335	Value of drivers 2/.....	8	(X)	81,653	(X)	112,481
3339111341	Subsurface pumps for oil-well pumping.....	10 b/	40,220	a/ 118,304	43,951	150,037
3339111352	Mud pumps (slush pumps).....	3	(D)	(D)	(D)	(D)
3339111363	Other oil well and oil field pumps 4/.....	9	(D)	(D)	(D)	(D)
	Oil well and oil field pumps, n.s.k. 3/.....	6	439	2,035	521	3,255
	Other pumps, n.e.c., including drivers.....	(X)	6,776,478	293,758	5,699,705	247,145
	Other pumps (except vacuum pumps, automotive pumps, measuring and dispensing or service station pumps, hand pumps, and hydraulic fluid power pumps), including oil burner and appliance pumps, fire engine pumps, laboratory pumps, packaged pump units, hot water heating circulator pumps, etc.:					
3339111580	Reported (or estimated from prior year reports).....	29	6,750,210	a/ 292,512	5,677,611	246,097
	Estimated from other sources 3/.....	10	26,268	1,246	22,094	1,048
	Parts and attachments for pumps and pumping equipment whose product codes begin with 333911; made by manufacturers of complete units only.....	(X)	(X)	914,859	(X) r/	1,025,078
3339115144	Aftermarket (spare) parts for centrifugal pumps.....	60	(X)	c/ 645,687	(X)	728,303
3339115155	Aftermarket (spare) parts for vertical turbine pumps.....	15	(X)	b/ 50,553	(X) r/	65,334
3339115166	Aftermarket (spare) parts for reciprocating pumps.....	32	(X)	(X)	(X) r/	101,789
3339115199	Other.....	34	(X)	b/ 126,200	(X)	129,652
3339121 pt.	Air and gas compressors.....	(X)	3,800,561	2,317,466	3,394,550	2,519,762
3339121115	Value of drivers 2/.....	37	(X)	284,239	(X) r/	270,860
	Air compressors, new:					
	Stationary, reciprocating, single acting.....	(X)	608,196	282,049	616,239	302,441
3339121121	1-1/2 hp and under.....	17	259,658	44,338	233,963	43,367
3339121124	Over 1-1/2 hp to 5 hp.....	23 b/	147,870	b/ 93,415	155,073	99,050
3339121127	6 to 25 hp.....	23 c/	199,992	b/ 129,792	226,484	143,875
333912112A	26 hp and over.....	11 b/	676	b/ 14,504	719	16,149
3339121133	Stationary, reciprocating, double acting.....	11	21,303	a/ 31,876	17,648	40,510
	Stationary, rotary positive:					
3339121144	Discharge pressure 50 PSIG and under, all hp sizes.....	10	77,140	31,292	84,547	32,679
	Discharge pressure of 51 PSIG and over.....	(X)	19,861	256,968	19,589	308,885
3339121151	40 hp and under.....	12 a/	11,238	b/ 87,449	r/ 11,672	97,879
3339121154	41 to 150 hp.....	14	7,200	105,956	6,142	116,994
3339121157	151 to 300 hp.....	6	798	28,103	1,382	59,847
333912115A	301 hp and over.....	4	625	35,460	393	34,165
3339121166	Stationary, centrifugal and axial.....	10	23,930	189,012	25,071	242,470
	Portable.....	(X)	2,919,395	704,011	2,515,390	635,457
3339121171	Under 11 CFM.....	11	(D)	(D)	(D)	(D)
3339121174	11 to 74 CFM.....	10	(D)	(D)	(D)	(D)
3339121177	75 to 124 CFM.....	9	554	4,033	r/ 803	r/ 5,507
333912117A	125 to 249 CFM.....	8	12,378	108,673	12,733	r/ 112,968
333912117E	250 to 599 CFM.....	6	2,247	32,712	2,517	r/ 34,900
333912117H	600 CFM and over.....	7	1,914	76,624	2,096	r/ 77,889
	Gas compressors, new:					
	Stationary, centrifugal and axial.....	(X)	602	222,392	507	348,187
3339121183	Natural gas.....	6	51	55,755	139	140,033
3339121188	All other gases.....	9	551	a/ 166,637	368	208,154
	Stationary reciprocating:					
3339121199	Integral engine, including drivers.....	5 b/	193	39,048	(D)	(D)
	Other than integral engine:					
33391211A1	1,000 hp and under.....	18 a/	1,129	b/ 90,295	1,461	95,228

Table 2. Quantity and Value of Shipments of Pumps and Compressors: 1999 and 1998
 [Quantity in number of units. Value in thousands of dollars]

Product code	Product description	No. of cos.	1999		1998	
			Quantity	Value	Quantity	Value
33391211A9	1,001 hp and over.....	10	921	235,940	(D)	(D)
33391211CC	Stationary rotary positive.....	8 b/	450	a/ 89,222	659	49,576
33391211FF	Other compressors (except for refrigeration, air-conditioning, and ice-making), including rebuilt compressors, compressor packages, and packaged compressor units assembled from purchased compressors.....	15	57,333	102,383	49,691	109,400
	Air and gas compressors, n.s.k. 3/.....	16	70,108	42,978	62,618	46,730
	Laboratory vacuum pumps.....	(X)	12,736	3,177	14,264	3,227
3391110123	Laboratory vacuum pumps, including drivers and replacement parts.....	4	12,736	3,177	14,264	3,227
3339121 pt.	Vacuum pumps, excluding laboratory.....	(X)	355,445	206,980	329,791	228,849
3339121225	Value of drivers 2/.....	15	(X)	21,480	(X)	22,565
	Low vacuum, 29.5" mercury vacuum and lower:					
3339121261	Under 5 hp.....	19	287,188	57,050	257,537	63,464
3339121265	5 hp and over.....	14 b/	4,257	a/ 32,461	r/ 5,319	r/ 44,138
	High vacuum, 29.6" mercury vacuum and over:					
3339121273	Under 5 hp.....	16 c/	60,219	62,803	63,325	63,670
3339121277	5 hp and over.....	7 a/	3,781	b/ 33,186	r/ 3,610	r/ 35,012
	Vacuum pumps, n.s.k. 3/.....	16	22,079	14,759	20,485	r/ 16,318
	Parts and attachments for air and gas compressors and vacuum pumps whose product codes begin with 3339121; made by manufacturers of complete units only.....	(X)	(X)	335,551	(X)	332,487
3339125111	Parts and attachments for air and gas compressors and vacuum pumps (except laboratory).....	42	(X)	335,551	(X)	332,487

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. n.s.k Not specified by kind.
 pt. Part. r/Revised by 5 percent or more from previously published data. X Not applicable.

- 1/Value includes parts but quantity does not.
- 2/Value of drivers (electric motors, internal combustion engines, hydrostatic transmissions, steam turbines, etc.) is not included for most product categories but rather placed in one of four separate "driver" categories within the product code. Drivers may be included in values for products in product codes without separate driver categories.
- 3/Not specified by kind, or "n.s.k.": Values and quantities for a number of manufacturing establishments (either delinquent or too small to be included in the survey) were estimated from the 1997 Census of Manufactures and subsequent other surveys and records. Estimates were made only to the product code level. Drivers may in some cases be included.
- 4/Power pumps for water flooding are reported in product code 3339111363.

Note: Percent of estimation of each item is indicated as follows: a/10 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, Exports, and Imports of Pumps and Compressors: 1999 and 1998
 [Quantity in number of units. Value in thousands of dollars]

Product description	Manufacturers' shipments 1/		Export shipments 2/		Import shipments 4/	
	Quantity	Value f.o.b. plant	Quantity	Value 3/	Quantity	Value 5/
1999						
Pumps 6/.....	24,039,059	3,939,522	1,885,057	928,948	49,346,904	659,167
Centrifugal pumps, submersible.....	832,078	289,744	344,456	73,068	1,364,056	42,181
Centrifugal pumps, other 7/.....	6,568,630	1,341,410	140,333	285,907	12,441,688	247,028
Turbine pumps, vertical.....	53,132	184,190	8,459	31,136	132,291	5,231
Reciprocating pumps.....	(D)	(D)	89,241	83,626	666,365	82,444
Diaphragm pumps.....	2,069,340	239,471	125,599	53,646	818,844	19,774
Rotary pumps.....	(D)	(D)	53,876	115,287	586,009	46,141
Oil well and oil field pumps (except boiler feed).....	47,649	227,756	5,971	55,798	32,211	3,994
Domestic water systems, including windmill and hand pumps.....	2,599,271	461,751	429,413	37,874	22,157,531	38,217
Other pumps, including domestic water systems and sump pumps, and hot water circulator pumps, etc.	10,240,590	558,256	687,709	192,606	11,147,909	174,157
Compressors 6/.....	3,730,453	2,274,488	1,882,406	186,587	10,613,229	363,573
Stationary air compressors:						
Reciprocating, single and double acting 8/.....	629,499	313,925	(NA)	(NA)	379,067	91,782
Rotary positive, centrifugal, and axial 8/.....	120,931	477,272	(NA)	(NA)	334,766	117,959
Portable air compressors 8/.....	2,919,395	704,011	4,129	56,938	6,073,371	111,245
Other air and gas compressors, including gas compressors, and compressor packages.....	60,628	779,280	1,878,277	129,649	3,826,025	42,587
Vacuum pumps.....	(D)	(D)	369,466	90,748	3,403,063	313,984
1998						
Pumps 6/.....	22,895,871	5,165,011	1,977,702	911,730	49,136,303	590,962
Centrifugal pumps, submersible.....	703,204	252,851	256,380	61,867	781,827	35,062
Centrifugal pumps, other 7/.....	6,671,191	1,476,655	141,873	305,934	10,490,822	220,158
Turbine pumps, vertical.....	54,894	209,705	8,603	30,653	82,624	4,310
Reciprocating pumps.....	(D)	(D)	86,787	86,034	646,734	55,830
Diaphragm pumps.....	1,877,899	226,620	161,637	43,165	1,019,134	25,663
Rotary pumps.....	(D)	(D)	60,399	110,259	6,873,392	45,775
Oil well and oil field pumps (except boiler feed).....	56,608	364,325	6,191	57,964	7,816	17,857
Domestic water systems, including windmill and hand pumps.....	2,365,290	414,497	417,633	25,227	18,582,969	29,986
Other pumps, including domestic water systems and sump pumps, and hot water circulator pumps, etc.	9,353,049	532,518	838,199	190,627	10,650,985	156,321
Compressors 6/.....	3,016,593	2,127,610	1,905,853	183,405	9,142,161	258,306
Stationary air compressors:						
Reciprocating, single and double acting 8/.....	633,887	342,951	(NA)	(NA)	393,407	95,044
Rotary positive, centrifugal, and axial 8/.....	129,207	584,034	(NA)	(NA)	357,124	10,935
Portable air compressors 8/.....	2,201,181	598,234	4,433	63,318	3,792,622	101,754
Other air and gas compressors, including gas compressors, and compressor packages.....	52,318	602,391	1,901,420	120,087	4,599,008	50,573
Vacuum pumps.....	(D)	(D)	411,735	105,504	2,227,654	278,270

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

1/Manufacturers' shipments generally exclude value of drivers. See Table 4 for comparability.

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

3/Excludes value of drivers.

4/Sources: Census Bureau report IM 145, U.S. General Imports, and IM 146, U.S. Imports for Consumption.

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

6/Manufacturers' shipments detail does not necessarily sum to total because of such factors as drivers, parts, and "n.s.k.";

see Table 1.

7/Manufacturers' shipments include n.s.k. (see Table 1) which is believed not to include submersible pumps.

8/Export data for three categories of compressors are combined because one harmonized code in the third category may be used interchangeably with any of several codes in the first two categories.

Table 4. Comparison of North American Industry Classification System-Based Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 1999

Product code	Product description	Export number 1/	Import number 2/
3339111424, 425, 428, 429, 42C, 42E, 42G, 42K, 42M	Centrifugal pumps, submersible	8413.70.2004	8413.70.2004
3339111411, 412, 444, 445, 447, 449, 44A, 44C, 44D, 44F, 44G, 44J, 44K, 44M, 44N, 44R, 451, 452, 454, 456, 457, 459, 45A, 45C, 45E, 45F, 45H, 45K, 45L, 45N, 461, 464, 467, 46C, 46E, 46H, 471, 474, 477, 47C, 47E, 47H, 481, 484, 48K, 48M	Centrifugal pumps, other.....	8413.70.1000	8413.70.1000
		8413.70.2005	8413.70.2005
		8413.70.2015	8413.70.2015
		8413.70.2022	8413.70.2022
		8413.70.2025	8413.70.2025
		8413.70.2030	8413.70.2030
		8413.70.2040	8413.70.2040
8413.70.2090	8413.70.2090		
3339111493, 498, 49F, 49N	Turbine pumps, vertical.....	8413.81.0020	8413.81.0020
33391114C3, 4C7	Reciprocating pumps.....	8413.50.0090	8413.50.0090
33391114D5	Diaphragm pumps.....	8413.50.0050	8413.50.0050
33391114R1, 4R3, 4R5, 4R7, 4RA, 4RC, 4RE, 4RJ, 4RM, 4RR	Rotary pumps.....	8413.60.0070	8413.60.0070
		8413.60.0090	8413.60.0090
3339111335, 341, 352, 363	Oil well and oil field pumps (except boiler feed).....	8413.50.0010	8413.50.0010
		8413.60.0050	8413.60.0050
3339111167, 172, 175, 178, 190	Domestic water systems, including windmill and hand pumps	8413.20.0000	8413.20.0000
		8413.81.0030	8413.81.0030
33391114T5, 235, 238, 239, 580	Other pumps.....	8413.81.0040	8413.81.0040
3339121121, 124, 127, 12A, 133	Stationary air compressors, reciprocating, single and double acting.....	8414.80.1018	8414.80.1505
		8414.80.1042	8414.80.1515
		8414.80.1055	8414.80.1525
			8414.80.1535
			8414.80.1540
			8414.80.1545
8414.80.1555			
3339121144, 151, 154, 157, 15A, 166	Stationary air compressors, rotary positive, centrifugal, and axial.....	8414.80.1060	8414.80.1560
		8414.80.1067	8414.80.1565
		8414.80.1075	8414.80.1570
		8414.80.1080	8414.80.1575
			8414.80.1580
3339121171, 174, 177, 17A, 17E, 17H	Portable air compressors.....	8414.40.0000	8414.40.0000
		8414.80.1095	8414.80.1585
		8414.80.1590	
3339121183, 188, 199, 1A1, 1A9, 1CC, 1FF	Other compressors.....	8414.80.2010	8414.80.2010
		8414.80.2050	8414.80.2050
		8414.80.2060	8414.80.2060
		8414.80.2070	8414.80.2070
		8414.80.9000	8414.80.9000
3391110123, 3339121255, 261, 265, 273, 277	Vacuum pumps.....	8414.10.0000	8414.10.0000

1/Source: 1999 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 (1999).