

(Formerly Series No. MA35Q)

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: The value of shipments of antifriction bearings, components and parts was \$5,795.6 million in 1999, a less than 1 percent decrease from shipments of \$5,800.1 million in 1998. The 1999 total includes complete ball bearings, unmounted, \$1,951.7 million, a 4-percent decrease from the 1998 value of shipments; tapered roller bearings, including cups and cones, unmounted, \$1,589.5 million, an increase of 3 percent; roller bearings (except tapered), unmounted, \$1,201.8 million, an increase of 3 percent; mounted bearings (except plain), \$447.4 million, a decrease of less than 1 percent; and parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately, \$605.3 million, a decrease of 2 percent.

Current
Industrial
Reports

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Dana Brooks, 301-457-4797.

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

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. Census Bureau



**Table 1. Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts
by Product Class: 1990 to 1999**

[Millions of dollars]

Product code	Product description	1999	1998	1997	1996	1995
332991	Ball and roller bearings.....	5,795.6	5,800.1	5,723.1	5,488.0	5,205.4
3329911	Ball bearings, complete, unmounted.....	1,951.7	2,024.2	2,095.9	1,989.1	1,896.7
3329913	Tapered roller bearings, including cups and cones, unmounted.....	1,589.5	1,538.8	1,420.9	1,408.8	1,283.1
3329915	Roller bearings (except tapered), unmounted....	1,201.8	1,169.4	1,117.2	1,017.4	987.5
3329917	Mounted bearings (except plain).....	447.4	450.6	426.1	458.4	459.7
3329919	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately.....	605.3	617.1	663.0	614.3	578.5
		1994	1993	1992	1991	1990
332991	Ball and roller bearings.....	4,693.8	4,331.1	4,011.3	3,778.9	4,064.2
3329911	Ball bearings, complete, unmounted.....	1,676.2	1,616.8	1,484.2	1,406.7	1,469.0
3329913	Tapered roller bearings, including cups and cones, unmounted.....	1,139.2	1,001.0	935.6	876.8	977.3
3329915	Roller bearings (except tapered), unmounted....	935.5	810.4	773.1	794.3	872.4
3329917	Mounted bearings (except plain).....	407.8	439.4	378.0	322.9	362.9
3329919	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately.....	535.1	467.0	440.4	378.3	382.6

Table 2. Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 1999 and 1998
 [Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	No. of co.	1999		1998	
			Quantity	Value	Quantity	Value
332991	Ball and roller bearings.....	(X)	(X)	5,795,637	(X)	5,800,123
3329911	Ball bearings, complete, unmounted.....	71	602,669 a/	1,951,653	604,431	2,024,152
	Annular, including self-aligning:					
	Ground or precision:					
	Single-row conrad:					
	Miniature (below 9 mm outside diameter):					
3329911001	Regular (ABEC 1 and 3).....	3	(D)	(D)	(D)	(D)
3329911002	Precision (ABEC 5 and up).....	5	5,308	21,491	5,542	22,408
	Other regular (ABEC 1 and 3):					
3329911003	9 mm outside diameter through 30 mm outside diameter.....	10	81,516	72,755	79,228	77,058
3329911004	Over 30 mm outside diameter through 52 mm outside diameter.....	19	119,625	179,753	126,431	190,610
3329911005	Over 52 mm outside diameter through 100 mm outside diameter.....	19	35,459	200,589	36,163	215,944
3329911007	Over 100 mm outside diameter.....	19	5,433	175,820 r/	4,659 r/	176,562
	Other precision (ABEC 5 and up):					
3329911009	9 mm outside diameter through 30 mm outside diameter.....	6	4,828	60,896	5,563	63,844
3329911011	Over 30 mm outside diameter through 52 mm outside diameter.....	8	592	40,670	657 r/	43,591
3329911012	Over 52 mm outside diameter through 100 mm outside diameter.....	7	209	31,367 r/	199 r/	31,566
3329911013	Over 100 mm outside diameter.....	7	62	40,709 r/	66 r/	42,332
3329911014	Single-row maximum capacity type.....	7	1,110	14,202	1,696 r/	23,590
3329911018	Integral shaft and integral spindle ball bearings.....	8 a/	24,084 b/	351,402	21,957	314,978
3329911020	Double-row.....	12	29,648	192,956	31,249	209,410
	Angular contact:					
3329911019	Regular.....	11	845	61,656	1,066	78,738
3329911023	Precision.....	4	(D)	(D)	(D)	(D)
3329911024	All other ground or precision bearings (ABEC 1 and up).....	4	(D)	(D)	(D)	(D)
3329911027	Ground bearings of less than ABEC 1 precision.....	4	4,318	43,023 r/	5,582 r/	52,210
3329911029	Unground (less than ABEC 1).....	17	227,208	133,514	221,293	134,059
	Thrust ball bearings:					
3329911033	Ground.....	12 b/	7,053 a/	26,696	7,627	31,941
3329911035	Unground.....	5	8,071 a/	12,761 r/	7,445 a/	12,024
3329911055	Other ball bearings.....	17	43,035	230,609	43,544	240,302
3329913	Tapered roller bearings, including cups and cones, unmounted.....	20	267,846	1,589,534	263,258	1,538,793
3329913032	Cup and cone assemblies shipped as a set	18	(D)	(D)	(D)	(D)
3329913033	Cups shipped separately.....	14	(D)	(D)	(D)	(D)
3329913034	Cone assemblies shipped separately.....	17	(D)	(D)	(D)	(D)
3329915	Roller bearings (except tapered), unmounted.....	39	957,923	1,201,821	876,428	1,169,428
	Cylindrical roller bearings:					
3329915011	Regular (ABEC 1 and 3).....	24	144,749	229,721	131,066	224,865
3329915012	Precision (ABEC 5 and up).....	8	174	70,407	201	81,013
	Spherical roller bearings, including hourglass and barrel:					
3329915024	Single-row.....	5	(D)	(D)	(D)	(D)
3329915025	Double-row.....	5	719	164,962	766	177,687
3329915041	Needle roller bearings.....	6	657,697	562,546	612,089	523,473
3329915093	Other roller bearings, n.e.c.	15	(D)	(D)	(D)	(D)
3329917	Mounted bearings (except plain).....	18	8,986	447,359	9,357	450,632
3329917017	Ball bearings, unit and/or split mounted.....	11	7,853	225,155	8,172	230,042
	Roller:					
3329917053	Unit-mounted.....	9 b/	981 b/	196,904	1,005	187,062
3329917055	Split-mounted.....	5 c/	151 c/	25,300	181	33,528
3329919	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately.....	65	(X)	605,270	(X)	617,118
3329919011	Balls (millions of units) 1/.....	20	26,223 a/	209,996	28,169	223,934
3329919021	Other antifriction ball bearing components and parts, including unassembled ball bearings, cages, races, seals, shields, etc. (except balls).....	18	(X)	91,225	(X)	99,960

Table 2. Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 1999 and 1998
 [Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	No. of co.	1999		1998	
			Quantity	Value	Quantity	Value
3329919031	Rollers (millions of units) 2/.....	18 a/	20,433	148,895	15,028	136,691
	Other roller bearing parts and components (except rollers):					
3329919035	For tapered roller bearings (except cup and cone assemblies).....	9	(X)	77,921	(X)	76,468
3329919036	For cylindrical roller bearings.....	9	(X)	(D)	(X)	(D)
3329919037	For spherical roller bearings.....	3	(X)	(D)	(X)	(D)
3329919049	For other roller bearings.....	10	(X)	(D)	(X)	(D)
3329919059	Housings and parts and components for housings, including housing closures, collars, spacers, sleeves, adapters, and other miscellaneous items.....	5	(X)	(D)	(X)	(D)

D Data 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/Production for all purposes of balls for 1999 and 1998 is 25.4 millions of units and 27.5 millions of units, respectively.

2/Production for all purposes of rollers for 1999 is 14.0 millions of units. Data for 1998 is withheld to avoid disclosing data for individual companies.

Note: 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, Imports, and Apparent Consumption of Antifriction Ball and Roller Bearings, Components, and Parts: 1999
 [Quantity in thousands of units. Value and duty in thousands of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Imports for consumption 2/		Apparent consumption 3/	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	C.i.f. and calculated duty	Quantity	Value
3329911001, 002	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, miniature (below 9 mm outside diameter), regular (ABEC 1 and 3) and precision (ABEC 5 and up).....	(D)	(D)	406	4,031	21,001	13,151	(D)	(D)
3329911003, 009	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), 9 mm outside diameter through 30 mm outside diameter.....	86,344	133,651	930	13,667	290,396	157,760	375,810	277,744
3329911004, 011	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), over 30 mm outside diameter through 52 mm outside diameter.....	120,217	220,423	451	6,674	183,835	178,143	303,602	391,892
3329911005, 012	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), over 52 mm outside diameter through 100 mm outside diameter.....	35,667	231,956	548	10,126	34,108	111,507	69,227	333,337
3329911007, 013	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), over 100 mm outside diameter.....	5,496	216,529	200	12,689	3,064	47,769	8,360	251,609
3329911014	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, single-row maximum capacity type.....	1,110	14,202	239	8,907	12,771	7,316	13,642	12,611
3329911018	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, integral shaft and integral spindle.....	24,084	351,402	1,066	17,204	19,861	56,484	42,879	390,682
3329911020	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, double-row.....	29,648	192,956	107	2,427	4,945	14,673	34,486	205,202
3329911019 023	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, angular contact, regular and precision.....	(D)	(D)	12,079	62,379	7,297	79,888	(D)	(D)
3329911024 027, 029, 035	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other ground or precision (ABEC 1 and up) and ground of less than ABEC 1 precision and annular ball bearings, including self-aligning, unground (less than ABEC 1) and unground thrust ball bearings.....	(D)	(D)	600	8,224	36,928	23,645	(D)	(D)
3329911033	Ground thrust ball bearings.....	7,053	26,696	672	3,418	3,558	8,979	9,939	32,257
3329911055	Other ball bearings.....	43,035	230,609	18,757	106,486	29,185	114,262	53,463	238,385
3329913032	Tapered roller bearings, cup and cone assemblies shipped as a set.....	(D)	(D)	5,196	104,425	37,637	107,139	(D)	(D)
3329913033	Tapered roller bearings, cups shipped separately.....	(D)	(D)	4,308	22,439	52,242	63,129	(D)	(D)
3329913034	Tapered roller bearings, cone assemblies shipped separately.....	(D)	(D)	8,368	106,028	28,385	68,562	(D)	(D)
3329915011, 012	Cylindrical roller bearings, regular (ABEC 1 and 3) and precision (ABEC 5 and up).....	144,923	300,128	2,741	57,420	16,585	95,430	158,766	338,138
3329915024	Spherical roller bearings, including hourglass and barrel, single-row.....	(D)	(D)	102	6,497	279	5,847	(D)	(D)
3329915025	Spherical roller bearings, including hourglass and barrel, double-row.....	719	164,962	2,953	22,215	672	51,741	(1,563)	194,488
3329915041	Needle roller bearings.....	657,697	562,546	19,180	70,365	26,959	37,141	665,476	529,322
3329915093	All other roller bearings, n.e.c.....	(D)	(D)	1,170	6,264	1,583	4,124	(D)	(D)
329917017	Unit and/or split mounted ball bearings (except plain).....	7,853	225,155	432	20,905	4,704	27,275	12,125	231,525
3329917053, 055	Unit and split mounted roller bearings.....	1,132	222,204	178	10,741	927	9,877	1,882	221,340
3329919011	Parts and components for ball and roller bearings, balls.....	26,223	209,996	(X)	28,115	(X)	21,594	(X)	203,475
3329919021	Other parts and components for antifriction ball bearings, including unassembled ball bearings, cages, races, seals, shields, etc. (except balls).....	(X)	91,225	(X)	32,394	-	-	(X)	58,831
3329919031	Parts and components for ball and roller bearings, rollers.....	20,433	148,895	(X)	50,262	(X)	26,553	(X)	125,186
3329919035	Other parts and components for tapered roller bearings (except rollers and cup and cone assemblies).....	(X)	77,921	(X)	35,981	(X)	10,929	(X)	52,869
3329919036	Other parts and components for cylindrical roller bearings (except rollers).....	(X)	(D)	(X)	7,873	(X)	12,348	(X)	(D)

Continued

Table 3. Shipments, Exports, Imports, and Apparent Consumption of Antifriction Ball and Roller Bearings, Components, and Parts: 1999
 [Quantity in thousands of units. Value and duty in thousands of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Imports for consumption 2/		Apparent consumption 3/	
		Quantity	Value f.o.b. plant	Quantity	Value at port	Quantity	C.i.f. and calculated duty	Quantity	Value
3329919037	Other parts and components for spherical roller bearings (except rollers).....	(X)	(D)	(X)	3,532	(X)	6,496	(X)	(D)
3329919049	Other parts and components for other roller bearings (except rollers).....	(X)	(D)	(X)	25,770	(X)	5,470	(X)	(D)
3329919059	Parts and components for ball and roller bearings, housings and parts and components for housings, including housing closures, collars, spacers, sleeves, adapters, and other miscellaneous items.....	(X)	(D)	(X)	17,220	(X)	27,939	(X)	(D)

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

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

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

3/Apparent consumption is derived by subtracting exports from manufacturer's shipments plus imports.

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

Product code	Product description	Export number 1/	Import number 2/
3329911001, 002	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, miniature (below 9 mm outside diameter), regular (ABEC 1 and 3) and precision (ABEC 5 and up).....	8482.10.5036	8482.10.5036
3329911003, 009	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), 9 mm outside diameter through 30 mm outside diameter.....	8482.10.5044	8482.10.5044
3329911004, 011	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), over 30 mm outside diameter through 52 mm outside diameter.....	8482.10.5048	8482.10.5048
3329911005, 012	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), over 52 mm outside diameter through 100 mm outside diameter.....	8482.10.5052	8482.10.5052
3329911007, 013	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other regular and other precision (ABEC 5 and up), over 100 mm outside diameter.....	8482.10.5056	8482.10.5056
3329911014	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, single-row maximum capacity type.....	8482.10.5032	8482.10.5032
3329911018	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, integral shaft and integral spindle.....	8482.10.1000	8482.10.1040 8482.10.1080
3329911020	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, double-row.....	8482.10.5060	8482.10.5060
3329911019, 023	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, angular contact, regular and precision.....	8482.10.5016 8482.10.5024 8482.10.5028	8482.10.5016 8482.10.5024 8482.10.5028
3329911024, 027, 029, 035	Annular ball bearings, including self-aligning, ground or precision, single-row conrad, other ground or precision (ABEC 1 and up) and ground of less than ABEC 1 precision and annular ball bearings, including self-aligning, unground (less than ABEC 1) and unground thrust ball bearings.....	8482.10.5004 8482.10.5064	8482.10.5004 8482.10.5064
3329911033	Ground thrust ball bearings.....	8482.10.5008	8482.10.5008
3329911055	Other ball bearings.....	8482.10.5012 8482.10.5068	8482.10.5012 8482.10.5068
3329913032	Tapered roller bearings, cup and cone assemblies shipped as a set.....	8482.20.0020 8482.20.0030 8482.20.0040 8482.20.0060	8482.20.0020 8482.20.0030 8482.20.0040 8482.20.0060
3329913033	Tapered roller bearings, cups shipped separately.....	8482.99.3010	8482.99.1540
3329913034	Tapered roller bearings, cone assemblies shipped separately.....	8482.20.0070 8482.20.0080	8482.20.0070 8482.20.0080
3329915011, 012	Cylindrical roller bearings, regular (ABEC 1 and 3) and precision (ABEC 5 and up).....	8482.50.0000	8482.50.0000

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

Product code	Product description	Export number 1/	Import number 2/
3329915024	Spherical roller bearings, including hourglass and barrel, single-row.....	8482.30.0040	8482.30.0040
3329915025	Spherical roller bearings, including hourglass and barrel, double-row.....	8482.30.0080	8482.30.0080
3329915041	Needle roller bearings.....	8482.40.0000	8482.40.0000
3329915093	All other roller bearings, n.e.c.	8482.80.0020 8482.80.0040 8482.80.0060	8482.80.0020 8482.80.0040 8482.80.0060
3329917017	Unit and/or split mounted ball bearings (except plain).....	8483.20.0010	8483.20.4040 8483.20.8040
3329917053, 055	Unit and split mounted roller bearings.....	8483.20.0050	8483.20.4080 8483.20.8080
3329919011	Parts and components for ball and roller bearings, balls.....	8482.91.0010 8482.91.0020	8482.91.0010 8482.91.0020
3329919021	Other parts and components for antifriction ball bearings, including unassembled ball bearings, cages, races, seals, shields, etc. (except balls).....	8482.99.1010 8482.99.1050	8482.99.0500 8482.99.3500
3329919031	Parts and components for ball and roller bearings, rollers.....	8482.91.0040 8482.91.0050 8482.91.0070 8482.91.0080 8482.91.0090	8482.91.0040 8482.91.0050 8482.91.0070 8482.91.0080 8482.91.0090
3329919035	Other parts and components for tapered roller bearings (except rollers and cup and cone assemblies).....	8482.99.3050	8482.99.1580 8482.99.4500
3329919036	Other parts and components for cylindrical roller bearings (except rollers).....	8482.99.7060	8482.99.2560 8482.99.6560
3329919037	Other parts and components for spherical roller bearings (except rollers).....	8482.99.5000	8482.99.2520 8482.99.6510
3329919049	Other parts and components for other roller bearings (except rollers).....	8482.99.7030 8482.99.7090	8482.99.2540 8482.99.6530
3329919059	Parts and components for ball and roller bearings, housings and parts and components for housings, including housing closures, collars, spacers, sleeves, adapters, and other miscellaneous items.....	8483.30.5020	8483.30.4040 8483.30.8020 8483.90.2000 8483.90.7000

n.e.c. Not elsewhere classified.

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).