

Antifriction Bearings

2000

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Current
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Reports

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.

SUMMARY OF FINDINGS. The value of shipments of antifriction bearings, components and parts was \$5,784.8 million in 2000, virtually unchanged from shipments of \$5,766.1 million in 1999. The 2000 total includes ball bearings, complete, unmounted, \$1,988.1 million, a less than 1-percent increase from the 1999 value of shipments; tapered roller bearings, including cups and cones, unmounted, \$1,501.9 million, a decrease of 2 percent; roller bearings, (except tapered), unmounted, \$1,238.6 million, an increase of 4 percent; mounted bearings, (except plain), \$413.5 million, a decrease of 7 percent; and parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately, \$642.7 million, an increase of 4 percent.

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

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Table 1. Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts by Product Class: 1991 to 2000
[Millions of dollars]

Product code	Product description	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
332991	Ball and roller bearings.....	5,784.8	5,766.1	5,800.1	5,723.1	5,488.0	5,205.4	4,693.8	4,331.1	4,011.3	3,778.9
3329911	Ball bearings, complete, unmounted.....	1,988.1	1,974.4	2,024.2	2,095.9	1,989.1	1,896.7	1,676.2	1,616.8	1,484.2	1,406.7
3329913	Tapered roller bearings, including cups and cones, unmounted.....	1,501.9	1,531.5	1,538.8	1,420.9	1,408.8	1,283.1	1,139.2	1,001.0	935.6	876.8
3329915	Roller bearings (except tapered), unmounted.....	1,238.6	1,196.2	1,169.4	1,117.2	1,017.4	987.5	935.5	810.4	773.1	794.3
3329917	Mounted bearings (except plain).....	413.5	445.4	450.6	426.1	458.4	459.7	407.8	439.4	378.0	322.9
3329919	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately.....	642.7	618.6	617.1	663.0	614.3	578.5	535.1	467.0	440.4	378.3

Table 2. Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 2000 and 1999
[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	No. of co.	2000		1999	
			Quantity	Value	Quantity	Value
332991	Ball and roller bearings.....	(X)	(X)	5,784,808	(X)	5,766,058
3329911	Ball bearings, complete, unmounted.....	71	556,729	1,988,088	576,293	1,974,365
	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	4,884	19,255	5,308	21,491
	Other regular (ABEC 1 and 3):					
3329911003	9 mm outside diameter through 30 mm outside diameter.....	9	78,313 a/	69,791	81,516	72,755
3329911004	Over 30 mm outside diameter through 52 mm outside diameter.....	19 a/	108,557 a/	171,857 a/	119,625	179,753
3329911005	Over 52 mm outside diameter through 100 mm outside diameter.....	22	36,812	205,751	35,459	200,973
3329911007	Over 100 mm outside diameter.....	19 a/	4,504	185,232	5,443	175,815
	Other precision (ABEC 5 and up):					
3329911009	9 mm outside diameter through 30 mm outside diameter.....	7 c/	4,786	59,917	4,828	60,896
3329911011	Over 30 mm outside diameter through 52 mm outside diameter.....	8 c/	555 c/	37,469	592	40,670
3329911012	Over 52 mm outside diameter through 100 mm outside diameter.....	7	209	29,314	209	31,367
3329911013	Over 100 mm outside diameter.....	7 c/	62 c/	39,989	62	40,709
3329911014	Single-row maximum capacity type.....	7	866	13,054	1,110	14,202
3329911018	Integral shaft and integral spindle ball bearings.....	8	25,193	382,520	24,084 a/	351,401
3329911020	Double-row.....	12	30,687	223,820	29,648	192,956
	Angular contact:					
3329911019	Regular.....	11	633	54,035	845	61,656
3329911023	Precision.....	5 c/	2,644 b/	65,997	2,738 r/	69,850
3329911024	All other ground or precision bearings (ABEC 1 and up).....	3	(D)	(D)	(D)	(D)
3329911027	Ground bearings of less than ABEC 1 precision.....	5	3,874	34,574	4,318	43,023
3329911029	Unground (less than ABEC 1).....	17 a/	221,863 a/	130,647	227,208	133,514
	Thrust ball bearings:					
3329911033	Ground.....	13	7,025	25492 b/	7,053	26,696
3329911035	Unground.....	5	8,120 a/	12,939	8,071 a/	12,761
3329911055	Other ball bearings.....	16	15,578 a/	214,689 r/	16,628	232,492
3329913	Tapered roller bearings, including cups and cones, unmounted.....	19	276,947	1,501,898 r/	305,588	1,531,542
3329913032	Cup and cone assemblies shipped as a set	17	(D)	(D)	(D)	(D)
3329913033	Cups shipped separately.....	13	(D)	(D)	(D)	(D)
3329913034	Cone assemblies shipped separately.....	16	(D)	(D)	(D)	(D)
3329915	Roller bearings (except tapered), unmounted.....	39	987,137	1,238,630	957,108	1,196,168
	Cylindrical roller bearings:					
3329915011	Regular (ABEC 1 and 3).....	25	259,196	333,262	144,751	228,368
3329915012	Precision (ABEC 5 and up).....	8	192	89,093 r/	183	71,900
	Spherical roller bearings, including hourglass and barrel:					
3329915024	Single-row.....	4	(D)	(D)	(D)	(D)
3329915025	Double-row.....	6	742	168,808	719	164,962
3329915041	Needle roller bearings.....	15	567,319	465,146	656,888	557,279
3329915093	Other roller bearings, n.e.c.	15	(D)	(D)	(D)	(D)
3329917	Mounted bearings (except plain).....	20	8,361	413,473	8,991	445,381
3329917017	Ball bearings, unit and/or split mounted.....	12	7,309	219,746	7,853	225,155
	Roller:					
3329917053	Unit-mounted.....	9	(D)	(D) b/	981	194,926
3329917055	Split-mounted.....	6	(D)	(D) b/	157	25,300
3329919	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers sold separately.....	65	(X)	642,719	(X)	618,602
3329919011	Balls (millions of units) 1/.....	21	23,078	236,591 r/	24,401 r/	223,689
3329919021	Other antifriction ball bearing components and parts, including unassembled ball bearings, cages, races, seals, shields, etc. (except balls).....	19	(X)	99,224	(X)	91,223
3329919031	Rollers (millions of units) 2/.....	20	17,661	158,779 a/	20,434	148,063
	Other roller bearing parts and components (except rollers):					
3329919035	For tapered roller bearings (except cup and cone assemblies).....	8	(X)	75,213	(X)	77,593
3329919036	For cylindrical roller bearings.....	7	(X)	(D)	(X)	(D)
3329919037	For spherical roller bearings.....	2	(X)	(D)	(X)	(D)
3329919049	For other roller bearings.....	12	(X)	(D)	(X)	(D)

Table 2. Quantity and Value of Shipments of Antifriction Ball and Roller Bearings, Components, and Parts: 2000 and 1999
[Quantity in thousands of units. Value in thousands of dollars]

Product code	Product description	No. of co.	2000		1999	
			Quantity	Value	Quantity	Value
3329919059	Housings and parts and components for housings, including housing closures, collars, spacers, sleeves, adapters, and other miscellaneous items.....	6	(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 2000 and 1999 is 23.3 millions of units and 24.7 millions of units, respectively.

2/Production for all purposes of rollers for 2000 and 1999 is 10.9 millions of units and 14.0 millions of units, respectively.

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, Imports, and Apparent Consumption of Antifriction Ball and Roller Bearings, Components, and Parts: 2000
[Quantity in thousands of units, unless otherwise noted. 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
	Total	(X)	5,784,808	(X)	961,648	(X)	1,536,262	(X)	6,359,422
	Ball bearings, complete, unmounted:								
	Annular, including self-aligning:								
	Ground or precision:								
	Single-row conrad:								
3329911001, 002	Miniature (below 9 mm outside diameter), regular (ABEC 1 and 3) and precision (ABEC 5 and up).....	(D)	(D)	599	6,677	24,369	12,112	(D)	(D)
3329911003, 009	Other regular and other precision (ABEC 5 and up): 9 mm outside diameter through 30 mm outside diameter.....	83,099	129,708	1,021	18,361	318,845	155,161	400,923	266,508
3329911004, 011	Over 30 mm outside diameter through 52 mm outside diameter.....	109,112	209,326	797	10,875	212,120	182,862	320,440	381,422
3329911005, 012	Over 52 mm outside diameter through 100 mm outside diameter.....	37,020	235,065	561	10,802	46,693	128,027	83,173	352,726
3329911007, 013	Over 100 mm outside diameter.....	4,565	225,221	180	10,363	7,927	61,176	12,321	276,216
3329911014	Single-row maximum capacity type.....	866	13,054	228	9,120	17,255	10,295	17,893	14,229
3329911018	Integral shaft and integral spindle.....	25,193	382,520	1,348	23,198	30,499	55,649	54,344	414,971
3329911020	Double-row.....	30,687	223,820	99	2,220	8,601	15,860	39,189	237,460
3329911019, 023	Angular contact, regular and precision.....	3,277	120,032	10,028	59,787	15,494	102,729	8,743	162,974
3329911024, 027, 029, 035	All other ground or precision (ABEC 1 and up) and ground bearings of less than ABEC 1 precision; annular ball bearings including self-aligning, unground (less than ABEC 1); and unground thrust ball bearings.....	(D)	(D)	2,460	12,555	35,172	22,092	(D)	(D)
3329911033	Ground thrust ball bearings.....	7,025	25,492	902	4,487	3,946	10,225	8,031	31,230
3329911055	Other ball bearings.....	15,578	214,689	23,333	122,471	38,506	141,093	30,963	231,958
	Tapered roller bearings, including cups and cones, unmounted:								
3329913032	Cup and cone assemblies shipped as a set.....	(D)	(D)	5,486	109,690	30,628	82,724	(D)	(D)
3329913033	Cups shipped separately.....	(D)	(D)	5,549	27,297	51,020	60,290	(D)	(D)
3329913034	Cone assemblies shipped separately.....	(D)	(D)	10,861	120,011	40,617	85,392	(D)	(D)
3329915011, 012	Cylindrical roller bearings, regular (ABEC 1 and 3) and precision (ABEC 5 and up).....	259,389	422,355	2,542	52,516	21,039	117,711	277,886	487,550
	Spherical roller bearings, including hourglass and barrel:								
3329915024	Single-row.....	(D)	(D)	223	7,618	371	5,657	(D)	(D)
3329915025	Double-row.....	742	168,808	3,462	23,791	4,202	63,697	1,483	208,857
3329915041	Needle rolling bearings.....	567,319	465,146	19,765	57,310	50,134	38,617	597,688	446,453
3329915093	Other roller bearings, n.e.c.	(D)	(D)	336	4,342	1,370	3,206	(D)	(D)
	Mounted bearings (except plain):								
329917017	Ball bearings, unit and/or split mounted.....	7,309	219,746	989	27,664	6,392	38,744	12,523	221,307
3329917053, 055	Roller bearings, unit and split mounted.....	1,052	193,727	220	12,197	932	7,920	1,605	166,831
	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers, sold separately:								
3329919011	Balls (millions of units).....	23,078	236,591	(X)	27,954	(X)	20,022	(X)	228,659
3329919021	Other antifriction ball bearings components and parts, including unassembled ball bearings, cages, races, seals, shields, etc. (except balls).....	(X)	99,224	(X)	44,027	-	-	(X)	55,197
3329919031	Rollers (millions of units).....	17,661	158,779	(X)	66,244	(X)	28,927	(X)	121,462
	Other roller bearing parts and components (except rollers):								
3329919035	For tapered roller bearings (except cup and cone assemblies).....	(X)	75,213	(X)	36,047	(X)	24,265	(X)	63,431
3329919036	For cylindrical roller bearings.....	(X)	(D)	(X)	6,137	(X)	14,442	(X)	(D)
3329919037	For spherical roller bearings.....	(X)	(D)	(X)	3,975	(X)	9,377	(X)	(D)
3329919049	For other roller bearings.....	(X)	(D)	(X)	22,376	(X)	6,647	(X)	(D)
3329919059	Housings and parts and components for housing, including housing closures, collars, spacers, sleeves, adapters, and other miscellaneous items.....	(X)	(D)	(X)	21,536	(X)	31,343	(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: 2000

Product code	Product description	Export number 1/	Import number 2/
	Ball bearings, complete, unmounted: Annular, including self-aligning: Ground or precision: Single-row conrad:		
3329911001, 002	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	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	Over 30 mm outside diameter through 52 mm outside diameter.....	8482.10.5048	8482.10.5048
3329911005, 012	Over 52 mm outside diameter through 100 mm outside diameter.....	8482.10.5052	8482.10.5052
3329911007, 013	Over 100 mm outside diameter.....	8482.10.5056	8482.10.5056
3329911014	Single-row maximum capacity type.....	8482.10.5032	8482.10.5032
3329911018	Integral shaft and integral spindle.....	8482.10.1000	8482.10.1040 8482.10.1080
3329911020	Double-row.....	8482.10.5060	8482.10.5060
3329911019, 023	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	All other ground or precision bearings (ABEC 1 and up) and ground bearings of less than ABEC 1 precision; 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, including cups and cones, unmounted: 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	Cups shipped separately.....	8482.99.3010	8482.99.1540
3329913034	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
3329915024	Spherical roller bearings, including hourglass and barrel: Single-row.....	8482.30.0040	8482.30.0040
3329915025	Double-row.....	8482.30.0080	8482.30.0080
3329915041	Needle roller bearings.....	8482.40.0000	8482.40.0000

Table 4. Comparison of North American Industry Classification System Product Codes with Schedule B Export Numbers, and HTSUSA Import Numbers: 2000

Product code	Product description	Export number 1/	Import number 2/
3329915093	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	Mounted ball bearings (except plain): Ball bearings, unit and/or split mounted.....	8483.20.0010	8483.20.4040 8483.20.8040
3329917053, 055	Roller bearings, unit and split mounted.....	8483.20.0050	8483.20.4080 8483.20.8080
3329919011	Parts and components for ball and roller bearings (except cups and cones), including balls and rollers, sold separately: Balls (millions of units).....	8482.91.0010 8482.91.0020	8482.91.0010 8482.91.0020
3329919021	Other antifriction ball bearings components and parts, including unassembled ball bearings, cages, races, seals, shields, etc. (except balls)....	8482.99.1010 8482.99.1050	8482.99.0500 8482.99.3500
3329919031	Rollers (millions of units).....	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 roller bearing and components (except rollers): For tapered roller bearings (except cup and cone assemblies).....	8482.99.3050	8482.99.1580 8482.99.4500
3329919036	For cylindrical roller bearings.....	8482.99.7060	8482.99.2560 8482.99.6560
3329919037	For spherical roller bearings.....	8482.99.5000	8482.99.2520 8482.99.6510
3329919049	For other roller bearings.....	8482.99.7030 8482.99.7090	8482.99.2540 8482.99.6530
3329919059	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: 2000 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2000).