

# Large Thrust Bearings

## Heavy Duty Tapered Roller Thrust Bearings



High load capacity, long life, tapered roller thrust bearings  
in standard and custom designs



RBC Division  
ISO 9001:2000

[www.rbcbearings.com](http://www.rbcbearings.com)  
800.390.3300



## RBC Bearings — Industrial Heritage

Founded in 1919, RBC Bearings Incorporated has a long and impressive history of quality craftsmanship and innovation in bearing technology — one that has been highlighted by patents for creative engineering design.

Today, the company has 20 facilities throughout North America and Europe, with a global network of over 2,400 sales engineers, distributors, and authorized agents. In August, 2005, RBC became a public company (Nasdaq; ROLL), and has grown steadily through strategic planning and acquisitions.

## RBC Heavy Duty Tapered Roller Thrust Bearings

RBC produces an extensive heavy duty tapered roller thrust bearing product line from 4 inch bore to 16 inch bore. RBC heavy duty tapered roller thrust bearings are designed for demanding applications operating in harsh environments, such as oil field top drives, oil field swivels, extruders, pulp refiners, pulp digesters, and boring mill tables.

The RBC TTVF series of tapered roller thrust bearings is available in both machined bronze and pin-type cages, offering significantly increased capacity for highly loaded applications.

Advantages of RBC heavy duty tapered roller thrust bearings:

- **Interchangeable with industry standard product offering**
- **High shock load resistance**
- **Application flexibility — Assemblies are available with bore reliefs standard on larger sizes, optional on smaller sizes — to fit a variety of unique applications**
- **Best lead times in the industry**
- **Unparalleled customer service: 800.390.3300**

RBC has implemented a total quality control system that uses statistical quality control and manufactures in high volume to a just-in-time program.

### Warranty

RBC products are warranted for material and workmanship for a period not to exceed 90 days from shipment and for a value not to exceed purchase price. No other warranty is in effect.



## RBC TRTB Heavy Duty Tapered Roller Thrust Bearings

Bore, Inches	O.D., Inches	Width, Inches	Max Shaft and Housing Fillet Radii R	ABMA Dynamic Capacity, lbf	ABMA Static Capacity, lbf	Bearing Assembly/RBC Part Number	Interchanges with Timken Part Number	Cage Type
4.0000	8.5000	1.8125	0.13	208,000	677,000	TRTB411	T411	Machined Bronze
4.4000	8.8000	2.2000	0.13	263,000	842,000	TRTB441	T441	Machined Bronze
4.5000	9.8750	2.1250	0.16	284,000	943,000	TRTB451	T451	Machined Bronze
5.0000	9.8750	2.1875	0.19	273,000	908,000	TRTB520	T520	Machined Bronze
5.0000	10.5000	2.3125	0.19	318,000	1,066,000	TRTB511	T511	Machined Bronze
5.0625	10.5000	2.3125	0.19	318,000	1,066,000	TRTB511A	T511A	Machined Bronze
6.0000	12.5000	2.7500	0.25	437,000	1,501,000	TRTB611	T611	Machined Bronze
6.5000	12.2500	3.5000	0.25	552,000	1,808,000	TRTB651	T651	Machined Bronze
6.6250	12.0000	2.7500	0.25	380,000	1,294,000	TRTB661	T661	Machined Bronze
6.8750	14.1250	3.2500	0.25	576,000	2,005,000	TRTB691	T691	Machined Bronze
7.0000	14.5000	3.2500	0.31	587,000	2,058,000	TRTB711	T711	Machined Bronze
7.0000	17.0000	4.0000	0.25/.13	934,000	3,306,000	TRTB709	T709	Machined Bronze
7.4803	14.0000	2.9220	0.25	459,000	1,624,000	TRTB7519	T7519	Machined Bronze
8.0000	16.5000	3.6250	0.38	723,000	2,593,000	TRTB811	T811	Machined Bronze
8.0000	16.5000	4.7500	0.38	723,000	2,593,000	TRTB811X	T811X	Machined Bronze
9.0000	17.0000	3.4950	0.38	650,000	2,370,000	TRTB9020	T9020	Machined Bronze
9.0000	19.0000	4.1250	0.44	940,000	3,443,000	TRTB911	T911	Machined Bronze
9.2500	19.0000	4.1250	0.44	940,000	3,443,000	TRTB911A	T911A	Machined Bronze
9.2500	21.5000	5.0000	0.63	1,304,000	4,427,000	TRTB921	T921	Machined Bronze
10.0000	21.2500	4.6250	0.44	1,166,000	4,339,000	TRTB1011	T1011	Machined Bronze
11.0000	19.5000	5.2500	0.25	1,135,000	4,024,000	TRTB1115	T1115	Machined Bronze
11.0000	23.7500	5.3750	0.44	1,590,000	7,000,000	TRTB1120	T1120	Machined Bronze
14.0000	21.0000	4.0000	0.44/.25	662,000	2,509,000	TRTB1421	T1421	Machined Bronze
14.5000	23.7500	4.7500	0.38	1,002,000	3,858,000	TRTB14520	T14520	Machined Bronze
16.0000	33.0000	7.0000	0.50	2,489,000	9,933,000	TRTB16050	T16050	Machined Bronze
16.0079	28.0000	5.7500	0.38	1,577,000	6,282,000	TRTB16021	T16021	Machined Bronze

## RBC TRTB Heavy Duty Tapered Roller Thrust Bearings — Tolerances

Bore						Outside Diameter						Width			
Deviation						Deviation						Deviation			
Range		Class 2		Class 3		Range		Class 2		Class 3		Class 2			
Over	Including	High	Low	High	Low	Over	Including	High	Low	High	Low	High	Low	High	Low
0	12.000	+0.0010	0	+0.0005	0	0	12.000	+0.0010	0	+0.0005	0				
12.000	24.000	+0.0020	0	+0.0010	0	12.000	24.000	+0.0020	0	+0.0010	0	all sizes	+0.0150	-0.0150	+0.0080
24.000	36.000	+0.0030	0	+0.0015	0	24.000	36.000	+0.0030	0	+0.0015	0				

Please contact RBC Engineering for TTVF designs and specials.







## Innovation. Commitment. Quality.

RBC has been producing bearings in the USA since 1919. In addition to unique custom bearings, RBC offers a full line of standard industrial and aerospace bearings, including:



### Spherical Plain Bearings

Radial, angular contact, extended inner ring, high misalignment. **QuadLube®**, **ImpactTuff®**, **SpreadLock® Seal**, **CrossLube®**, **DuraLube™**, and self-lubricating bearings. Available in inch and metric sizes.



### Needle Roller Bearings

**Pitchlign®** caged heavy duty needle roller bearings, inner rings, **TJ TandemRoller®** bearings for long life.



### Thin Section Ball Bearings

Standard cross sections to one inch. Sizes to 40 inches. Stainless steel and other materials are available. Seals are available on all sizes and standard cross sections. Super duplex configurations.



### Self-Lubricating Bearings

Radial, thrust, rod ends, spherical bearings, high temperature, high loads. Available in inch and metric sizes. **Fiberglide®** self-lubricating bearings.



### Tapered Roller Bearings

**Tyson®** case-hardened and through-hardened tapered roller bearings. Available in many sizes. Used in Class 8 heavy truck and trailer wheel bearings, gearboxes, and final drive transmissions.



### Airframe Control Bearings

Ball bearing types, self-lubricating types, needle roller track rollers.



### Tapered Roller Thrust Bearings

Case-hardened. Sealed and unsealed for truck, tractor, and construction equipment steer axles, and Class 8 trailer landing gear.



### Dowel Pins, Loose Needle Rollers, Shafts

**Precision Products** dowel pins, loose needle rollers, and shafts.



### Ball Screws

Precision ground, rolled, ball splines. Long life, low wear, high accuracy. **QuickTurn®** Ball Screw Repair Service.



### Commercial Rod Ends

Commercial and industrial, precision, Mil-Spec series, self-lubricating, and aircraft. Sold under the **Heim®**, **Unibal®**, and **Spherco®** names. Available in inch and metric sizes.



### Integrated Assemblies

For robots and other process tool applications. Engineering design assistance. Production volume capacity.



### Ball Bearings

Precision ground, semiground, unground. High loads, long life, smooth operation. **Nice™** branded products are offered in caged and full complement configurations.



### Cam Followers

Standard stud, heavy stud, yoke type, caged roller followers. Patented **RBC Roller®** cylindrical roller cam followers, **HexLube®** universal cam followers, airframe track rollers.



### Specials

RBC manufactures many specialty bearings for the aerospace, oil and energy, semiconductor equipment, packaging, transportation, and other industries.



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