# Solving Problems with RBC Cam Followers



"Premature cam follower failures have been linked to high loads in our application. How can we get more capacity without redesigning our machines?"

RBC Roller® cam followers utilize a double row of cylindrical rollers which provide up to 125% increase in dynamic load capacity.

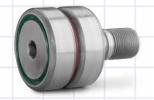
The end guidance of these rollers minimizes the tendency of typical needle rollers to skew during rotation. This reduces excessive heat- another cause of early cam follower failure.

"Cam followers are frequently being replaced. What can RBC do to increase the service life of cam followers being used on our equipment?"

The increased load capacity of RBC Roller® cam followers also provides a substantial increase in operating life.

Up to 400% increase in life can be experienced when switching from needle roller cam followers to the RBC Roller®.

Additionally, RBC Rollers® are lubed for life, eliminating relubrication requirements.



# "The size we need is not in your catalog."

Specials are a way of life for RBC. Make sure to present the details of the modifications or special work needed.

Blueprint review often yields an acceptable solution.

"The effects of rust and corrosion are a constant concern for our products."

Thin dense chrome (TDC) plating has proven to be very effective in combating the effects of salt water, mild chemicals, and other corrosive agents.

TDC is applied to a thickness of approximately .0001" which creates minimal dimensional interference.

The exceptionally hard surface provides outstanding resistance to wear.

TDC can be specified for any RBC cam follower.



"Standard cam follower relubrication is often performed through the stud. This can represent real access problems. What relubrication options does RBC have?"

RBC's Universal HexLube® cam follower line offers the unique feature of relubrication through the hex head.

This style of cam follower replaces the old style screwdriver slot varieties.

"Why would we want to replace screwdriver slot style cam followers with the Universal HexLube® style?"

The Universal HexLube® cam follower permits relubrication through the head without utilizing a protruding grease fitting that is subject to damage.

Full assembly torque can be applied to the Universal HexLube® cam follower utilizing a hex wrench rather than a screwdriver.

Hex wrenches provide a better fit for assembly operations than screwdrivers.



"The load in our application is not exactly perpendicular to the cam follower outer service. We are concerned about edge loading."

RBC's crowned cam followers are designed for exactly this situation. Crowned outer rings provide improved distribution of load forces to minimize axial thrusting.

Crowned carn followers are particularly effective on curved or circular tracks.



"Overhanging loads and/or large bending moments are typical in our application."

RBC's heavy stud series of cam followers are designed to meet the needs of these high stress applications.

Heavy studs are 20-40% greater in diameter than standard cam followers.

They are available from stock.

"Sequentially mounted cam followers need to be lined up after installation. We want the roller preloaded to be identical for each cam follower."

Using our eccentric adjustable cam follower permits precise positioning of the cam follower outer race relative to any contact surfaces

Our eccentric cam followers feature hex sockets for accurate adjustment.







Smoother. Faster. Longer. Because That's How We Roll.



# Innovation. Commitment. Quality.

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



# Tapered Roller Thrust Bearings

Case-hardened tapered roller thrust bearings for oilfield top drives and swivels. Available in full complement, maximum capacity versions.



## Cylindrical Roller Bearings

Cylindrical roller bearings designed for mud pump pinion and eccentric positions. Fully interchangeable to industry standards.



## 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.



#### Keyless Locking Devices

Mechanical bushings used to connect power transmission components onto rotating shafts. Without the use of keyways, KLDs eliminate the problems associated with backlash including fretting, corroding, and wallowing.



#### Self-Lubricating Bearings

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



#### **Ball Bearings**

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



# Thin Section Ball Bearings

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



# Needle Roller Bearings

Pitchlign® caged heavy duty needle roller bearings ideal for cross head bearings applications. These double row bearings are available in single row and TandemRoller® versions.



# Tapered Roller Bearings

Single, double, & multi row versions available for main bearing positions in mud pumps, gear boxes, etc. Bearings are constructed of case hardened steel washers and rollers with bore size of 11" or greater.



# Lubron™ Bearings

Lubron™ self-lubricating bearings designed and custom manufactured in most any size, material and bearing configuration. Applications include hydro power and water control, nuclear power generation, infrastructure, architecture, offshore marine, industrial, machinery and heavy equipment.



# **Rigid Couplings**

Shaft couplings serve as components to time, join, or align shafts at lower speeds and torque, especially when zero backlash is desired. Made from mild steel with a black oxide finish type 303 stainless steel, or aluminum. Available in inch and metric sizes.



#### 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.



#### Commercial Rod Ends

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



#### TP Series Bearings

RBC Bearings® TP Series cylindrical roller thrust bearings ideal for crane hooks, oil well swivels, winch systems, and gear boxes. Fully interchangeable with industry standard offering.



#### **Shaft Collars**

Used to position or locate a component on a shaft. Made from mild steel, type 303 or 316 stainless steel, aluminum, or acetal. Available in inch and metric sizes.



#### Specials

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



#### PIC Design

Complete line of precision gears, precision hardware, timing belts, pulleys, and linear motion systems. Industries served include industrial, aerospace, defense, medical, robotics and automation, material handling, and assembly. Custom design support for unique applications.















#### www.rbcbearings.com

800.390.3300

This document contains a general overview of the products and features described herein. It is solely for informational purposes, does not represent a warranty of the information contained herein, and is not to be construed as an offer to sell or a solicitation to buy. Contact RBC Bearings for detailed information suitable to your specific applications. RBC Bearings reserves the right to modify its products and related product information at any time without prior notice. Some of the products listed herein may be covered by one or more issued and pending U.S. or foreign patents. Contact RBC Bearings for product specific information.