



# Spherical Plain Bearings

Your Engineered Solutions Provider



*Inventor & Innovator*

***Smoother. Faster. Longer.***

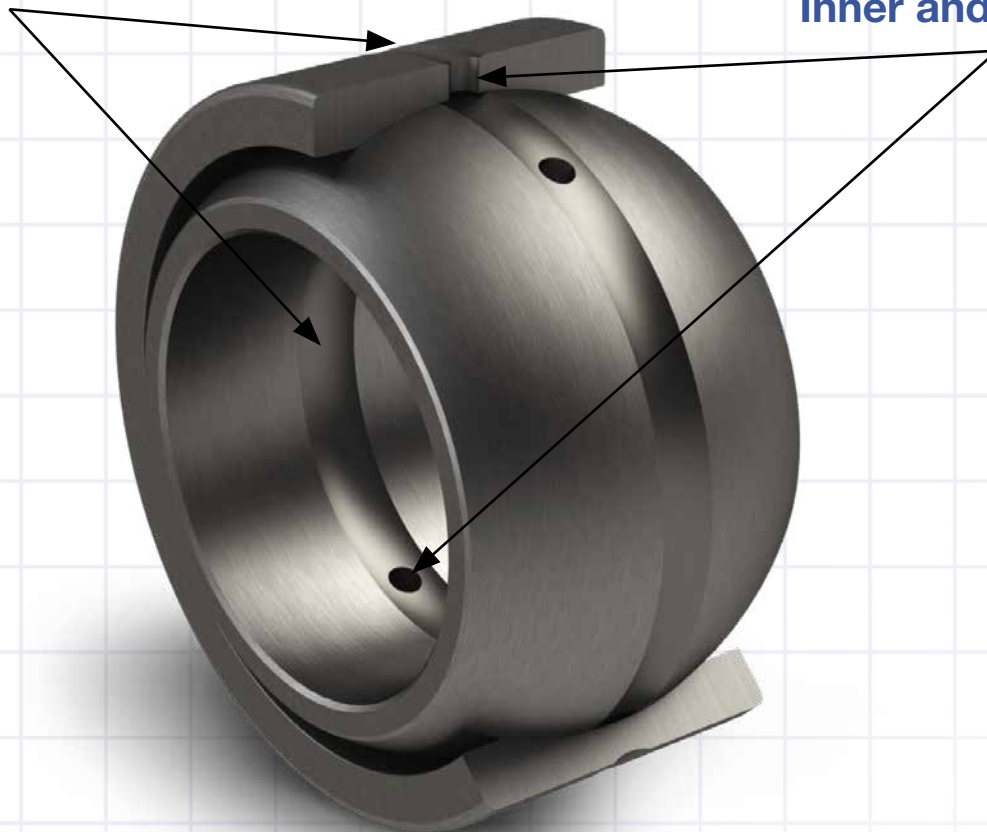
*Because That's How We Roll.*

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# ISO / ABMA Standard Spherical Plain Bearings

Center Lube Groove  
in both Inner and  
Outer Ring

Two Lubrication  
Holes in both the  
Inner and Outer Ring



*The Industrial Spherical Plain Bearing (Fractured Race)  
was invented by RBC in the 1950's.*

*Since that time, all major bearing companies have developed  
a similar product line. RBC remains a leader in this type of  
bearing, offering a complete line of enhanced bearings  
as well as standard ISO ABMA series bearings.*

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# Enhanced Spherical Plain Bearings

## CUSTOMIZE TO MAXIMIZE YOUR DESIGN SOLUTION

### Material Options

- ✓ "Thru-Hardend" 52100
- ✓ IMPACTTUFF®
- ✓ Stainless Steel



### Coating Options

- ✓ Chrome
- ✓ Thin Dense Chrome
- ✓ Diamond Chromium
- ✓ Dry Film
- ✓ Zinc Nickel

### Outer Ring Spherical Lubrication



- ✓ Circumferential Crossing Grooves



- ✓ CrossLUBE®

### Inner Ring Spherical Lubrication



- ✓ QUADLUBE®

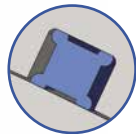


- ✓ Enhanced QUADLUBE®

### Seal Options



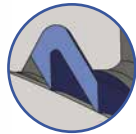
- ✓ Scraper Seal



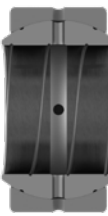
- ✓ Quad O-Ring Seal



- ✓ Elastomer Seal



- ✓ SPREADLOCK® Seal



- ✓ Spiral Bore Groove



- ✓ Annular Bore Groove

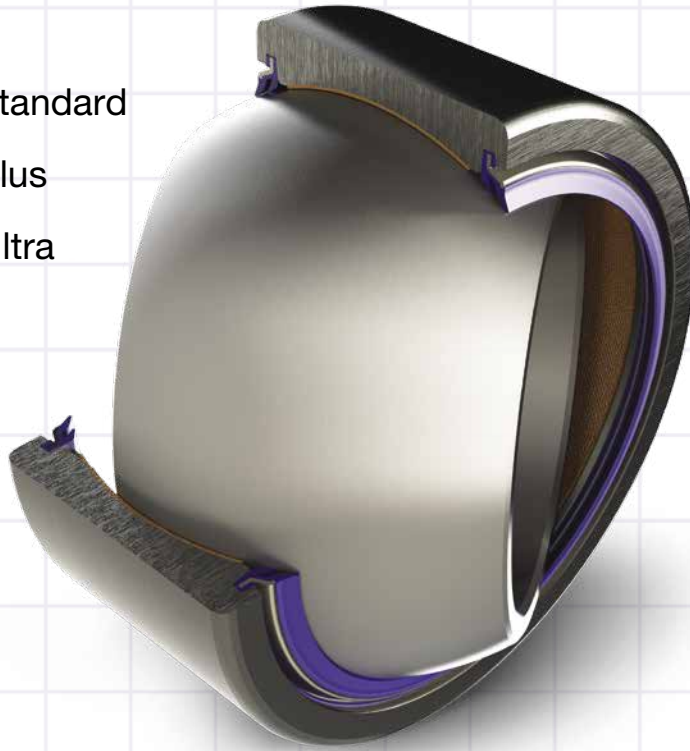
### Special Bearing Geometries



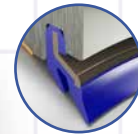
# Maintenance-Free Spherical Plain Bearings

## Liner Options

- ✓ DuraLube™ II Standard
- ✓ DuraLube™ II Plus
- ✓ DuraLube™ II Ultra



## Seal Options



✓ TriLock™ Seal



✓ Combination Seal

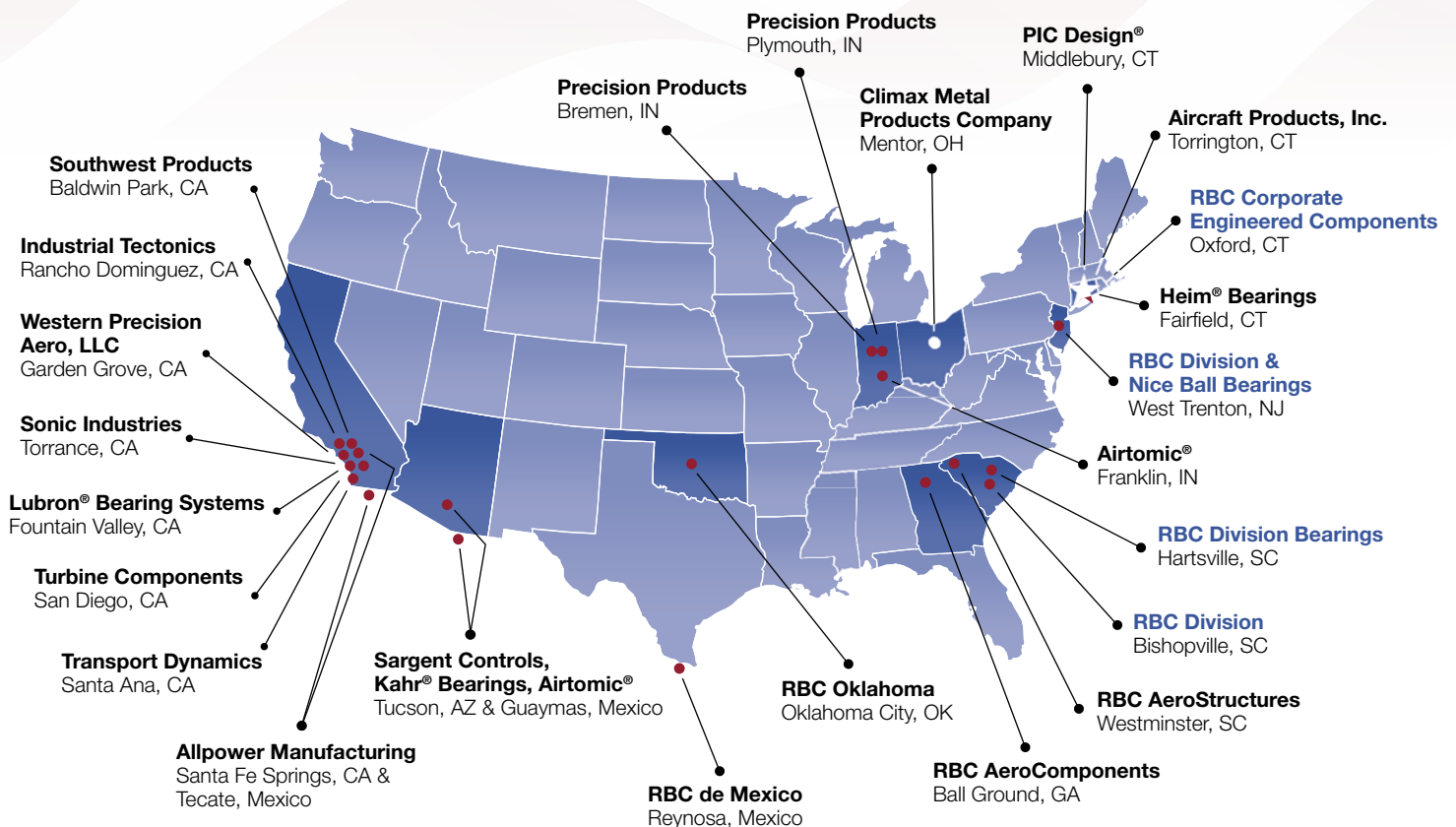


✓ Boot Seal

Features	Benefits
PTFE Liners	<ul style="list-style-type: none"> <li>✓ Eliminate fretting corrosion</li> <li>✓ Inherent dampening qualities</li> <li>✓ Ensure lubricant remains in the load zone</li> </ul>
High Dynamic Load Ratings	<ul style="list-style-type: none"> <li>✓ Provide greater 'power density'                             <ul style="list-style-type: none"> <li>• Higher load carrying capability in the <i>same</i> envelope</li> <li>• Or, similar performance in a <i>smaller</i> envelope</li> </ul> </li> <li>✓ Improved Life</li> </ul>
Lower Coefficient of Friction	<ul style="list-style-type: none"> <li>✓ Lower al torque</li> <li>✓ Lower power requirements</li> </ul>
Better temperature capability	<ul style="list-style-type: none"> <li>✓ Provides reliable operation in more extreme environments</li> </ul>
Can target lower clearance	<ul style="list-style-type: none"> <li>✓ Provides less system 'play'</li> <li>✓ Better performance in reverse loading applications</li> </ul>



## Your American Bearing Company



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.



### 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.



### 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.



### Cylindrical Roller Bearings

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



### Needle Roller Bearings

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



### 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.



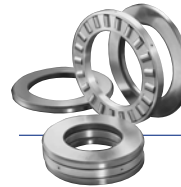
### Spherical Plain Bearings

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



### 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.



### 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.



### 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.



### 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.



### 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.



### Self-Lubricating Bearings

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



### 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.



### Specials

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



### Ball Bearings

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



### 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.