

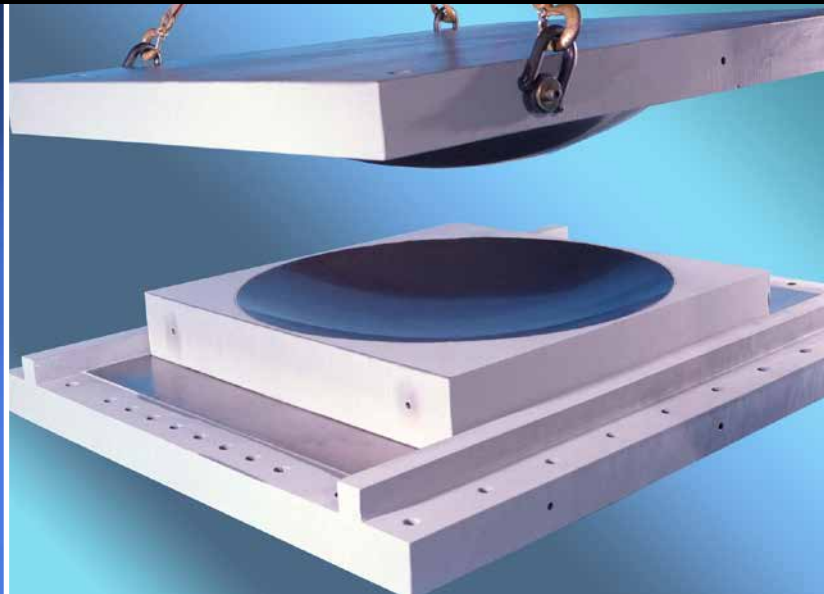


## Self-Lubricating Bearings



It takes a unique company to combine 100 years of bearing expertise and knowledge to provide the industry with innovative solutions.

**RBC Bearings is that company!**



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

# Lubron Self-Lubricating Bearings

**LUBRON AE** bearings and bearing assemblies are designed for use in nuclear power plants and nuclear powered vessels. Capable of withstanding high radiation and high temperatures, LUBRON AE near-isotropic nuclear grade graphite solid lubricants are employed to provide long service life and reliable performance.



**LUBRON AQ** bearings are constructed of high strength bronze alloys permanently embedded with PTFE solid lubricants, and are especially suitable for underwater applications where grease lubrication is impractical or prohibited. Specified by water power authorities and engineering companies worldwide, LUBRON AQ bearings are the proven choice for hydro and marine applications.



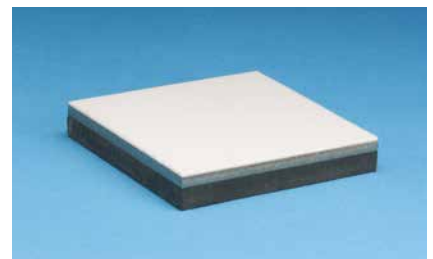
**LUBRON SL** bearings are widely used in many industrial and structural applications for moderate to heavy loads and cryogenic to elevated temperatures. Solid graphite lubricants are compounded and compressed into trepanned or circular recesses, and are available in a combination with a wide variety of bronze, copper nickel and Meehanite® bearing alloys.



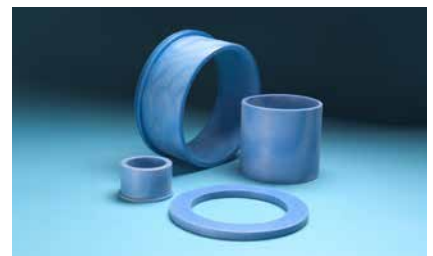
**LUBRON TF** bearings are constructed of woven PTFE fabric liners permanently bonded and mechanically locked to rigid bronze, stainless steel or fiberglass backings. Capable of very low friction and high wear resistance, LUBRON TF bearings offer exceptional performance for high load low friction applications.



**LUBRON TR** PTFE resin slide bearings are widely used for low friction, moderate load applications. Recommended for loads up to 2000 psi, LUBRON TR slide bearings consist of pure PTFE or glass-filled PTFE resin sheets bonded to either or a combination of carbon steel, stainless steel, reinforced elastomeric or neoprene substrates.



**LUBRON TX** bearings consists of synthetic fiber reinforced PTFE polyester materials capable of moderate loads and low friction. LUBRON TX bearings have excellent dimensional stability in water, and are ideally suited for many hydro turbine and marine applications. LUBRON TX bearings are available in a variety of shapes, and can be machined on-site.



# RBC Lubron Applications

## Aerospace & Defense

- ✓ Launch Facilities
- ✓ Missile Silos
- ✓ Naval Vessels



## Architectural

- ✓ Buildings
- ✓ Convention Centers
- ✓ Sports Arenas
- ✓ Museums
- ✓ Airports



## Industrial

- ✓ Petrochemical
- ✓ Processing
- ✓ Air Pollution Control
- ✓ Material Handling



## Infrastructure

- ✓ Highway Bridges
- ✓ Railroad Bridges
- ✓ Pedestrian Bridges
- ✓ Parking Structures
- ✓ Light Rail Transit
- ✓ High Speed Rail



## Machinery & Heavy Equipment

- ✓ Bulk Handling Equipment
- ✓ Mining & Excavation
- ✓ Iron Foundries & Steel Mills
- ✓ Amusement Parks
- ✓ Cranes



### Offshore/Marine

- ✓ Oil Platforms
- ✓ Floating Oil Production & Storage Vessels
- ✓ Offshore Drilling Vessels
- ✓ Mooring Systems
- ✓ Ships & Barges
- ✓ Derrick Crane Vessels
- ✓ Floating Bridges



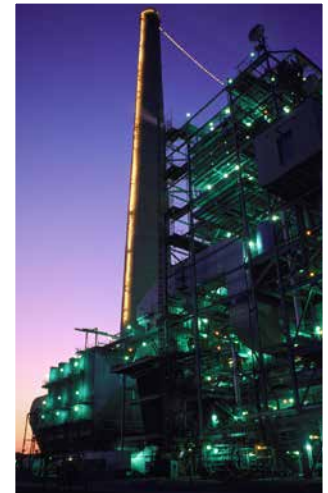
### Power Generation

- ✓ Hydroelectric
- ✓ Nuclear
- ✓ Oil, Gas & Coal Solar
- ✓ Wind



### Water Control

- ✓ Hydro Dam Gates
- ✓ Navigation Locks
- ✓ Flood & Tidal Barriers



# RBC Lubron Bearing Systems

We design and custom manufacture self-lubricating bearings for demanding applications and tough operating conditions. Our products are used in some of the largest projects and most critical applications on the planet, from power generation to bridge building, from rocket launching to subsea oil production, from missile defense systems to earthquake seismic isolation.

## Manufacturing Capabilities

Our manufacturing facilities are state-of-the-art, flexible and capable of complex tasks with precision accuracy. We have in-house CNC machining capabilities for up to 80" (2000 mm) in size. Our diverse design and manufacturing skills combine to assure consistent quality and reliable performance.

## Quality Assurance

Lubron self-lubricating bearings are manufactured and inspected in compliance with the requirements of ISO 9001.

## Testing & Development

Prototype and full scale production testing is performed in-house or by independent testing laboratories. In-house testing equipment includes hydraulic presses capable of sliding and rotational movement. Maximum vertical load testing capacity is 4 million pounds.

## Engineering Services

We offer a variety of engineering services from custom design of selflubricating bearings, selection of bearing materials, and testing of bearings to simulate load, movement, velocity, temperature and other environmental conditions present during the actual operation of Lubron maintenance-free bearings. On-site engineering services are available upon request.

## Design-Build

We work with all members of Design-Build teams and Public-Private Partnerships during the design, bidding and construction processes to identify and evaluate bearing requirements and provide best value bearing solutions.



## Catalogs

Catalogs are available from our website [www.lubron.com](http://www.lubron.com) and [www.rbcbearings.com](http://www.rbcbearings.com). Contact RBC Lubron Bearing Systems for any additional information.



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.



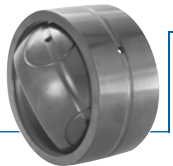
### Needle Roller Bearings

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.



### 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.



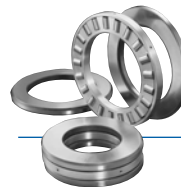
### Spherical Plain Bearings

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.



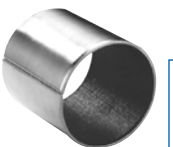
### Lubron® Bearings

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.



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

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