



RBI BEARING

Bearings + Technology + Solutions



**BEARING SOLUTIONS FOR
HEAVY DUTY APPLICATIONS**

www.rbibearing.com + 1-800-708-2128



AXPB RBTECH PROVIDES DEPENDABLE BEARING SOLUTIONS FOR EXTREME INDUSTRIAL APPLICATIONS.

Faster lead times, an expanding product line and a fast growing arsenal of state-of-the-art manufacturing facilities have positioned AXPB RBtech as a performance alternative to top tier bearing manufacturers.



ARMOR BEARING SERIES | Bearing Technology & Protection

RBI offers all of our bearing products with our Armor Bearing Technology & Protection to reduce bearing friction and substantially increase bearing life - which means less downtime and reduced repair costs. We offer Armor Nano Technology, Armor Long Lasting Lubrication Technology & Armor Coated Protection. Armor Technologies do not alter the dimensional tolerances of the bearings. Armor Bearing Technologies & Protection benefit applications experiencing high heat temperatures, harsh contamination and clean environments sensitive to corrosion and chemical wash downs.



ARMOR Nano Technology ARMOR Long Lasting Lubrication ARMOR Coated Protection

- Significantly extend the bearing's life
- Shields the bearing against harsh environments
- Increases efficiency and production
- Provides constant and consistent lubrication
- Preventing contamination ingress & corrosion
- Dramatically reducing shutdowns & the need for maintenance
- Saves time and operation costs

AXPB RBtech provides solutions for the following industries:

- Compressors (Air and Gas)
- Pumps
- Gearboxes
- Wind Turbines
- Planetary Drives
- Construction Machinery
- Vibratory Screens
- Crane Sheaves
- Cement Mixer
- Mining Equipment
- Steel Mill Industry
- Machine Tool
- Oil and Gas
- Port Equipment

AXPB RBtech Product Range:

- Spherical Roller Bearings
- Tapered Roller Bearings
- Cylindrical Roller Bearings
- Angular Contact Ball Bearings
- High Precision Spindle Bearings
- 4-point Angular Contact Ball Bearings
- Sheave Bearings
- Vibratory Screen Bearings
- Gear/Bearing Units
- Full Complement Bearings

AXPB RBtech Premium Features:

- Premium Raw Materials
- Top-tier Component Suppliers
- Advanced Quality Management Systems
- State-of-the-Art Manufacturing Facility
- German Engineered Production Equipment
- Hard Turning Processes
- Superior Superfinishing
- Premium Packaging
- Complete Traceability
- Extensive Product Range
- Attention to Detail

DISCOVER THE AXPB RBTECH DIFFERENCE.

For more information call 1-800-708-2128 or visit www.rbibearing.com/axpb-rbtech



Production Basics

Manufacturing Facility:

- 90,00SF production floor area
- 35,000SF R&D center
- 130,000SF workshop
- High precision bearings, large size bearings, ring turning, heat treatment, and distribution center
- Fully sealed work floor
- Temperature controlled environment
- Central emulsion supply system

Machines:

- All machines controlled by SIEMENS Systems interfaces
- German engineered production machinery
- Thielenhaus superfinish machinery
- CRB & TRB with logarithmic raceway profiles for optimum bearing life
- Internal tolerance P5+ accuracy
- Vertical turning machinery for hard turning process
- 3-Stage ultrasonic washing equipment
- 100% traceable material, components, manufacturing & assembly
- Data matrix or bar code marking on product
- Manufacturing SPC controlled at center of tolerance

Advanced Quality Management Systems:

- Mahr profile meter
- Mitutoyo Roundness Tester
- Fluorescent Magnetic Particle Testing Machine
- Zeiss Metalloscope

Raw Materials and Components:

- 100Cr 6, Jiangsu Xingcheng special steel (SKF Grade 3 ultra-clean steel is standard)
- Forging: Zhangjiagang Hongyang steel products company (qualified by Schaeffler)
- Brass cage: Becotek (Sweden), and TLD Dalian (Schaeffler supplier)
- Stamping cage: Harsha (cage supplier of Timken and Schaeffler)
- Roller: Haiyate (roller supplier for NSK and SKF)
- Salt bath through hardening, case hardening, and stainless steel hardening (Bainitic hardening also available.)
- Upon request, retained austenite less than 2% can be guaranteed 62 (+/- 2) HRC up to 180°C
- Temperature stabilizing up to S4 / 350°C



Advanced Technology Design Focus

Hard Turning:

- High axial load carrying capacity due to optimized rib contact
- A higher level of energy efficiency due to reduced frictional torque
- Lower maintenance costs
- Lower operating costs due to reduced energy consumption
- Increased performance
- Suitable for extremely high radial loads
- Suitable for very high speeds

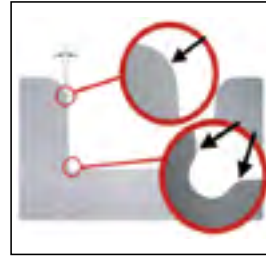
Control:

- Modern metrology and a climate controlled manufacturing environment consistently provides precise measurements
- Reduced tolerances levels of ABEC 5 and above

Material, Forging and Heat Treatment:

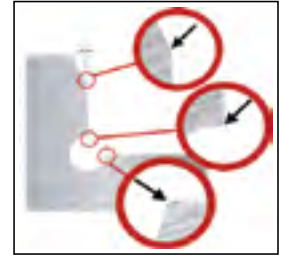
- Ultraclean, extremely wear resistant, low oxygen level bearing steel
- Forging and ring rolling in state-of-the-art facilities

AXPB RBtech Hard Turning



vs.

Grinding



- Control over material and process for demanding applications
- Salt bath hardening, along with sub zero treatment to assure residual austenite levels lower than 2%

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AXPB RBtech Core Products

Tapered Roller Bearing

Features:

- Metric and Inch Sizes
- Single Row, Double Row, Multi-Row
- Universal Interchangeable cup, cone, and roller assembly
- Optimized Rib Design for 1.5X axial capacity
- Raceway Logarithmic Geometry reduces stress and ensures optimum bearing life

Industry Usage:

- Compressors
- Pumps
- Gearboxes
- Construction Machinery
- Mining Equipment



Cylindrical Roller Bearings

Features

- Available in single row, double row, multi-row and full complement designs
- Machined brass, L-PPS, and plastic cages
- Hard-turned ribs for optimum performance
- Raceway Logarithmic Geometry reduces stress and ensures optimum bearing life

Industry Usage:

- Gearboxes
- Construction Machinery
- Steel Industry



Spherical Roller Bearing

Features:

- Available in a variety of configurations, including E-type and sealed versions
- Cage materials include Machined Brass, Polyamide, and Pressed Steel
- Advanced internal geometries for optimum performance characteristics

Industry Usage:

- Gearboxes
- Construction Machinery
- Vibratory Screens
- Cement Mixers
- Mining Equipment
- Steel Industry
- Pulp and Paper



Angular Contact Ball Bearing

Features:

- High precision, high load capacity designs
- Premium and standard cage materials; L-PPS, Machined Brass, Polyamide
- Universally ground for paired mounting
- Available with 3 axial clearance classes
- Available with 3 preload classes
- Super Precision spindle bearings also available in ABEC 7-9 precision with phenolic cage option

Industry Usage:

- Compressors
- Pumps
- Gearboxes
- Construction Machinery
- Machine Tools



Four Point Angular Contact Ball Bearing

Features:

- Supports radial and bi-directional axial loads
- Split inner ring enables greater ball quantity for increased load capacity
- Requires less space than other angular contact bearing designs

Industry Usage:

- Compressors
- Gearboxes
- Construction Machinery
- Machine Tool



Sheave Bearing

Features:

- High Dynamic and Static Load Capacity
- Inner Ring is ground and split before assembly for precision assembly
- Optimized Rib Design ensures 2-3X axial load capacity
- Advanced Seal Design

Industry Usage:

- Construction Machinery
- Crane Sheave
- Elevator



Next Generation Gear Unit

Features:

- Integration of bearing and gear into one unit
- Reduced installation time and cost
- Improve gear bore profile and roughness as bearing outer ring
- Increase combined unit load capacity

Industry Usage:

- Planetary Gear Drives
- Final Reduction Drives
- Wind Energy





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