RBC Aerospace Bearings

Western Precision Aero • Reliable • Flexible • Engineering

Western Precision Aero, a Division of

RBC Bearings Inc., is a world-class manufacturer of geared and splined product supporting commercial aerospace and defense applications.

Western Precision has been reinvented since being acquired by RBC in 2013. While still focusing on highly engineered, precision-cut gearing and splines, WPA has expanded capabilities into multicomponent assemblies and high strength, structural elements. With a management team consisting of experienced RBC managers and engineers, WPA now offers benefits beyond industry norms; including stocking positions on contracted product as well as engineering and product synergy from the breadth of RBC Bearings' product offerings.

Capabilities

Western Precision's expertise with Spur Gears, Helical Gears, and Planetary Gear Sets has been expanded to include next-level assembly offerings on pistons, cylinders, manifolds, and various mechanical assemblies.

WPA's custom machining and assembly capabilities include vertical and horizontal milling, CNC gear and spline cutting, as well as CNC gear grinding and hobbing.

Understanding that the market continues to push for reduced costs, WPA has an established Continuous Improvement team to streamline the manufacturing process and works with other RBC divisions to remain current on emerging manufacturing technologies.

Approvals

AS9100, ISO9001, and BOEING BQMS D-82479 approved.









Contact us! Call: 310.537.3750 Ext: 2226 Email: MachinedComponents@RBCbearings.com www.rbcbearings.com

RBC Aerospace Bearing Products Product Line Card



Spherical Bearings

- MS approved to AS81820
- (formerly MIL-B-81820) Self-lubricating
 Metal-to-Metal
- Loader slots High temperature
- Low coefficient of friction
- Special configurations and materials

Thin Section Ball Bearings

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

Journal Bearings

- MS approved to AS81934
- (formerly MIL-B-81934)
- Plain and flanged
 Self-lubricating
- High temperature High loads
- Available in inch and metric sizes

Airframe Control Ball Bearings

- MS approved to AS7949 (formerly MIL-B-7949) • Single and double row
- Radial, self-aligning, and pulley series
- 52100 Cad plated and 440C stainless
- Zinc Nickel plated

Ball Bearing Rod Ends

- MS approved to AS6039 (formerly MIL-B-6039)
- Various shank configurations
- Low coefficient of friction
- Advanced AeroCres[®] materials available

Rings and Seals

- · Solutions for any pneumatic and hydraulic applications
- Seals from .5" to 55" diameter
- Cast Iron to Rene 41
- · Precision machined & wire rings to tight tolerances

Specialty Fasteners

- Hollow Bolts, Fuse Pins, Solid Bolts
- (Standards), Customed Machined Parts & Nuts
- Hot Headed, Thread Rolled, HVOF Coated
- Large Diameter over 3/4"

Hydraulic Actuators

- 2-Position Fluid Hydraulic
- Auto or Manual Mechanical Locking
- Lock Sensing/Position Sensing
- Flow/Directional Control Valves;
- Solenoid/Manual













 Capability for advanced aerospace specialty corrosion resistant and high temperature materials

Control Rods

- Swaging up to 14' length and 4" dia
- Nadcap and customer special process
- approvals including NDT
- Surface treatments, CNC Machining, Flash Welding, Aluminum Heat Treat
- Design and build to print

Ducting Solutions

- Solutions for pneumatic ducting
- Patented couplings
- Temperatures 450° to 1,500°F
- Engines, Aircraft, APUs

Machined Components

- Exotic materials
- 3, 3.5, 4 and 5 Axis
 - Horizontal and Vertical Milling
 - Lathes, Hot Head, Gearing, Heat Treat, Special Processes

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. © 2020 RBC Bearings Incorporated, All rights reserved RBC 9/2020













Rod End Bearings

- MS approved to AS81935
- (formerly MIL-B-81935)
- Self-lubricating
 Metal-to-Metal • Loader slots • High temperature
- · Low coefficient of friction
- · Special configurations and materials

Track Rollers

- MS approved to AS39901 (formerly MIL-B-3990)
- ATF single row and ATL double row
- Sealed with lube holes and grooves
- · Heavy duty cross sections
- Advanced AeroCres[®] materials available
- Lined track rollers available

Cam Followers

- MS approved to AS39901
- (formerly MIL-B-3990)
- Advanced AeroCres[®] materials available
- Maximum corrosion resistance
- · Superior lubricants and seals to reduce maintenance

Load Slot Bearings

- Spherical and rod end designs
- Superior ball-to-race conformity
- Reduced maintenance cost
- · Variety of race materials available