

# Noise & Vibration Solutions for Aircraft Interiors

RBC Bearings offers a wide variety of High Performance Elastomeric Bearings for motion accommodation and vibration & noise attenuation.



## Typical Uses:

Airframe designers and manufacturers constantly battle application issues caused by structural-borne noise and vibration. RBC has developed elastomeric bearing technology to address these complex issues.

By merging RBC's industry leading bearing technology with formulations of natural rubber and advanced synthetic materials, RBC's elastomeric bearing offering has a solution to address any load, misalignment, weight, vibration, and noise issue.

RBC Engineering can customize an elastomer blend to meet the most challenging stiffness, misalignment, and articulation requirements. Designs are available with CRES or lightweight substrate materials such as titanium, aluminum, and engineered thermoplastic polymers.

RBC's elastomeric technology can be integrated with your existing RBC products to produce higher level assemblies. Finally, there is a full line bearing manufacturer delivering elastomeric bearings to the Aerospace industry.

## Approvals:

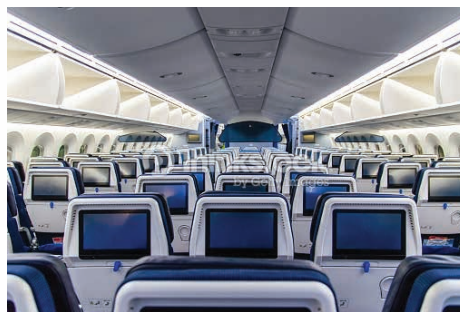
- ✓ BACB10HW
- ✓ BACC36

## Product Types:

- ✓ Hiem Rod Ends
- ✓ Cartridges
- ✓ Bushes
- ✓ Shock Mounts
- ✓ Brackets
- ✓ Rods

## Interiors Applications:

- ✓ Overhead bins
- ✓ Crew rest
- ✓ Galleys
- ✓ Structures
- ✓ Sidewall panels
- ✓ Avionics racks/trays
- ✓ Ceiling panels
- ✓ Electronics



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:



## 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"
- 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), Custom Machined Parts & Nuts
- Hot Headed, Thread Rolled, HVOF Coated
- Large Diameter over 3/4"



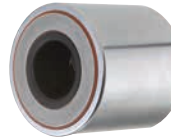
## Hydraulic Actuators

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



## 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



## Cam Followers

- MS approved to AS39901 (formerly MIL-B-3990)
- Advanced AeroCres® materials available
- Maximum corrosion resistance
- Superior lubricants & 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



## Specials

- Many specialty bearings, custom-designed and configured for diverse aerospace applications
- Capability for advanced aerospace specialty corrosion resistant and high temperature materials



## Control Rods

- Swaging up to 14' length and 4" diameter
- 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

