

## Aero**Structures**™

Leaders in Precision Aerospace Hardware

Control Rods Push-Pull Rods Connecting Links Torque Tubes Rod Assemblies Struts Special Processes

## Innovation. Commitment. Quality.

# AeroStructures™

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# Building Partnerships

**RBC** AeroStructures is well known for producing tight tolerance, precision fabricated tubular and machined parts. We also provide Mil-Spec painting, plating and non-destructive testing to the most exacting customer standards in the industry.

Through our engineering assistance program we offer our customers the latest in computer-aided design and automation techniques, helping you fine tune your design to optimize for reliability and extended operational performance.

Our Business Systems help us control internal costs and permit us to offer market competitive pricing. We also have full EDI capabilities.

RBC Aerostructures holds a variety of aerospace certifications including:

- ISO9001:2015
- AS9100:2016
- Nadcap Aluminum Heat Treating
- Nadcap Chemical Processing
- Nadcap Welding
- Nadcap Non-Destructive Testing

RBC Aerostructures continues to investigate new methodologies for improving its manufacturing and quality processes.100% of our manufacturing capability is dedicated to the aerospace industry.



Manufacturing Control Rods, Push-Pull Rods, Connecting Links, Torque Tubes, Rod Assemblies, Struts, Tie Downs and Special Processes for over 75 years.



www.rbcbearings.com

864-886-4607

### **Maintaining Partnerships**

Our long-term partnerships with key aerospace customers and their valued subcontractors reflect RBC AeroStructure's commitment to customer satisfaction and the trust that customers place in our capabilities.

### Manufacturing & Processing **Capabilities**

RBC Aerospace® is well known for producing tight tolerance, precision fabricated tubular and machined parts since 1948. Our product offering includes metallic rods, telescopic rods and bungees, which can be formed, swaged, machined, or flash welded. RBC has internal production capabilities to produce spherical & rod end bearings, clevises and other fully machined attachment points.

We enhance our product offering by providing special processes and capabilities to satisfy your application's stringent requirements. Our current process capabilities include:

- Aluminum Chemical **Conversion Coating**
- Magnetic Particle Inspection
- Aluminum Heat Treating
- Brush Cadmium Plating
- CAD/CAM Engineering
- CNC Machining
- Conventional Machining
- Flash Welding
- Fluorescent Penetrant Inspection
- Form Tapping
- Metal Forming

- Painting Passivation
- Statistical Process Control (SPC)
- Swaging
- Zinc Phosphate Processing
- TIG Welding

## **Operating Partnerships**

One of our most important partnerships and our greatest asset is our work force. RBC AeroStructures is dedicated to ensuring every part leaving our facility meets the most demanding standards of quality.

RBC AeroStructures is located in northwest South Carolina. We invite you to call with your inquiries, or better yet, visit and see first hand what we can offer.









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## **Innovation. Commitment. Quality.**

RBC Bearings® has been producing bearings in the USA since 1919. In addition to unique custom bearings, RBC Bearings<sup>®</sup> 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<sup>®</sup> 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









#### • Loader slots • High temperature · Low coefficient of friction

**Rod End Bearings** 

• Special configurations and materials

• Self-lubricating • Metal-to-Metal

#### Track Rollers

• MS approved to AS39901 (formerly MIL-B-3990)

• MS approved to AS81935 (formerly MIL-B-81935)

- ATF single row and ATL double row
- Sealed with lube holes and grooves
- · Heavy duty cross sections
- Advanced AeroCres<sup>®</sup> materials available

#### Cam Followers

- MS approved to AS39901 (formerly MIL-B-3990)
- Advanced AeroCres<sup>®</sup> 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



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