# **RBC Aerospace Bearings**

# **Transport Dynamics** — FibriloidCR™ Series

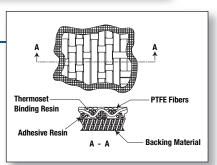
As the World Leader in self-lubricating liner systems, the Transport Dynamics Division of RBC Aerospace offers a full range of plain bearings (sphericals, rod ends, links and bushings). These bearings, featuring our proprietary liner systems, have been the preferred option for flight critical aerospace applications since they were originally developed by Transport Dynamics in 1957.

We have vigorously tested and validated the use of the **FibriloidCR**<sup>™</sup> series for cryogenic applications (-320°F). This series was specifically developed in support of space launch vehicles.



### FibriloidCR<sup>™</sup> Series Performance Benefits:

- Superior wear performance
- Low coefficient of friction at temperature
- Wide temperature range (°F):
  -300° to +450°



The FibriloidCR™ series of sphericals and rod ends is a space environment compatible offering that features the Fibriloid® liner, which is widely recognized as the most versatile and best performing liner in the aerospace industry for these demanding applications.

### Primary Market Served: Space Launch Vehicles



#### **Applications**

- Propulsion
  - Booster Engines
- Turbo Pumps
- Actuators
- Fuel Tanks
- Landing Gear

The use of the **FibriloidCR**™ series is an ideal cost effective solution for most applications requiring reliability and a long operational life without needing intervening maintenance.



Please consult your local Sales Engineer or contact us directly to get a technical design consultation.



Call: 714.546.3131 Ext: 1245
Email: FibriloidCR@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



- 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
- 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



### Specials

- · Many specialty bearings, customdesigned 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" 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

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