Titanium Bearings

Originally designed and qualified in the late 1980s, RBC Aerospace Bearings offers a variety of **titanium plain spherical bearings, rod end bearings, and journal bearings** for applications requiring maximum strength, light weight, and reduced maintenance.

Featured in applications throughout the aerospace and defense industry, these bearings are proven for use in engine hangers, trunnion bearings, helicopter rotor head bearings, landing gear bearings, and a variety of additional custom-engineered solutions.

Titanium has excellent inherent corrosion resistance due to a thin oxide surface film, eliminating the need for cadmium plating; unlike other materials such as 4340 steel. This results in a much “greener” product. Titanium is especially resistant to salt solutions, making it an ideal material for sea water applications.

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**Current Production Applications**

- Engine Hangers
- Landing Gear Bearings
- Trunnion Bearings
- Flight Control Bearings
- Helicopter Rotor Head Bearings
- Reverse Thrust Mounts
- Duct Support Bearings
- Gear Box Support Bearings

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FEATURED PRODUCT — TITANIUM BEARINGS

**Highest Strength-to-Weight Ratio**
Titanium bearings provide excellent strength-to-weight properties for applications that require a strong material without weight penalty.

**Superior Corrosion Resistance**
Titanium has excellent inherent corrosion resistance due to a thin oxide surface film, eliminating the need for cadmium plating; unlike other materials such as 4340 steel. This results in a much “greener” product. Titanium is especially resistant to salt solutions making it an ideal material for sea water applications.

**Temperature Capability**
Titanium bearings are recommended for a wider range of operating temperatures. Useful temperature range is -320°F to +750°F. Ti-6Al-4V alloy will retain above 60% of its tensile properties at 750°F.

**Proven Wear Performance**
RBC Aerospace Bearings provides a variety of self-lubricated liner materials depending upon the application. Extensive material testing has developed a proprietary hard coat for the titanium ball. Wear characteristics are equivalent to the standard CRES 440C ball material.

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