

## AeroCres® Reduced Maintenance Track Rollers

### RBC's AeroCres® bearings minimize maintenance to reduce downtime

RBC's new AeroCres® bearings provide a system solution that significantly reduces aircraft maintenance and downtime. The innovative design combines an advanced corrosion-resistant steel with a special lubricant and improved seal to set the standard in wing flap/slat performance.

RBC's AeroCres® bearings are made from bearing quality stainless steels that are manufactured using a proprietary process. This material is eight times more corrosion resistant than CRES 440C. These bearings also feature an improved one-piece seal and a special grease to enhance corrosion protection and extend service life.

This dependable wing system solution helps airlines reduce their total maintenance and downtime costs, including flight delays and cancellations.



*Outstanding corrosion resistance is the key to the reduced maintenance and extended service life of RBC's new AeroCres® grease bearings.*

### System Solution Benefits

#### Maximum Corrosion Resistance –

Unique bearing package with-stands corrosion in flight-tested environments through the combination of special steel, seal and lubricant.

**Advanced Steel** – Proprietary technology produces a superior material that is 38 times more corrosion resistant than 52100 steel and 8 times greater than CRES 440C.

**Effective Seal** – Improved one-piece copolymer design provides better protection and lubricant retention, even at regreasing pressures up to 5,800 psi (400 bar).

**Superior Grease** – AeroCres® grease is formulated to resist wash-out, emulsify water and guard against internal bearing corrosion and rolling contact fatigue.

**Extended Service Life** – Bearings are designed to resist corrosion and will last up to and beyond the first major maintenance check with minimal relubrication.

**Reduced Downtime** – Reliable design extends the regular maintenance cycle and minimizes unscheduled bearing replacement.

**Bolt-On Replacement** – Design permits direct interchange with existing bearings.

**Cost Efficiency** – Less bearing-related downtime saves maintenance time and money. Reduced flight delays and cancellations help airlines improve revenues.

**OEM Approval** – Bearings are currently approved for use on various Boeing and Airbus aircraft models.

**FAA Approval** – FAA/PMA approval allows immediate replacement of current bearings on various aircraft, including most Boeing aircraft.

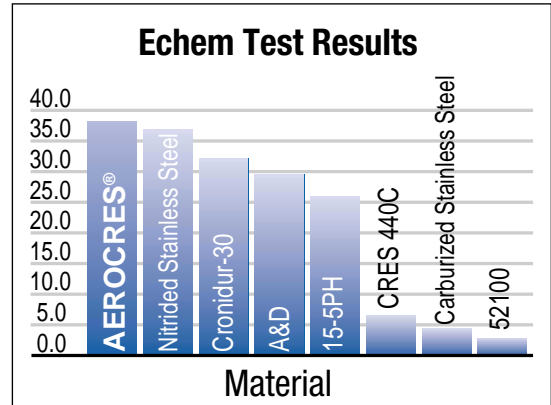
**Wingset Kits** – Complete bearing sets for flaps and slats simplify ordering, inventory, handling, and installation.

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## Bearing Steel

A proprietary heat treatment of a 400 grade stainless steel produces the advanced material used in RBC AeroCres® bearings. This unique steel provides outstanding corrosion resistance and performance characteristics that are superior to traditional bearing alloy steels under typical operating conditions.

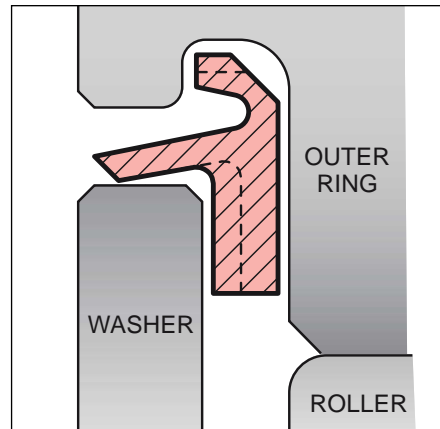
Electrochemical and environmental testing demonstrate unmatched corrosion resistance – 38 times greater than conventional 52100 bearing steel and 8 times over CRES 440C. Also, improved fatigue resistance enables bearings to withstand greater loads for longer cycles.



*Relative corrosion resistance after electrochemical test.*

## One-Piece Seal

Bearing design features a one-piece seal and thrust washer molded of BASF N-2310P acetal copolymer with lubricant fillers. This material provides superior wear resistance for both seal lips and thrust washers. The seal mounts securely in the bearing and incorporates pressure-relief features that permit full lubricant retention and function after regreasing with pressures in excess of 5,800 psi (400 bar).



*Combination seal and thrust washer resists contamination and retains lubricant.*

## Special Grease

The special grease is formulated to optimize long-term performance and extend relubrication intervals to achieve 5+ years. This grease is a blend of MIL-PRF 23827 and Braycote 600EF. It is currently approved to both Airbus and Boeing specifications.

### Key Benefits of AeroCres® Grease

- Emulsification of water
- Resistance to washout
- Compatibility with other aircraft industry greases