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.

System Solution Benefits

Maximum Corrosion Resistance – Unique bearing package withstands 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 washout, 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.
**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.

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**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).

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**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.