

RBC Bearings

MV Sealed Bearing Assemblies

INTRODUCING MV Sealed BEARINGS

by Schaublin

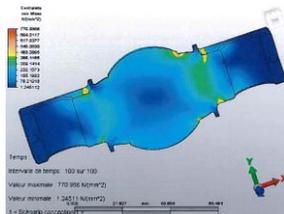


Background

- Expertise developed in the design and production of ball-pin or kingpin style spherical plain bearings
- These bearings are used in harsh environments with severe contamination such as sand, dust, mud or salt water
- The Design is optimized to perform in demanding fatigue, shock and vibratory conditions

Advanced design providing superior performance

- This new **MV Sealed** bearing product line is a concentration of bearing technology that provides you with numerous technical assets and solutions
- The Uniflon®-E liner system delivers:
 - A liner system: highly resistant to heat, abrasion, and high loads
 - A high proportion of PTFE and synthetic fibers, which have superb low wear properties
 - A matrix chemically linked by a thermoset resin system with a low coefficient of friction
- Fatigue resistant case hardening steel used for the ball pin with specially selected surface coatings.
- The design is optimized by using FEA (Finite Element Analysis) to achieve the best performance
- Integral seal boots: high strength elastomeric boots, which are replaceable if necessary



Qualifications

Each product or component is qualified according to a dedicated test plan which may include

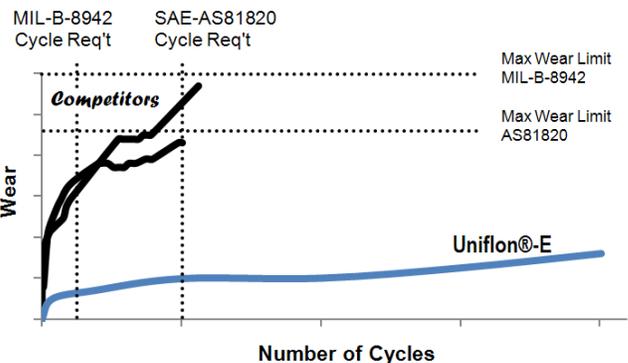
- Static and/or dynamic test
- Duty cycle endurance test
- Contamination (Hose down pressure)



These bearings are manufactured using proven technology

- Liner system meeting SAE-AS81820 performance requirements for use in military and commercial aircraft applications
- Seal boots resistant to -40°C (-40°F) and 80 bar (1'160 PSI) hose down pressure according to the toughest requirements. Test data available for mud immersion test in reverse loading and large angle oscillation conditions
- Surface finishing, coatings, conformity of the spherical assembly and liner bonding are all controlled by special processes

Room Temperature Oscillation Full Load



Advantages

- Shock and fatigue resistant
- High radial and axial load capacity
- Integral seal boot design
- Wear resistant



Typical applications

- High mobility vehicles
- Independent suspension axle systems
- Upper and lower wishbones
- Pivot bearings, kingpins

RBC Bearings

Innovation, Commitment, Quality

RBC has been producing bearings in the USA since 1919. In addition to unique custom bearings, RBC offers a full line of standard industrial and aerospace bearings, including:



Spherical Plain Bearings

Radial, angular contact, extended inner ring, high misalignment. **Quadlube**®, **ImpactTuff**®, **Spreadlock**® Seal, **CrossLube**®, **DuraLube**™, and self-lubricating bearing. Available in inch and metric sizes.



Needle Roller Bearings

Pitchlign® caged heavy duty needle roller bearing, inner rings, **TJ TandemRoller**® bearings for long life.



Thin Section Ball Bearings

Standard cross sections to one inch. Sizes to 40 inches. Stainless steel and other materials are available. Seals are available on all sizes and standard cross sections. Super duplex configurations.



Self-Lubricating Bearings

Radial, thrust, rod ends, spherical bearings, high temperature, high loads. Available in inch and metric sizes. **Fiberglide**® self-lubricating bearings



Tapered Roller Bearings

Tyson® case-hardened and through-hardened tapered roller bearings. Available in many sizes. Used in Class 8 heavy truck and trailer wheel bearings, gearboxes, and final drive transmissions.



Airframe Control Bearings

Ball bearing types, self-lubricating types, needle roller track rollers.



Tapered Roller Thrust Bearings

Case-hardened. Sealed and unsealed for truck, tractor, and construction equipment steer axles, and Class 8 trailer landing gear.



Dowel Pins, Loose Needle Rollers, Shafts

Precision Products dowel pins, loose needle rollers, and shafts.



Integrated Assemblies

For robots and other process tool applications. Engineering design assistance. Production volume capacity.



Commercial Rod Ends

Commercial and industrial, precision, Mil-Spec series, self-lubricating, and aircraft. Sold under the **Heim**®, **Unibal**®, and **Spherco**® names. Available in inch and metric sizes.



Cam Followers

Standard stud, heavy stud, yoke type, caged roller follower cam followers, Patented **RBC Roller**® cylindrical roller cam followers, **HexLube**® universal cam follower, airframe track rollers.



Ball Bearings

Precision ground, semiground, unground. High loads, long life, smooth operation. **Nice**® branded products are offered in caged and full complement configurations.



Ball Pin Spherical Plain Bearings

Self-lubricating types, greased plain bearings, sealed. High loads, high vibration resistant, long life. **S-FIT**™ and **CTRL**™ configurations available.



Specials

RBC manufactures many specialty bearings for the aerospace, oil and energy, semiconductor equipment, packaging, transportation, and other industries.