Aerospace carbon seals for turbine engines

SKF is a leading supplier of carbon seals and sealing rings for turbine engines, auxiliary power units, and auxiliary gear boxes used in both military and commercial aircraft platforms. Decades of engineering, application, and manufacturing expertise go into every product, first as Kaydon Ring & Seal, and now the Ring & Seal operation of SKF, making SKF a “go to” supplier for today’s and tomorrow’s program needs.

**Bearing compartment carbon seals**

SKF carbon seal designs are engineered to seal the main shaft bearing compartment and oil sump, for more efficient and environmentally sustainable operation. Carbon face seals and carbon circumferential seals reduce costs by extending life and delivering outstanding performance, setting quality standards for many commercial and military engines.

SKF lift seal designs provide clear performance advantages in reducing heat generation, extending seal life, reducing load on engine oil management systems, and maximizing time on wing.

**Quality**

The Ring & Seal operation of SKF is known for consistently high quality, using continuous improvement and Six Sigma methodologies to achieve ever-higher levels of performance. SKF’s internal quality programs and processes are supported with approvals from ISO9001, AS9100 and NADCAP as well as numerous individual process approvals from the world’s leading aerospace OEMs.
Applications

- Bearing compartment face seals
- Bearing compartment circumferential seals
- Bearing compartment bushing seals
- Main engine bearing compartment seals
- Air seals
- Auxiliary power unit (APU) seals
- Auxiliary gear box seals
- Military aircraft engine seals
- Commercial aircraft engine seals

Project schedule and scope

We support your schedule requirements with design, prototypes, demonstration validation testing and production hardware as needed. Shaft seal runners, spacers, and support structures are often included in our scope to simplify the supply of associated seal components and assure the proper interface of mating components.

Seal rig testing and validation

SKF has made significant investments in its high speed test rigs to allow demonstration testing for new designs and validation testing of design changes. Testing is performed to match flight profiles for engine applications.