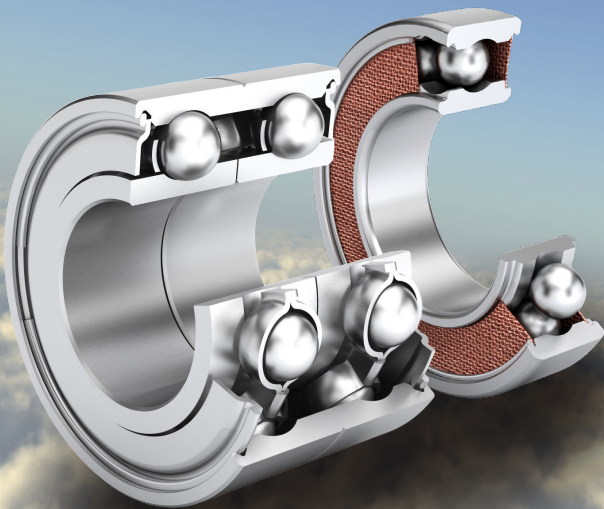
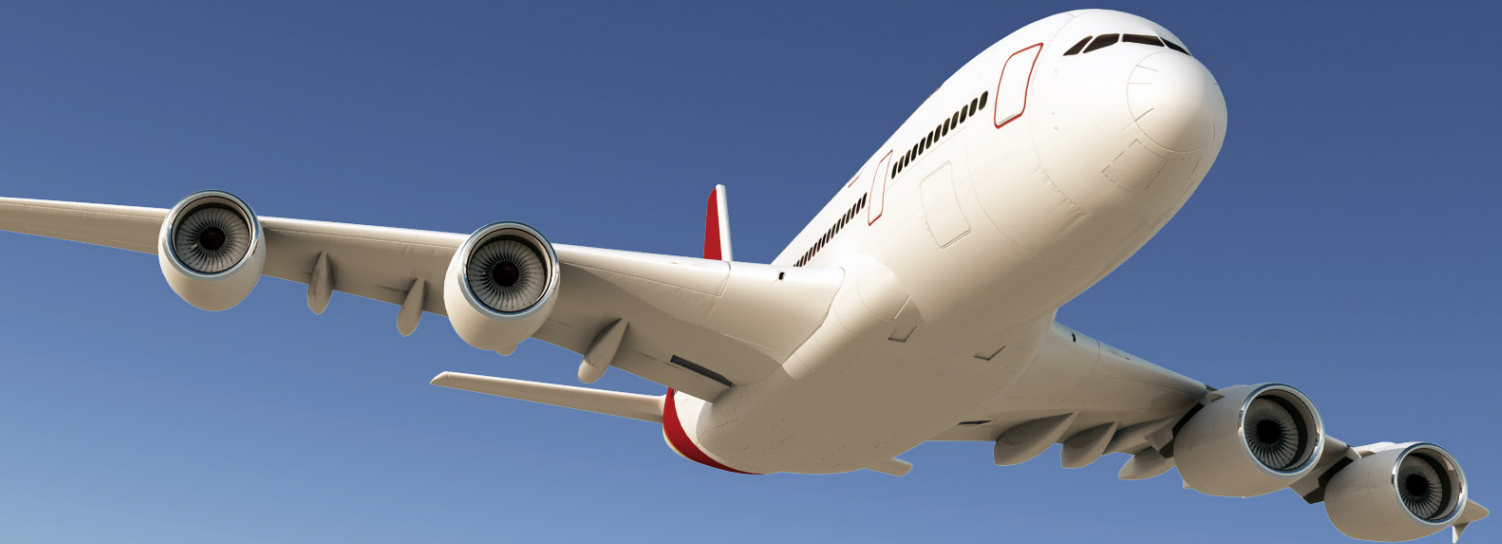




Super Precision Aerospace Bearings



HQW Precision GmbH
The Barden Corporation (UK) Ltd

Partners in Precision



The Company

The Barden Corporation leads the world in the design and manufacture of super precision bearings and bearing assemblies. Together in partnership with fellow precision bearing manufacturer HQW Precision GmbH, Barden works within a worldwide network of state-of-the-art manufacturing facilities, engineering and service locations and sales offices.

Founded over 70 years ago and with a respected history of designing ball bearings for extreme and challenging applications, Barden's aerospace pedigree is second to none. Bearings are designed with quality, precision and reliability in mind - so customers are assured of solutions which are expertly customised to the application.

Quality

Quality is paramount throughout the organisation and is applied to every aspect of design and manufacturing, from raw materials through to the finished product. Final assembly and inspection of all Barden bearings takes place in a cleanroom environment. Barden facilities are certified to ISO 9001 and AS 9100, with full traceability where required, and are certified by the major aerospace Tier 1 & Tier 2 companies.



The Products

Barden has an unrivalled reputation for designing customised bearing solutions. In addition to having a standard range of metric and inch size deep groove and angular contact bearings, Barden has developed a unique in-house capability to design and manufacture complex bearing assemblies and mating parts.

Our super precision bearings are manufactured to ISO P4/P2 (ABEC 7/9) standards to offer the very best in performance and reliability.

Aerospace applications form a large part of Barden's core business and include a wide variety of aircraft accessories and critical components. Our bearings are typically found in applications such as auxiliary power unit (APU) generators, actuator motors, cabin air systems and gyroscopes for both military and civil markets.

Materials

Within the design process, our engineers use their extensive experience and knowledge to select the correct bearing materials to maximise performance in a particular application. This includes selection of ring material, ball type, cage material, type of seal and the correct lubricant.

Ceramic balls are often used in extreme aerospace applications or hostile environments to improve lubricant life and reduce wear. Cages can be made from a range of materials, such as phenolic, PEEK, steel or bronze. High performance materials are selected for the bearing rings, including SAE 52100, AISI 440C, M50 and SV30.

Customised Engineering Solutions

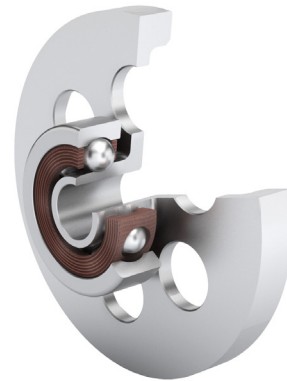
Using the latest design and modelling software, Barden products can be optimised internally for maximum performance in the minimum space envelope. Externally they can be designed to incorporate design features such as flanges, shafts and housings, which make fitting quicker, easier and more accurate. This reduces assembly time and overall operating costs.

Performance Benefits

Barden super precision bearings remain at the forefront of bearing technology, offering end users high performance, long working life and reliable operation... every time.



Full complement bearing for a fin actuation system



Gyroscope rotor bearing



Guidance system gimbal duplex pair



Aircraft actuator motor bearing



The Barden Corporation (UK) Ltd
Plymbridge Road, Estover
Plymouth PL6 7LH
United Kingdom

Phone: +44 (0) 1752 735555
Email: info@bardenbearings.co.uk
Web: www.bardenbearings.co.uk

All technical data is considered correct at time of printing.
No liability can be accepted for any technical alterations, errors or misprints.

This publication or parts thereof are protected by copyright
and must not be reproduced without permission.

BUK-SPAB-04/2021-EN