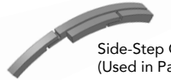


Gap Design

We offer a range of gap types for improved sealing performance and ease of assembly. Rings can be made either 'outspringing' or 'inspringing'. Other angled and special gaps are also available for seals and retaining rings. Our consultancy service is free and we can assist with your design.



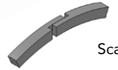
Simple Straight Cut



Side-Step Gap
(Used in Pairs)



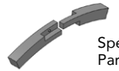
Step Gap



Scarf Cut Step Gap



Latch Gap



Special Gaps for
Particular Applications

Capabilities & Materials

Capabilities

- Up to 1000°C (1832°F)
- Size range:
  12.7mm to 1828mm
  (0.5 – 72 inches)
- Maximum pressure:
  70 MPa (10000 psi).

Materials

- Cobalt alloys: HAYNES® 25
- Nickel alloys: Inconel 600, 718, X-750; WASPALOY®; Nimonic 90
- Phosphor bronze;
  Aluminium bronze
- Stainless steels: 316, 321; 420
- High speed steels: M2,M35
- Titanium alloys

HAYNES® is a registered trademark of Haynes International.
WASPALOY® is a registered trademark of Pratt & Whitney, a United Technologies Company.

CROSS

PRECISION SEALING SOLUTIONS







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Publication number CMC002
Issue date 08/2026

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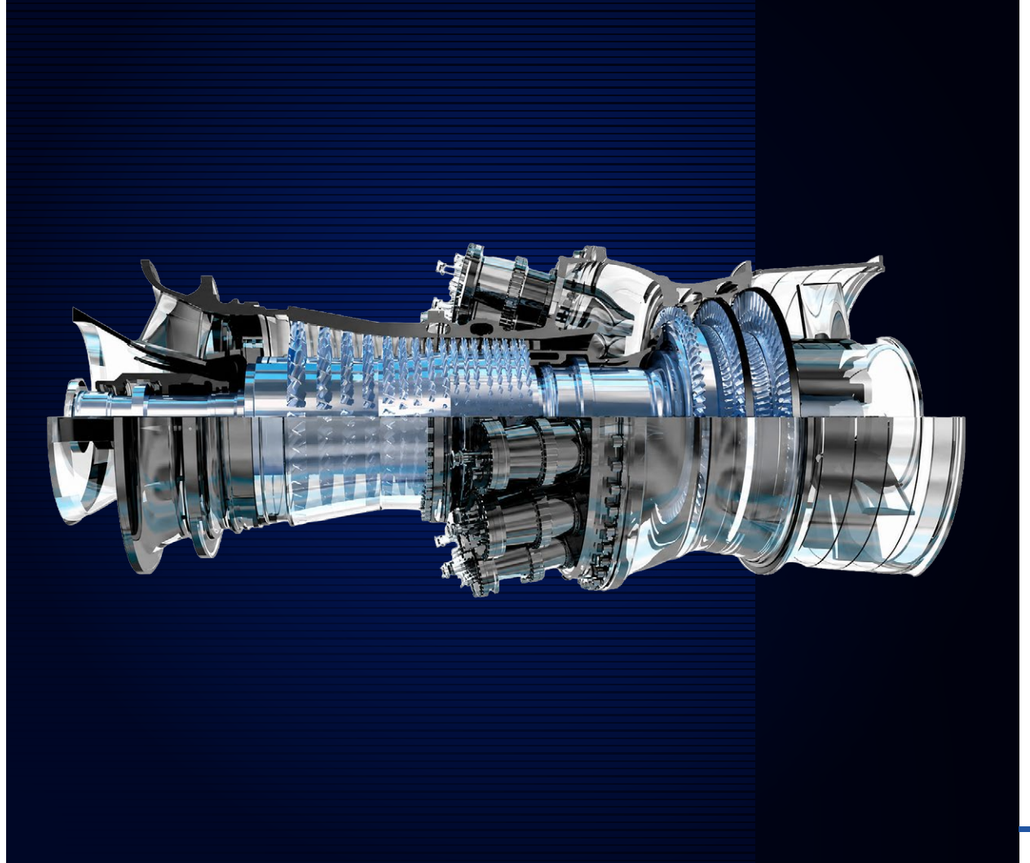






Piston, Sealing & Retaining Rings





CROSS

Cross has been involved in the design, test and manufacture of aerospace and power generation sealing solutions for over 80 years and supplies over 400 customers in 40 countries.

Products manufactured at our Bath site are designed to solve specific sealing, damping or retaining application challenges in aircraft engines, gas and steam turbines.

Cross rings are superior because they are forged with the grain flow around the ring so the finished parts are ductile and not brittle. Full technical support is at your service for development of new designs and engine upgrades.

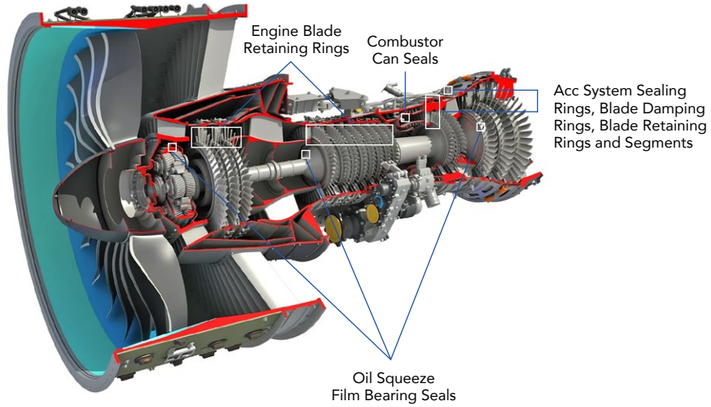
This dedication to quality and excellence is recognised throughout the world.



Sealing & Retaining Rings for Aircraft Engines, Gas and Steam Turbines

For Aerospace and Power Generation from APUs to Power Stations

- Compressor and Turbine Static Sealing
- Engine Blade Retaining Rings
- Oil Squeeze Film Bearing Seals
- Combustor Can Seals
- Retaining Segments
- Centralising and Energising Springs
- Spacer Bars for Heat Exchangers
- Pipe Joint Sealing Rings and Bearing Rings for Anti-icing Systems
- Blade Damping Rings
- Exhaust System Seals
- Intake Seals
- Nozzle Seals
- Aerospace Grade Spring Washers



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