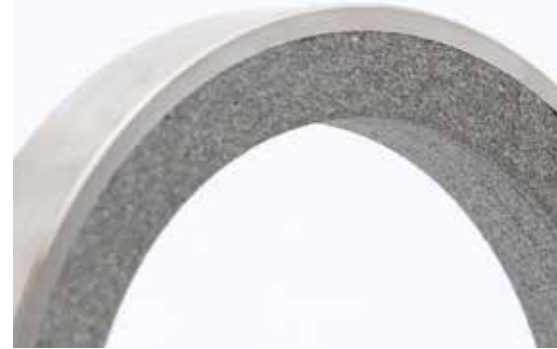


FELTMETAL™ Abradable Seals

PROVIDING AIRFLOW EFFICIENCY FOR TURBINE ENGINES

Technetics FELTMETAL™ abradable seals have over 40 years and a billion hours of successful operation in aerospace engines and industrial gas turbines. FELTMETAL™ abradable seals provide superior clearance control and effective sealing of blade tips and interstage labyrinth seal knife edges while minimizing wear on the critical rotating hardware. Tightly controlled sealing surfaces and reduced wear on rotating equipment translates to more efficient operation.



BENEFITS

- Reduces interstage leakage in the compressor and power turbine sections of gas turbine engines
- Eliminates need for hard coatings on mating hardware which are required on competing seal materials such as thermal spray coatings
- Allows incursion of rotating components with minimal wear to contact surface
- Can be applied thicker than competing materials allowing for deeper blade incursions and closure of larger gaps
- Seal material can be manufactured to custom sizes and thicknesses and can be rolled, formed, or machined to its final configuration
- Superior sealing versus competing sealing materials thus minimizing backflow or stage pressure losses

DESIGN FEATURES

- Material options include, but are not limited to, FeCrAlY and Hastelloy-X
- 50-85% porous
- Available as seal segments .03 in. to .60 in. thick
- Available as complete seal assemblies

OPERATING PARAMETERS

- Temperatures up to 1300°F [700°C]

APPLICATIONS

In aerospace and industrial turbine applications, Technetics FELTMETAL™ abradable seals are used as:

- Outer gas path seals for compressor and turbine blades (shroud seals, tip seals, rub strips)
- Inner seals below the gas path for interstage sealing
- Labyrinth seals



WHO WE ARE

Technetics' products can be found on aircraft in virtually every segment of the aerospace market. We design and manufacture solutions for both fixed-wing and rotary-wing aircraft supporting a growing list of commercial and military platforms, as well as unmanned aerial vehicles and spacecraft. Our mission is to deliver engineered products that meet and exceed our customers' expectations for performance, quality, reliability and delivery.

SUPERIOR ENGINEERING CAPABILITIES

- **3D MODELING & FEA:** Technetics uses CAD software to design and develop sealing concepts, and facilitate efficient communication with our customers and supply chain partners.
- **QUALIFICATION/TESTING:** Extensive on-site static sealing, dynamic sealing and fluid sealing test capabilities combined with external testing partners' expertise to ensure product integrity and full conformity with design criteria.

STRONG SAFETY & QUALITY CULTURE

- **SAFETY:** The safety culture within Technetics places a relentless focus on creating a healthy work environment. Our safety framework is designed to eliminate all incidents associated with Technetics activities, products and services.
- **OPERATIONAL EXCELLENCE:** Our continuous improvement culture is focused on customer satisfaction and driving operational efficiencies across our businesses.
- **CERTIFICATIONS:** All our aerospace facilities hold AS9100 quality approval as well as a number of customer approvals.

DIVERSE AEROSPACE OFFERINGS



**FELTMETAL™
ACOUSTIC MEDIA**



BRUSH SEALS



**FELTMETAL™
ABRADABLE SEALS**



**ELASTOMER
SEALS**



BURST DISCS



**STATIC METAL
SEALS**



**PTFE TAPES
& FILMS**



**MECHANICAL
SEALS**



**EDGE-WELDED
METAL BELLOWS**

ESTABLISHED GLOBAL FOOTPRINT

Technetics has facilities around the globe, strategically located near our customers. Our pursuit of customer satisfaction ensures we provide responsive, timely assistance and outstanding technical support as well as on-time delivery.

