

# BLADESAFE® Abradable Seals

*Increasing Engine Efficiencies with BLADESAFE® Abradable Technologies*



With over 50 years of engineering expertise in the development of abradable sealing technologies, Technetics Group is a proven partner when it comes to delivering custom solutions for critical aerospace and industrial turbine applications.

## IMPROVING EFFICIENCIES & REDUCING BLADE DAMAGE

Technetics Group's BLADESAFE® abradable material provides superior clearance control between the blade tip and the casing, mitigating leakage of air flow around the blade and improving overall efficiency as well as life of the engine. With enhanced durability, BLADESAFE® abradable material is able to withstand the harshest of environments while maintaining seal performance and ensuring reduced blade damage and engine downtime.

## FEATURES & BENEFITS

- Can be applied significantly thicker than thermal spray coatings without loss of strength or cohesion
  - 2-5 mm is typical
  - Can be produced >10mm thick and has been tested in high speed abradable tests up to 5mm thick
- Reduced blade damage when compared to conventional coating solutions
- Ability to withstand high speed uncoated Ti6Al4V blade incursion with less heat generation and less abradable seal wear
- Higher dry particle erosion resistance
- Lower air permeability
- Lower oxidation rate
- Increased density

## LEADING ENGINEERING SUPPORT

- Dedicated Engineering teams providing extensive technical expertise in developing custom solutions

## COMMITTED TO QUALITY

- ISO 9001:2008 and AS9100C certified

## SEAL MATERIAL

The Technetics Group BLADESAFE® abradable technology is a Hastelloy-X based metal matrix composite (MMC) seal material that has been engineered for improved blade wear and erosion resistance response.



## TECHNETICS GROUP

EnPro Industries companies

1700 E. International Speedway Blvd  
DeLand, FL 32724 USA

Phone: 386-736-7373

Fax: 386-738-4533

deland@technetics.com  
technetics.com

**Technetics**  
GROUP

EnPro Industries companies