# HELICOCARB® CARBON FIBER BRUSH SEALS

High-performance rotating sealing solutions for critical industrial applications



The HELICOCARB<sup>®</sup> carbon brush seal, robust and easy to integrate, offers good adaptability to your service and operating conditions as well as performance improvements for your equipment. This sealing solution also allows you to reduce your total cost of ownership while ensuring safety and reliability of your installation.

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## **APPLICATIONS**

The HELICOCARB® seal can replace existing seals in the following applications:



|                           | Advantages of Using HELICOCARB® Seals  |
|---------------------------|--|
| LABYRINTHS SEALS          | Lower leak rate, improved efficiency, easier to integrate & to install, no<br>leakage during shut down sequences |
| METAL BRUSH SEALS         | Lower friction, no shaft abrasion, bi-directional  |
| • CONTACT MECHANICAL SEAL | Lower friction, higher speed   |
| • DRY GAS MECHANICAL SEAL | Longer lifetime, bi-directional, more robust, easier to integrate & to install                                   |
| LIP SEAL                  | Higher speed, higher temperature, lower friction, longer lifetime  |

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### BENEFITS

- Improved energy efficiency
  - Leakage reduction: up to 90% gain compared to labyrinth seals (depending on conditions)
  - Low-friction torque resistance
  - Low shaft abrasion
- Simple, robust and reliable
  - Easy to integrate and easy to install
  - Customizable design for optimized integration within assembly (materials casing, carbon fiber layer)
- Improved lifetime



### TECHNICAL CHARACTERISTICS

- Pressure:
  - Standard: up to 2 bars  $\Delta P$
  - Special designs for higher pressure applications
- Temperature: up to 450°C
- Shaft Speed: up to 160 m/s
- Media: gas (air, mist oil), liquid (water, oil)
- Bi-directional



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For other service conditions, please contact our engineering department for a customized solution adapted for your application. technetics.com/products/helicocarb





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