Hi-Tech Seals Inc.

TechCera™ Ceramic

When Strength Meets Reliability

TechCera™ ceramic is Hi-Tech Seals' family of high-performance advanced ceramics. These lightweight materials exhibit excellent mechanical properties and extreme hardness. They provide outstanding resistance to corrosion, wear, chemicals, and abrasion. TechCera™ consists of Alumina and Zirconia compounds, with other materials available upon request.

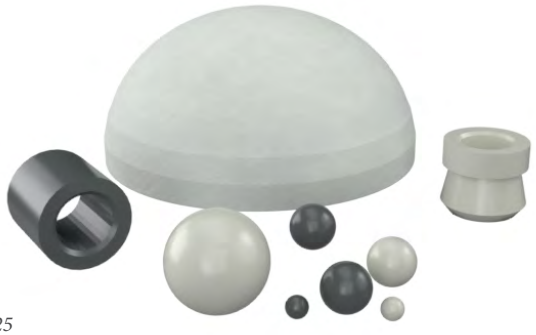
Alumina is a cost-effective and widely used advanced ceramic material. It resists corrosion and offers remarkable mechanical strength and wear resistance. Alumina has exceptional thermal conductivity and is an excellent electrical insulator, making it ideal for applications requiring heat dissipation and electrical isolation.

Zirconia is known as "ceramic steel" due to its superior toughness. Zirconia is beneficial for components that endure high dynamic stresses. One of its notable properties is its resistance to thermal shock, which is the ability to withstand sudden temperature changes without cracking.

We offer hot isostatic pressed (HIP'd) and cold isostatic pressed (CIP'd) TechCera™ ceramic compounds. HIP'd compounds offer improved mechanical properties, while CIP'd compounds allow for the production of parts with closer tolerances.

TechCera™ Ceramic advantages:

- Excellent mechanical properties
- Extreme hardness
- Superior wear resistance
- Outstanding thermal properties
- Exceptional chemical resistance
- Great resistance to corrosion
- Remarkable electrical insulation properties



TechCera™ are used to manufacture a wide range of components including rings, wear sleeves, balls, burst discs, inserts, seats, bearings, rollers, and more. They are used in numerous applications across markets and industries, including:

- Oil and Gas
- Aerospace
- Medical
- Electronics
- Automotive
- Industrial Manufacturing

We work with customers from design to production to help ensure TechCera™ ceramic components meet and exceed our customers' application requirements.

hitechseals.com
info@hitechseals.com
linkedin.com/company/hitechseals

03/2025