



Techno Cera IndustriesTM

We are a state-of-the-art facility that manufactures industrial, technical, advanced ceramics of high purity materials like Alumina, Zirconia and others. Our products are fired at 1600°C and achieve a hardness of 9 Mohs scale, putting them just below Diamonds in toughness.

We provide an extremely wide range of products: Recrystallized Alumina ceramics, High Alumina wear resistant ceramic parts, Ceramic ferrules for boilers, Ceramic seal faces, Alumina chemical seals, Alumina ceramic sleeves, Wire Drawing rings, cones & pulleys, Ceramic Igniters, Ceramic thread guides, Zirconia ceramics, Alumina ceramic rings, tubes, rods, crucibles, nozzles, Sintered Silicon Carbide and many more.

We use the most modern production equipment's like PLC Presses (for best dimensional accuracy), Extruders, Injection Molding machines, ISO-Static Presses, Microprocessor controlled high temperature kilns, and Grinding, Lapping and Polishing machines. We also use rigorous quality testing equipment to provide products that can withstand abrasion, erosion, corrosion, thermal and electrical insulation in demanding applications.

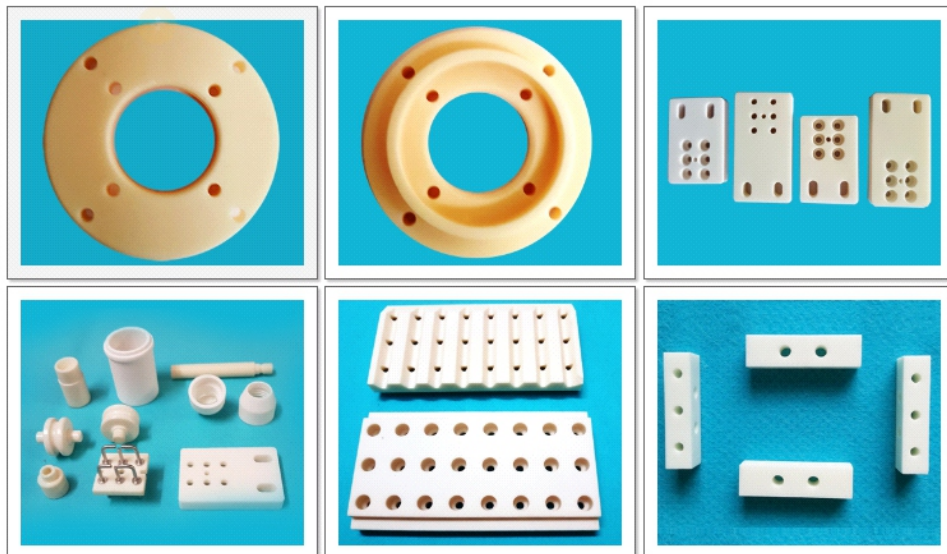
Range of Products :

- **Recrystallized Alumina Ceramics**
- **Alumina Ceramics Wear Resistant**
- **Ceramic Ferrules for Boilers**
- **Alumina Seal Faces and Sleeves**
- **Ceramic Wire Drawing Parts**
- **Ceramic Igniters**
- **Ceramic Thread Guides**
- **Zirconia Ceramics**
- **Sintered Alpha Silicon Carbide**



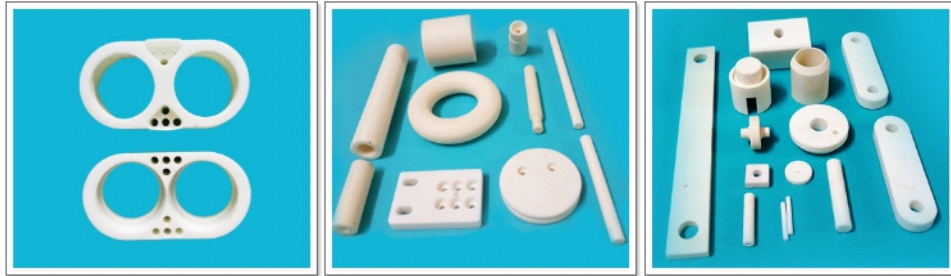
• Recrystallized Alumina Ceramics :

Recrystallized Alumina Ceramics are used where very high electrical insulation is required. Our recrystallized alumina ceramics are manufactured using very high purity alumina. They have a distinct Ivory colour. They are manufactured as per customer drawing. Recrystallized Alumina Hitech ceramic products / parts are an ideal choice for Vacuum, Semiconductor, Hydrocyclones Labwares, Spray Nozzles applications.



- **Alumina Ceramics Wear Resistant :**

High Alumina ceramics are used for various industrial applications., where high wear resistance, high abrasion and corrosion resistance required. Also they can be used in high temperatures, if there is no thermal shock involved. They are manufactured as per customer drawing. High Alumina Hitech ceramic products / parts are an ideal choice for Vacuum, Semiconductor, Hydrocyclones, Labwares Spray Nozzles applications.



- **Ceramic Ferrules for Boilers :**

Ceramic Ferrules are used at the inlet of the Shell & Tube type heat exchanger to protect the tube inlets from hot gas corrosion and abrasive particle erosion. Techno Cera Ferrules are manufactured using 98% High Alumina. These ferrules exhibit excellent mechanical wear resistance, corrosion resistance and thermal resistance properties. They are manufactured in various sizes & shapes as per customer requirements.



- **Alumina Seal Faces and Sleeves :**

Ceramic is commonly used as a mating ring together with carbon-graphite opposite seal face in mechanical seal kits which in turn used in chemical pump applications. Since Alumina exhibit high hardness, good abrasion resistance & good resistance to acid and mild alkaline solutions. This makes them suitable choice for chemical seal faces. Our seals are lapped within 20 micron Parallelism, polished to surface finish Less than 0.3 microns and flatness within 2 light bands.



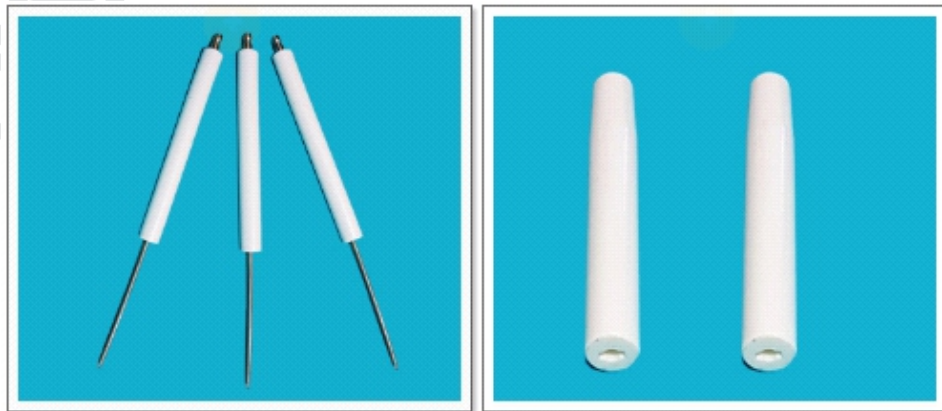
• **Ceramics Wire Drawing Parts :**

Ceramic wire drawing cones, rings & guides are commonly used for drawing and production of non-ferrous wires in the wire and cable industries. As Zirconia/Alumina exhibit high toughness, high hardness, good abrasion and corrosion resistance, this makes them ideal choice material for wire drawing applications. Techno Cera wire drawing cones, rings & guides are manufactured in various shapes and sizes & ground to precise dimensions as per customer requirements



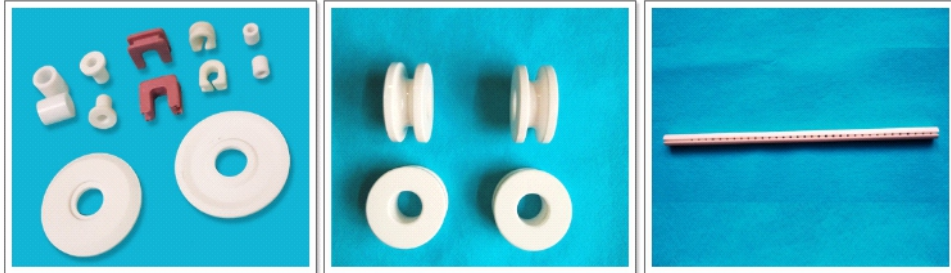
• **Ceramic Igniters :**

Igniters are commonly used for lighting the burners of industrial and domestic boilers, hot air generators, etc. Alumina is used as insulating material to withstand high voltage required to generate spark and high operating temperature up to 1400DC near the burners. Techno Cera Igniters are manufactured in various sizes and standard designs like clamped, threaded, etc. The electrodes are made from special Nickel / Magnesium alloy to withstand temperature up to 1400DC



• **Ceramics Thread Guides :**

Ceramic thread grades are used in textile machineries to guide, to change direction, to twist, to control tension of textile yarns. Since Titania and Alumina exhibit high hardness, good abrasion and corrosion resistance, fine grain structure, yarn friendly surface finish, this makes them ideal choice material for textile thread guides. Techno Cera thread guides are manufactured in various shapes and sizes & various surface finish like tumbled finish, matt finish and high polished finish.



• **Zirconia Ceramics :**

Zirconia ceramics exhibit high toughness, high hardness, good abrasion and corrosion resistance, This makes them ideal choice material for wire drawing applications. They are made as per customer requirements.



• **Sintered Alpha Silicon Carbide :**

Sintered Alpha Silicon Carbide used in sliding contact applications like mechanical seal faces, product lubricated bearings, spray and blasting nozzles, heat exchangers, chemical plants etc. Due to their high thermal conductivity, low thermal expansion co-efficient, good thermal shock resistance, very high hardness, very high corrosion/erosion resistance, low frictional properties, they are ideal choice for these applications. They are manufactured in various shapes and sizes as per customer requirements.



• Technical Specifications •

| Description | Unit | Alumina 99.5/99.7/99.8 | Alumina 98 /99 | Alumina 95/96 | Alumina 90 | Magnesia/Yttria Stabilized Zirconia | Sintered Silicon Carbide |
|-------------------------------|-------------|--|------------------|--|---|-------------------------------------|--------------------------|
| Density | gm/cc | 3.85+/-0.05 | 3.80 ± 0.05 | 3.70 ± 0.05 | 3.50 ± 0.05 | 5.75 ± 0.05 | 3.1+/-0.05 |
| Porosity | % | Nil | Nil | Nil | Nil | Nil | Nil |
| Alumina Content | % | 99.5 | 98 | 95 | 90 | -- | -- |
| Zirconia Content | % | -- | -- | -- | -- | 90-95 | -- |
| SIC Content | % | -- | -- | -- | -- | -- | 100 |
| Tensile Strength | kpsi | 36 ± 3k | 32 ± 3 | 25 ± 3 | 24 ± 3 | 25 ± 3 | 50+/-4 |
| Compressive Strength | kpsi | 360 ± 10 | 325 ± 10 | 300 ± 10 | 280 ± 10 | 300 ± 10 | 380+/-10 |
| Transverse Breaking Strength | kpsi | 50 ± 4 | 48 ± 4 | 48 ± 4 | 46 ± 4 | 85 ± 2 | 55+/-4 |
| Hardness | Vickers HV1 | 2000 | 1900 | 1800 | 1600 | 1700 | 2600 |
| Surface Finish on lapped face | Micron | Less than 0.3 | Less than 0.3 | Less than 0.3 | Less than 0.3 | Less than 0.3 | Less than 0.3 |
| Flatness on polished face | Light Band | Within 2 | Within 2 | Within 2 | Within 2 | Within 2 | Within 2 |
| Parallelism on lapped face | Micron | Within 20 | Within 20 | Within 20 | Within 20 | Within 20 | Within 20 |
| Colour | -- | Ivory / White | White / Pink | White / Pink | White | Yellow/White | Black |
| Applications | -- | High Dielectric Insulation, Chemical Seals, Sleeves, Crucibles, Tubes, Wire & Thread guides, Vacuum, Semiconductors, Hydrocyclones | Ceramic Ferrules | Ceramic Seal faces, Thread & Wire drawing guides, Igniters, Ferrules | Grinding Media Balls, Wear Resistant Tiles & Ball mill Liners | Wire drawing cones, rings & guides | Seal faces, Tubes, Tiles |

Send your valuable enquiries to



• **Contact Details :**

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Website : www.technocera.com

• **Details Required for Quotation :**

- Material Specifications, if any available
- Drawing with tolerances or sketch with dimensions and tolerances
- Finish required; As fired, Lapped, Polished etc
- Application details, temperature of usage
- Fitting details. Is it OD fit or ID fit etc? Critical dimension if any
- Qty required
- Colour: White or Pink
- If possible, Photo of Product
- Contact details: Company name, contact person, contact number
- Material of construction i.e. % of Alumina required
- Material Specifications, if any available
- Drawing with tolerances or sketch with dimensions and tolerances
- Finish required; As fired, Lapped, Polished etc
- Application details, temperature of usage
- Fitting details. Is it OD fit or ID fit etc? Critical dimension if any
- Qty required
- Colour: White or Pink
- If possible, Photo of Product
- Contact details: Company name, contact person, contact number

• **Business Details :**

GST No. : 27AAUPD6002F1ZW

DUNS No. : 87-095-9990

IEC: 3110010933

MSME UAN: MH26A0028173