



DATASHEET CERAMIC INSULATORS

WHAT A DESIGNER, ENGINEER MUST KNOW ABOUT CERAMIC INSULATORS

WHERE CERAMIC INSULATORS CAN BE USED

Ceramics have very good mechanical properties, conditions as chemical, corrosive, abrasive resistant or even combined. Other conditions are electric- and thermal insulating, heat resistance and high stiffness.



ELECTRIC INSULATOR/ CONDUCTOR

1016 to 100 Ωcm



EXTREMELY HEAT RESISTANT

2100 °C



THERMAL INSULATOR/ CONDUCTOR

1,4 to 1800 W/m.K

WHY WOULD CERATEC INSULATORS HAVE ADDED VALUE?

Ceratec has an added value in:

- Costumized precision parts.
- Engineering, designing, machining and manufacturing in house.
- Combined with steel of other materials.
- Integrated in existing systems.
- Over 30 years of experience in the niche and volume market.



CERAMIC INSULATOR COMPONENTS

Technical ceramics is a group of materials that each have their strong specific advantages. Used as a stiff electric isolator in vacuum or as a ignitor in torches and combustion systems.

♦ PETRO / CHEMISTRY

Within chemistry, insulators are often used due to specific material properties. In this industie are wear-, high temperature-, corrosion resistance often required.



MACHINE MANUFACTURE

In machines where many products are processed per time unit, ceramics can have big advantages. For example in measurement and control equipment.



⊕ ENERGY

Energy technology is often characterised by high temperatures, high voltages and chemical resistence. In sustainable energy as solar, wind, bio, water and waste energy ceramics is widely applicable.



➡ MECHATRONICS

Many applications in mechatronics and the semiconducting industry are not possible without ceramics. Ceramics are processable down to vacuum level. The properties of ceramics are fully exploited in this area.



TECHNICAL INFORMATION / USE INFO

Electric resistivity, thermal conductivity, high temperatures and flexible strength are specific areas where ceramics surpasses other materials.

Insulators can be made of different kind of ceramics:

- Silicon Nitride Si₃N₄
- Boron Nitride BN
- Zirconia ZrO₂
- Alumina Al₂O₃

And all kind variations within these materials combined with ferro or non-ferro materials.



WHAT ADVANTAGES?

Ceratec Technical Ceramics is specialized in a wide range of ceramics that can be custumized. Made out of basic stocks forms as rod, tube and plates, different shapes can be easily machined.

This makes the accessibility of requested forms easier. The combination of various materials and basic shapes gives us and advantage in production. We can use this advantage for the optimal production method.

We offer high quality engineered precision parts, sometimes combined with steel or other materials, even intergrated in existing systems. The possiblities of Ceratec Technical Ceramics lies in the surplus of engineering, designing, machining and manufacturing of these parts. We guarantee a high quality reproducible product and flexible delivery times. This all "made in Holland" at our own facility in Geldermalsen.

This is why Ceratec continues to be a relible partner that will offer the best suitable solution.



For more information contact us at info@ceratec.nl or dial +31 345 580101.





WHO WE ARE

Ceratec has been successfully developing and applying ceramic isolators for over 30 years.

Ceratec Technical Ceramics is located in Geldermalsen, in the centre of The Netherlands. With over 25 employees, we have collected knowledge and experience in the field of technical ceramic materials, engineering, applications and manufacturing.

Costumers and prospects come to Ceratec when the usual materials such as metals and plastics no longer satisfy. Ceramics can offer possibilities due to their specific properties such as wear-resistance, high-temperature resistance and chemical resistance.

Together with the customer, our engineers will develop new solutions. The final product can be designed and manufactured in-house.





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For technical support and questions contact us through our website.

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