



High-performance Ceramic Silicon Carbide CARSIC 310

Even at high temperatures, our material CARSIC 310, a directly sintered silicon carbide, provides constant material characteristics. Our SSiC-quality CARSIC 310 is extremely resistant to corrosion and wear and has a high thermal resistance.

Whether in pumps or drive systems, sliding rings, sliding bearings, bushings and bearing sleeves for axial and radial bearings in many different versions make a significant contribution to long service life and hence to high operational reliability.

One important feature of CARSIC 310 is its outstanding tribological behavior. It displays very good emergency and dry-running characteristics.

Our silicon carbide can be used in the fields of food processing and pharmaceuticals without any reservation. It is also ideal for use in aggressive and high-temperature media, as found for example in chemical manufacturing.

Pump Components for Ultimate Quality Criteria

CARSIC 310 – SSiC-quality offers a unique property profile:

- > very high resistance to corrosion (pH value from 0 to 14)
- > high resistance to wear
- > high temperature resistance
- > excellent tribological properties
- > application in hygiene and food processing areas
- > form and aging stability
- > high surface quality
- > low density
- > high thermal conductivity



For solutions involving metal and ceramic composites, we pay special attention to low-gap design in order to fulfil the most exacting hygiene standards. We combine the benefits of the excellent ceramic properties of silicon carbide with those of the easy-to-assemble metal. Long service life and operational reliability make this a cost-efficient solution.



CARSIC 310

Silicon Carbide CARSIC 310

Component Design

- Depending on the design, dimensions up to \varnothing 200 mm
- Maximum compressive strength (2400 MPa)

Profile at a Glance

- Directly sintered silicon carbide
- Open porosity = 0%
- Gastight material
- Temperature stability up to 1500 °C
- High hardness
- Low specific density: 3,1 g/cm³
- Extreme corrosion and wear resistance

Special Characteristics

- Thermal conductivity = 100 W/m K
- Chemical resistance of pH 0 to pH 14
- Circumferential speed up to 50 m/s

Delivery Time

Depending on the component design, our production organisation enables us to offer maximum delivery flexibility.

Tradition

As an independent family-owned company, we have been a leading developer and manufacturer of technical ceramic components for more than 50 years.

Personality

The proximity and personal relationship to the customer is as important to us as is the highest quality of our products. You have chosen a reliable partner in us.

Development

We produce customised ceramic components in cooperation with the customer. Take advantage of our know-how to find an appropriate ceramics solution for your application.



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