

SCProbond™ SSiC/B

Sintered Silicon Carbide



- Material displays an extremely high corrosion resistance in acidic and basic media, and is maintained up to very high temperatures.
- Properties are outstanding among high-temperature ceramics, complemented by high thermal shock resistance, high thermal conductivity, high resistance to wear and a hardness close to that of a diamond.
- Ideal for extremely demanding applications, for example, slip ring seals in chemical pumps, bearing bushes, high temperature burner nozzles, or as kiln furniture for very high application temperatures.

Markets that widely use this type of material include, but are not limited to:

- Mining
- Pulp and Paper
- Chemical
- Petrochemical
- PowerGen

Applications Include:

- Nozzles
- Cyclones
- Spigots
- Impeller Rings
- Apexes
- Valves
- Suction Pumps
- Dust Collectors
- Cones
- Chutes
- Autoclave Parts
- Vessel and Pipe Linings
- Bearing Seals

Key Material Properties:

ITEM	UNIT	DATA
Temperature of application	°C	1600
Density	g/cm ³	>3.08
Open porosity	%	<0.1
Bending Strength	MPa	480-600
Broken Strength	MPa	1950-2600
Modulus of elasticity	GPa	420-450
Thermal conductivity	W/m.k	74
Coefficient of thermal expansion	K ⁻¹ x10 ⁻⁶	4.5
Rigidity		2150-2450
Acid-proof alkaline		Excellent



Silicon Carbide Products, Inc.
361 Daniel Zenker Drive
Horseheads, New York 14845 USA
Telephone: +1-607-562-8599
Fax: +1-607-562-7585
Email: scp@scprobond.com

