

## Reaction-Bonded Silicon Carbide(RBSiC/SiSiC) Data Sheet

### SiSiC Properties

Application temperature:	°C	1380
Density:	g/cm <sup>3</sup>	≥3.02
Open porosity	%	≤0.1
Bending Strength	Mpa	250(20°C)
	Mpa	280(1200°C)
Modulus of elasticity	Gpa	330 (20°C)
	Gpa	300 (1200°C)
Thermal Conductivity	W/ (M.K)	45 (1200°C)
Coefficient of thermal expansion	K <sup>-1</sup> ×10 <sup>-6</sup>	4.5
Rigidity	/	13
Acid&alkali resistance	/	Excellent
Surface Roughness (Ra)	μm	0.2-6.4

Reaction Bonded sintering products mainly include:

- Sand mill grinding barrels,
- silicon carbide heat exchanger tubes,
- flue gas desulfurization nozzles,
- wear-resistant lining materials, flame nozzles, radiant tubes, rollers, beams, sheds, burner sleeves,
- quench tubes, thermocouple protection tubes, Saggers, crucibles, wear-resistant pipes, sandblasting nozzles,
- desulfurization and dust removal nozzles for thermal power plants,
- large boilers,
- Other special-shaped high-temperature, wear-resistant, and corrosion-resistant parts.

*PS: Data in the parameter table will fluctuate, for reference only*