

nitride bonded silicon carbide customized special shape

■ **Introduction:**

Nitride bonded silicon carbide customized ceramic can be made into various special shapes according to specific application requirements. Such as NSIC fire brick, NSIC tube, NSIC kiln furniture, NSIC burner and so on.

■ **Technical data sheet:**

Item	Unit	Data
Contents: SIC		≥75
Si ₃ N ₄	Vol%	≥23
Si		0
Bulk Density 20 C	g/cm ⁻³	2.75-2.85
Apparent porosity	%	13- 15
Modulus of rupture(20 C)	Mpa	160- 180
Modulus of rupture(1200 C)	MPa	170- 180
Modulus of rupture(1350 C)	MPa	170- 190
Modulus of crushing(20 C)	MPa	580
Thermal conductivity(1200 C)	W.m ⁻¹ .k ⁻¹	19.6
Thermal expansion(1200 C)	a×10 ⁻⁶ /C	4.70
Thermal shock resistance(1200 C)		Excellent
Max. Working temperature	C	1580

■ **Advantages:**

1. Nitride bonded silicon carbide ceramic can be customized to special shapes according to user needs, so they are highly adaptable.
2. Compared with other high performance ceramics, the price of nitride bonded silicon carbide special shape is relatively low, so it has a certain price advantage.
3. NSIC special parts can work stably at high temperatures, so they can be used to manufacture high temperature working parts.

