

Recrystallized silicon carbide ceramic burner nozzle

■ Introduction:

Recrystallized silicon carbide ceramic burner nozzle is a high temperature ceramic material commonly used in high temperature burners and industrial ovens. Recrystallized silicon carbide ceramic burner nozzle has excellent corrosion resistance, high strength, high hardness and high temperature stability, suitable for high temperature, high pressure and strong corrosion environment.

■ Technical data sheet:

Item	Unit	Data
Contents: SIC		≧ 99
Si ₃ N ₄	Vol%	0
Si		0
Bulk Density 20℃	g/cm ³	2.65-2.75
Apparent porosity	%	15-18
Modulus of rupture(20℃)	Mpa	80-100
Modulus of rupture(1200℃)	MPa	90-110
Modulus of rupture(1350℃)	MPa	90-120
Modulus of crushing(20℃)	MPa	300
Thermal conductivity(1200℃)	W.m ⁻¹ .k ⁻¹	36.6
Thermal expansion(1200℃)	a×10 ⁻⁶ /℃	4.69
Thermal shock resistance(1200℃)		Good
Max. Working temperature	℃	1620 (oxide)

■ Advantages:

1. RSIC burner nozzle can withstand high temperature and high pressure, high speed gas flow environment, can run stably at high temperature for a long time.
2. Silicon carbide burner nozzle has excellent chemical corrosion resistance and can be used in corrosive media such as strong acid and alkali for a long time.
3. Silicon carbide ceramic burner with thermal expansion and deformation will not occur at high temperature, maintaining stable performance
4. Silicon carbide ceramic burner has excellent wear resistance and corrosion resistance, long service life.

