

Recrystallized silicon carbide plate for support

■ Introduction:

Recrystallized silicon carbide plate for support is a high performance ceramic material used for support and fixation in high-temperature industrial applications. Recrystallized silicon carbide plate for support is made of high purity silicon and carbon raw materials through high temperature sintering and recrystallization processes, with extremely high heat and corrosion resistance as well as excellent mechanical strength and stability.

■ 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. Recrystallized silicon carbide plate for support has high strength and hardness and can withstand heavy load under high temperature and pressure environment
2. Silicon carbide kiln furniture for support has high corrosion resistance, acid, alkali and other chemical substances is not easy to damage, can be used in harsh chemical environment.
3. Silicon carbide plate has high temperature resistance and can withstand long time use in high temperature environment.
4. RSIC kiln furniture has high dimensional stability, is not susceptible to thermal expansion and contraction, and can maintain its original shape and size.

