



Silicon Carbide Nozzle

Silicon carbide is an ideal material for nozzles. It has good corrosion resistance, great mechanical strength under high temperature and excellent wear resistance. Nextgen Advanced Materials supplies Silicon Carbide Nozzle with high quality and fast delivery. Customization is also available.

Product Description

As the professional manufacture, we would like to provide you Nextgen Silicon Carbide Nozzle. Customers are satisfied with our products and excellent service. Silicon carbide (SiC) is a lightweight ceramic material with high strength performance compared to diamond. It has excellent thermal conductivity, low thermal expansion, and great corrosion resistance. Silicon carbide is suitable for applications requiring good corrosion resistance and wears resistance. Therefore, it can be used in a variety of applications, including nozzles, shot blasting, and cyclone separator assemblies.



Silicon Carbide Properties

Item	Parameter
Compound Formula	SiC
Molecular Weight	40.1
Appearance	Black
Melting Point	2,730° C (4,946° F) (decomposes)
Density	3.0 to 3.2 g/cm ³
Electrical Resistivity	1 to 4 10x Ω-m
Poisson's Ratio	0.15 to 0.21
Specific Heat	670 to 1180 J/kg-K

Specifications			
Item	Recrystallized SiC	Sintered SiC	Reaction Bonded SiC
Purity of Silicon Carbide	0.995	0.98	>88%
Max. Working Temp. (°C)	1650	1550	1300
Bulk Density (g/cm ³)	2.7	3.1	>3
Appearance Porosity	<15%	2.5	0.1
Flexural strength (MPa)	110	400	380
Compressive strength (MPa)	>300	2200	2100
Thermal expansion (10 ⁻⁶ /°C)	4.6 (1200°C)	4.0 (<500°C)	4.4 (<500°C)
Thermal conductivity (W/m.K)	35~36	110	65
Main characteristics	High temp. resistance.	High Fracture Toughness	Chemical Resistance
	High purity		