

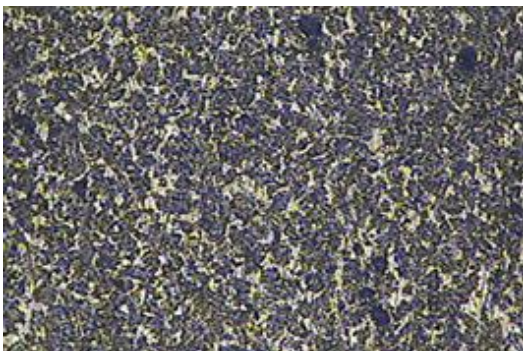
About Reaction-sintered silicon carbide (SiC)



The reaction-sintered silicon carbide is formed by reacting and sintering submicron silicon carbide powder into free silicon (content less than 12%) and reacting it with free silicon in a vacuum sintering furnace at 1500 °C. The material has the characteristics of lubricity, small friction coefficient, wear resistance and strong plasticity, and the maximum outer diameter of the sealing ring can reach

800mm. It is widely used in the fields of bearings, petroleum, chemical, automobile, ship, pump and valve.

Characteristics



Reaction-sintered silicon carbide material crystal image. The material is smoothed on the smooth and smooth cut surface, and the crystal distribution under the 200X optical microscope is uniform and uniform in size, and the free silicon content (not more than 12%).

Reaction-sintered Silicon Carbide Technical Data

Item	Unit	SiC
Volume Density	g/cm ³	≥3.03
Hardness	HV0.5	≥2200
Indicated Porosity	%	<0.2
Compressive Strength	Mpa	≥2000
Flexural Strength	Mpa	≥350
Free-si value	%	<12
Elastic Modulus	GPa	350
Thermal Conductivity	W/m [°] K	50~110
Maximum Temperature	°C	1000
Coefficient Of Heat Expansion	10 -6/°C	4.0