

Customised sintered silicon carbide seal ring parts

■ Introduction:

Customized sintered Silicon carbide seal ring parts use high purity silicon powder and graphite powder as raw materials, through sintering. The seal ring has excellent wear resistance, corrosion resistance, high temperature stability and mechanical strength, and can be used in a variety of seal applications requiring high strength, high temperature and high corrosion, such as chemical, petroleum, aviation, aerospace and automotive fields.

■ Technical data sheet:

Item	Unit	Data
Density	G/cm ³	>3.14
Open porosity	%	< 0.1
Bending strength	MPa	400-500
Viker Hardness	Kg/mm ²	2800
Rockwell Hardness	HRA	92
Acid-proof (98% H ₂ SO ₄ at 100C	Mg/cm ² .Y	0.98
Grain Size	nm	< 10
Fracture toughness	Mpa	4-5
Silicon Carbide Content	%	>99

■ Advantages:

1. The hardness of SSiC mechaical seal ring can reach more than 9.5 Mohs hardness, with extremely high wear resistance.
2. No pressured sintered silicon carbide has excellent chemical stability, can resist all kinds of acid, alkali, salt and other corrosive media erosion
3. Silicon carbide seal ring can work stably at high temperature, and the maximum operating temperature can reach 1600°C.
4. Customised silicon carbide parts with excellent strength and toughness, SSiC mechaical seal ring can withstand high pressure and high speed rotating seal applications.

