

### ■ Introduction of RBSIC Silicon carbide ceramic pipe liner lining:

RBSIC Silicon carbide ceramic pipe liner lining is widely used in mining operations because it has the characteristics of high hardness, special wear resistance, impact resistance, high temperature resistance, and acid alkali corrosion resistance. Silicon Carbide pipe lining is suitable for petrochemical, metallurgical manufacturing, aviation and aviation, nuclear industry and other specific environments.

The service life of RBSIC wear resistant cone lining is more than 6 times that of polyurethane. RBSIC wear-resistant Bushing Pipe lining liner is particularly suitable for operations such as graded concentration and dehydration of strong wear and coarse particle materials, and has been successfully applied in multiple mines.

### ■ Technical data sheet of Silicon Carbide pipe lining:

Item	Unit	Data
Temperature of application	°C	1380°C
Density	G/cm <sup>3</sup>	>3.02
Open porosity	%	<0.1
Bending strength	Mpa	250 (20°C)
	MPa	280 (1200°C )
Modulus of elasticity	GPa	330 (20°C)
	GPa	300 ( 1200°C )
Thermal conductivity	W/m.k	45 (1200°C )
Coefficient of thermal expansion	K-1 ×10-6	4.5
Rigidity	/	13
Acid-proof alkaline	/	excellent

### ■ Advantages of:

1. Reaction sintered silicon carbide ceramic cyclone liner has Excellent wear resistance, continuous use for more than 10 years.

According to the research institute, the wear resistance of silicon carbide ceramics is 266 times that of manganese steel and 171.5 times that of high chromium cast iron, indicating excellent wear resistance. The application of wear-resistant ceramic composite elbows in powder making systems greatly reduces equipment wear and tear, with a durability time of at least 10 years, reducing maintenance frequency and costs.

2. The RBSIC ceramic lining has high strength, high hardness, and light weight.

For example, the Rockwell hardness of corundum ceramics is HRA90-98, which is much higher than that of wear-resistant steel and stainless steel. The density is only half that of steel, and the weight of ceramic bends is only 1/3 that of wear-resistant steel bends, making it easy to install and replace.

3. Reaction sintered silicon carbide ceramic cyclone liner has Smooth inner wall without blocking powder.

Silicon carbide ceramics are sintered at high temperature and have a dense structure. After grinding and deburring treatment, their surface is smooth and clean. The inner wall of the ceramic composite bend is flat and smooth

without blocking powder.

4. Silicon Carbide straight pipe liner has Low barrier.

The surface of wear-resistant ceramic pipes is smooth. And it does not rust or contain scale, and its internal surface smoothness is better than any metal pipeline. So low operating resistance can reduce operating costs.

5. RBSiC Ceramic Lined straight Pipe has Low cost.

Ceramic pipes are lightweight, have good welding performance, and are convenient for construction and installation. Therefore, comprehensive installation and operation will reduce a lot of costs.

