

Industrial Thermal Protection Solutions

## Application:

Nitride bonded silicon carbide is designed for exceptional corrosion and thermal shock resistance. It can be formed into very intricate and precise shapes. Nitride Bonded Silicon Carbide has desirable refractory and chemical properties. The Nitride bonded refractory materials share common features including an outstanding hot mechanical strength and a low pores size that confers a low permeability to gas as well as a superior infiltration resistance to molten metal and slag and a low wettability.

Markets that widely	use this type of	f material include,	but are not limited to:
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Mining	Aluminum	Red Metal	Pulp & Paper
Chemical	Petrochemical	PowerGen	Industrial Process Heating

#### Specifications:

Item	Unit	Data
Contents: SIC		≧75
Si <sub>3</sub> N <sub>4</sub>	Vol%	≧23
Si		0
Bulk Density 20°C	g/cm <sup>-3</sup>	2.75-2.85
Apparent porosity	%	13-15
Modulus of rupture(20 $^\circ C$ )	Мра	160-180
Modulus of rupture(1200℃)	MPa	170-180
Modulus of rupture(1350℃)	MPa	170-190
Modulus of crushing(20℃)	MPa	580
Thermal conductivity(1200℃)	W.m <sup>-1</sup> .k <sup>-1</sup>	19.6
Thermal expansion(1200 $^\circ\!\!\mathbb{C}$ )	a×10⁻⁰/℃	4.70
Thermal shock resistance(1200 $^\circ \!\!\!\!^{\mathbb{C}}$ )		Excellent
Max. Working temperature	Ĉ	1580

## Features:

- 1.Excellent thermal shock characteristics
- 2.Reduced spalling and erosion
- 3. Close as-cast dimensional control
- 4.Repeatable dimensions
- 5.Cast threads (internal & external)

#### Benefits:

1.Improved performance saves operating costs

2. Cheaper and easier to install than glued on tiles

3.Lasts longer than steels and rubber

4. Won' t crack at high temp or during severe temperature changes

# Package:

In carton box, packed in fumigated wooden pallet with net weight 20-24MT/20'FCL.



