

# SCProbond™ N

## Nitride Bonded Silicon Carbide

(Typical Abbreviations: SNBSC, NBSC, NBSIC)

**Description:** SCProbond™ N is characterized by excellent wear properties in severe industrial environments. It exhibits good resistance to high temperatures even in demanding abrasive applications and has better impact resistance than most silicon carbide grades. Due to its unique properties and ability to be cast into final shape, this cost-effective grade is widely used as a workhorse in coal-fired power plants and in mining for bulk material handling and protective linings, as well as for non-ferrous molten metal contact.

**Ordering Information:** Part Number: SCProbond™ N

### Physical Properties:

Property	Unit	Value
Density	g/cc	2.60-2.72
	lb/ft <sup>3</sup>	162-169
Apparent Porosity	%	13-16
C704 Abrasion Loss (volumetric)	cc	1.77
Modulus of Rupture 3 Point Loading	MPa	65.5
	psi	9500
Maximum safe operating temperature (Dependent upon atmosphere)	°C	1525
	°F	2777
Thermal Conductivity	W/m°K	18
Coefficient of Thermal Expansion @ 1200°C	X10 <sup>-6</sup> /°C	4.9
	X10 <sup>-6</sup> /°F	2.7



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## Typical Applications

Micronizers

Ash Handling Sweeps

Centrifuge Components

Chutes

Coal Handling Components

Coal Preparation Applications

Molten Metal Pump Protective Sleeves

Frac Sand Sweeps, Elbows, Valve Body Liners

Refractory

Liners

Cyclones

Pump Components

Spray Nozzles

Transitions

Wear Blocks

Impellers

Complex custom shapes

### WARRANTY AND DISCLAIMER

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