

## NITRON™ - NITRIDE BONDED SILICON CARBIDE

NITRON™ - Nitride Bonded Silicon Carbide is designed for exceptional wear and thermal shock resistance, which prevents cracking at high or severe temperature changes. This material can be formed into a variety of intricate and precise shapes with the Blasch process.

### Key Material Properties

Composition	70% SiC 21% Si <sub>3</sub> N <sub>4</sub> 8.5% Si <sub>2</sub> N <sub>2</sub> O
Apparent Porosity	16%
Modulus of Rupture	6,000 PSI 35 MPa
Thermal Conductivity (BTU in/hr ft <sup>2</sup> °F)	115
Coefficient of Recersible Thermal Expansion (in/in °F)	2.6x10 <sup>-6</sup>

### Benefits of NITRON:

- Superior dimensional control and uniformity of properties wherever nitride bonded silicon carbide is required.
- Excellent thermal shock characteristics improves performance and saves operating costs.
- Reduced spalling and erosion lasts longer than steels and rubber.
- Good corrosion resistance.

