



## ALTRON™ - ALUMINA BONDED SILICON CARBIDE

ALTRON™ - Alumina Bonded Silicon Carbide is designed for exceptional wear and corrosion resistance at a reasonable price. This material can be formed into a variety of complex shapes with good tolerance control, without incurring traditional hard tooling setup charges, exhibiting exceptional oxidation and thermal shock resistance.

### Key Material Properties

Composition	75% SiC 24% Al <sub>2</sub> O <sub>3</sub> 0.9% SiO <sub>2</sub>
Apparent Porosity	5-10%
Modulus of Rupture	5,600 PSI (RT) 38 MPa
Erosion Resistance (ASTM C704)	1.5 cc
Bulk Density	170-180 lb/ft <sup>3</sup>
Thermal Conductivity (BTU in/hr ft <sup>2</sup> °F)	166
Coefficient of Recersible Thermal Expansion (in/in °F)	3.3x10 <sup>6</sup>

### Benefits of ALTRON:

- Abrasion resistance approaches that of much more expensive, fully dense, advanced ceramics, but retains the outstanding thermal shock resistance of less dense refractory grade materials.
- Designed for use in applications where other grades of silicon carbide exhibit abrasive wear, or the expense of an advanced ceramic material is too great.

