Boostec® SiC is a polycrystalline technical ceramic of alpha SiC type, obtained by pressureless sintering. This process leads to a silicon carbide that is completely free of non-combined silicon.

**MATERIAL EXPERTISE FOR HIGH TEMPERATURE AND WEIGHT SAVINGS**

- **GRAPHITE**
- **ISOSTATIC / EXTRUDED**
- **INSULATION RIGID / FLEXIBLE**
- **CALCARB®**
- **C/C COMPOSITES 2D / 2,5D**
- **AEROLOR®**
- **SINTERED SILICON CARBIDE**
- **BOOSTEC®**

**EXTREME OPERATING TEMPERATURES**
- up to 600°C in oxidizing atmosphere

**NO LUBRICANT REQUIRED**
- dry friction with high speed and low surface pressure in extreme environments

**STRENGTH INCREASES WITH TEMPERATURE**
- X2 at 2,500°C strength than at room temperature

**HIGH CHEMICAL RESISTANCE**
- in extremely corrosive environments

**EASED KINEMATICS**
- <0.2 coef friction in dry conditions

**PERMEABLE TO GAZ**
- porous structure, with 10% pore volume
- permeability < 0.1 with impregnation

**LOW THERMAL EXPANSION**
- low young modulus (9 to 25 GPa)
- holding high thermal shocks

**LOW COEFFICIENT OF THERMAL EXPANSION (CTE)**
- graphite is thermotropic and CTE from 4.0 – 7.5 10⁻⁶ / °C

**WEIGHT SAVINGS**
- 1.8 g/cm³ density
- (4x lighter than steel)

**MERSEN ISOSTATIC GRAPHITE Performance**

- **PURITY**
- **ELECTRICAL CONDUCTIVITY**
- **THERMAL SHOCK RESISTANCE**
- **POROSITY**
- **RESISTANCE TO HIGH TEMP**
- **SELF LUBRICATED**
- **MECHANICAL STRENGTH**
- **CHEMICAL STABILITY**
- **FRICION PROPERTIES**
- **LIGHT WEIGHT**
- **OUTSTANDING THERMAL CONDUCTIVITY**

**EXTREMELY GOOD THERMAL UNIFORMITY**
- from 20 to 130 W/m.K

**FIND ALL AEROSPACE SOLUTIONS**

**CONTACTS US**

**for engines, fluid handling and brakes with running temperature from -55°C up to 600°C in oxidizing atmosphere**