



## Boron Carbide



### PROCESS OF PRODUCTION

Boron Carbide is smelted from boric acid and powdered carbon in electric furnace under high temperature. It is one of the hardest man-made materials available in commercial quantities that has a finite melting point low enough to permit its relatively easy fabrication into shapes. Some of Boron Carbide's unique properties include: high hardness, chemical inertness, and a high neutron absorbing , cross section.

### APPLICATIONS

Boron Carbide is well suited to a variety of industrial applications including:  
Abrasives for lapping and ultrasonic cutting ,Anti-oxidant in carbon-bonded refractory mixes, Armor Nuclear applications such as reactor control rods and neutron absorbing shielding.  
Wear parts such as blasting nozzles, wire-drawing dies, powdered metal and ceramic forming dies, thread guides.



## SPEC

BRANDS	B (%)	C (%)	Fe <sub>2</sub> O <sub>3</sub> (%)	Si (%)	B <sub>4</sub> C (%)
F60---F150	77-80	17-19	0.25-0.45	0.2-0.4	96-98
F180—F240	76-79	17-19	0.25-0.45	0.2-0.4	95-97
F280—F400	75-79	17-20	0.3-0.6	0.3-0.8	93-97
F500—F800	74-78	17-20	0.4-0.8	0.4-1.0	90-94
F1000-F1200	73-77	17-20	0.5-1.0	0.4-1.2	89-92
60 - 150mesh	76-80	18-21	0.3max	0.5max	95-98
-100mesh	75-79	17-22	0.3max	0.5max	94-97
-200mesh	74-79	17-22	0.3max	0.5max	94-97
-325mesh	73-78	19-22	0.5max	0.5max	93-97
-25micron	73-78	19-22	0.5max	0.5max	91-95
-10micron	72-76	18-21	0.5max	0.5max	90-92