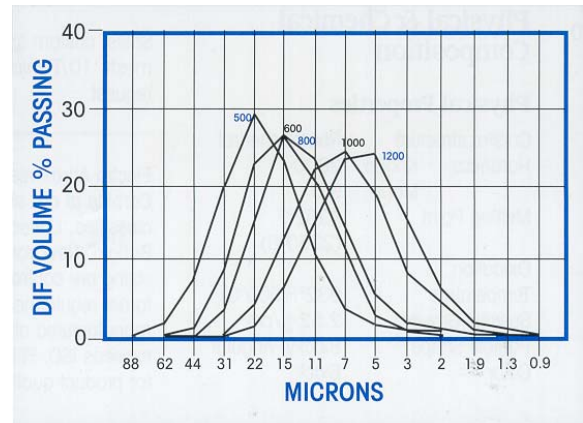
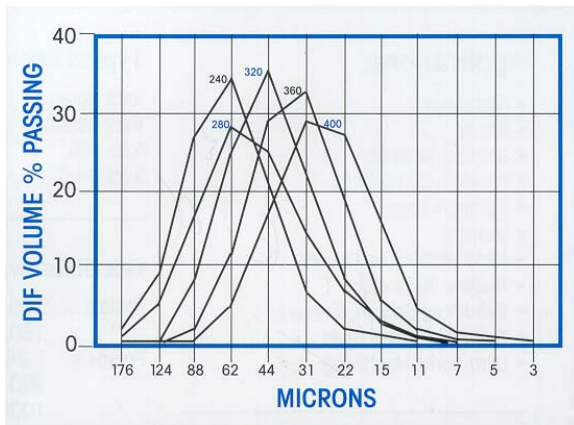
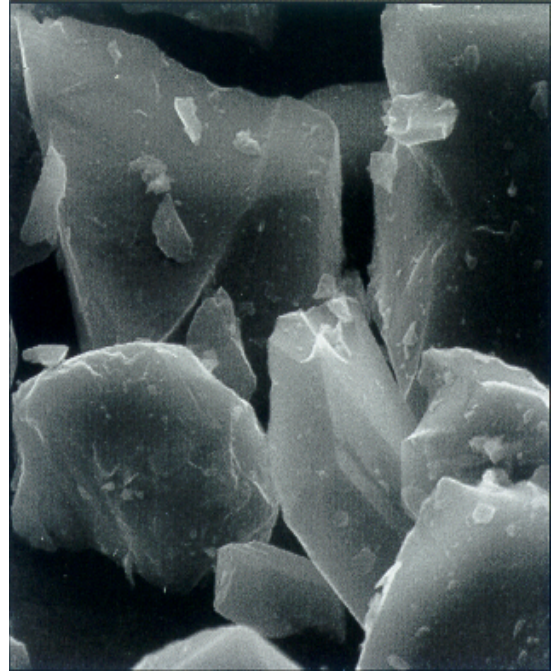


ELECTRO ABRASIVES - Boron Carbide B₄C

Electro Abrasives manufactures Boron Carbide to the finest powder, in custom sizes to meet all our customers needs. It is manufactured by a team of professionals dedicated to provide our customers the best quality, service, and support.

What is Boron Carbide

Boron Carbide is one of the hardest man made materials available. Above 1300° C, it is even harder than diamond and cubic boron nitride. It has a 4-point flexural strength of 50.000-70.000 psi and a compressive strength of 414.000 psi, depending on density. Boron Carbide also has a low thermal conductivity (29-67 W/mK) and has electrical resistivity ranging from 0.1-10 ohm-cm. With its strength to weight ratio and low thermal conductivity, it is ideal for a wide variety of applications.



Electro Abrasives manufactures Boron Carbide at our state-of-the-art, water classified, United States Headquarters in Buffalo, New York. All chemistry and sizing are controlled to meet exact customer requirements. All Boron Carbide manufactured at Electro meets or exceeds ISO, FEPA, and JIS Standards for product quality.

ELECTRO ABRASIVES - Boron Carbide B₄C**Applications**

- | | |
|----------------------|------------------------------|
| ⇒ Aerospace | ⇒ Metal Matrix Composites |
| ⇒ Armor | ⇒ Nuclear Technology |
| ⇒ Blasting Nozzles | ⇒ Refractory Shapes, Cements |
| ⇒ Ceramic Composites | ⇒ Tool & Die Fabrication |
| ⇒ Honing Stones | ⇒ Ultra-sonic Machining |
| ⇒ Lapping | |

Physical and Chemical Composition**Physical Properties**

Crystal structure:	Rhombohedral
Hardness:	Knoop 2800 Mohs 9.6
Melting Point:	4262° F (2350° C)
Oxidation Temperature:	932° F (500° C)
Specific Gravity:	2.52 g/cm ³
Particle Shape:	Blocky, Angular
Color:	Black

Typical Chemical Analysis

Total Boron	77.5 %
Total Carbon	21.5 %
Total Iron	0.2 %
Total B+C	98.0 %

Grit Sizes Available

Grains:	100, 120, 150, 180, 220
Powders:	F 240, 280, 320, 360, 400, 500, 600, 800, 1000, 1200, JIS 180 – 4000

Splits, custom sizes, and -200, -400 mesh, 10/F microns available on request.

Manufacturer: **ELECTRO ABRASIVES CORPORATION**
Supplier: **N. BUCHER AG**, Pfadackerstrasse 9, 8957 Spreitenbach/Switzerland
Phone: ++41-56 418 19 90
Fax: ++41-56 418 19 99
<mailto:info@nbucheraq.com>

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