

PROPERTIES OF GRAPHITE GRADE 2020

GENERAL

Isomolded dense, electrographite available in sizes up to 20" x 24" x 72" (530 x 635 x 1830 mm), 40" x 80" x 12" (1000 x 2000 x 300 mm), 60" x 60" x 12" (1500 x 1500 x 300 mm) & Ø 40" x 25" (Ø 1000 x 635 mm).

Maximum service temperature is 800 F (427 °C); maximum inert atmosphere service temperature 5,000 F (2760 °C).

TYPICAL

APPLICATIONS

Continuous casting dies, hot pressing molds, semiconductor jigs and fixtures, and heating elements.
Other miscellaneous refractory applications.

PROPERTIES

	Typical Values	
	English Units	SI Units
Bulk density	110.5 lbs/ft ³	1,77 g/cm ³
Grain size	0.0006 inch	15 µm
Specific resistance	0.00061 ohm-in	1550 µohm.cm
Flexural strength	6,500 psi	45 MPa
Tensile strength	4,225 psi	29 MPa
Compressive strength	14,300 psi	98 MPa
Hardness - Shore	52	52
Hardness - Rockwell H	95	95
Coefficient of thermal expansion (400 to 500°C)	2.4 x 10E-6/°F	4,3 x 10E-6/°C
Porosity	9%	9%
Thermal conductivity	49 Btu-Ft/Ft ² Hr°F	85 W/m°C
Modulus of elasticity	1.3 x 10E6 psi	9,2 GPa
Ash	750 ppm	750 ppm