



Technical Data Sheet

GRADE CGC ISOMOLDED GRAPHITE

Product Overview

Isostatically molded grade CGC is an ATC-based material that has been processed to higher density and strength. Grade CGC is isostatically molded to the most demanding quality standards and can be machined to very precise tolerances and a polished surface finish. This grade is specifically manufactured for continuous casting mold and die applications.

Applications

- Continuous casting dies
- Hot pressing dies and molds

Sizes*

- All near net finished die and mold sizes

Typical Properties at Room Temperature**

Characteristic	ENGLISH	WG	METRIC	WG
Density	lbs/ft ³	112	g/cm ³	1.80
Average Particle Size	Inches	0.001	mm	0.025
Specific Resistance	10 ⁻⁴ μΩm in.	5.43	μΩm	13.8
Flexural Strength	psi	5150	kg/cm ²	360
Young's Modulus	10 ⁶ psi	1.65	kg/mm ²	1160
Tensile Strength	psi	4950	kg/cm ²	350
Compressive Strength	psi	12500	kg/cm ²	880
Permeability	Darcy	0.0005	Darcy	0.0005
Hardness	Rockwell "L"	100	Rockwell "L"	100
C.T.E. (to 100 °C)	10 ⁻⁶ /°F	1.35	10 ⁻⁶ /°C	2.5
Thermal Conductivity	BTU-ft/hr ft ² °F	64	W/mK	100
Ash Content	%	0.09	%	0.09

Notes:

* Other sizes available upon request

** Properties listed are typical and cannot be used as accept/reject specifications