

# ATC™ Graphite

GrafTech International is a global leader in graphite and carbon products. We enable customer leadership better and faster than our competition, through the creation, innovation and manufacture of carbon and graphite material science based solutions.

## Grade ATC™ Graphite

Grade ATC™ graphite is a premium fine grain graphite, isostatically molded to the most demanding quality standards. It can be machined to very precise tolerances and a polished surface finish. This grade is specifically manufactured for continuous casting mold and die applications.

## Typical Applications

- Continuous casting dies
- Hot pressing dies and molds

## Sizes

Inches	MM
16" x 16" x 65" rectangles	406 x 406 x 1651 mm rectangles
12" x 25" x 80" rectangles	305 x 635 x 2032 mm rectangles
8" - 24" diameter x 72" long rounds	203-610 mm diameter x 1829 long rounds

## Typical Properties at Room Temperature

	<u>ENGLISH</u>	<u>WG</u>	<u>METRIC</u>	<u>WG</u>	<u>SI</u>	<u>WG</u>
Density	lbs/ft <sup>3</sup>	109	g/cm <sup>3</sup>	1.75	g/cm <sup>3</sup>	1.75
Maximum Particle Size	Inches	0.001	mm	0.03	mm	0.03
Specific Resistance	10 <sup>-4</sup> Ω in.	5.7	μΩm	14.5	μΩm	14.5
Flexural Strength	psi	4450	kg/cm <sup>2</sup>	300	MPa	31
Young's Modulus	10 <sup>6</sup> psi	1.65	kg/mm <sup>2</sup>	1157	GPa	11.4
Tensile Strength	psi	4110	kg/cm <sup>2</sup>	288	MPa	28
Compressive Strength	psi	10200	kg/cm <sup>2</sup>	715	MPa	70
Permeability	Darcy	0.003	Darcy	0.003	Darcy	0.003
Hardness	Rockwell "L"	90	Rockwell "L"	90	Rockwell "L"	90
C.T.E. (to 100 °C)	10 <sup>-6</sup> /°F	1.6	10 <sup>-6</sup> /°C	2.9	10 <sup>-6</sup> / K	2.9
Thermal Conductivity	BTU-ft/hr ft <sup>2</sup> °F	58	W/mK	100	W/mK	100
Ash Content	%	.09	%	.09	%	.09

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