



High Temperature Material Solutions

Advanced Graphite Materials for your Heat Treat Applications

Many graphite grades may appear similar, but even the slightest difference in the properties of the material can make a big difference in the performance. Electro Tech Machining distributes highly advanced carbon, graphite and carbon composite materials for heat treating applications. The high strength and low mass of our materials offers optimal thermal conservation opportunities and potentially greater furnace throughput.

When you work with ETM you can be assured that you will receive the exact grade of graphite you ordered. Lot tracking capability combined with our 30-year strategic partnership with one of the world's most respected graphite manufacturers provides us access to quality materials.

The graphite you need will be in stock and your order will be precisely machined to your specifications.



Grade	Specific Gravity	Specific Resistance	Young's Modulus	Flexural Strength	Shore Hardness	Coefficient of Thermal Expansion	Thermal Conductivity
	(g/cm ³)	($\mu\Omega$ -m)	(GPa)	(MPa)	(-)	($\times 10^{-6}/C$)	(W/mK)
G077	1.82	12.0	13.25	70.0	66	7.1	
G250	1.70	9.8	9.8	39.2	46	3.5	128
G330	1.79	13.0	9.8	39.3	53	4.8	104
G347	1.85	11.0	10.8	49.0	56	5.5	116
G348	1.92	10.0	12.3	60.0	68	5.5	128
G458	1.86	9.5	11.3	53.9	54	4.4	139
G520	1.83	12.0	10.8	56.8	62	5.5	116
G530	1.82	13.0	11.3	61.7	64	5.5	104
G535	1.82	17.0	10.8	63.7	72	5.5	81
G540	1.85	15.0	13.7	88.2	78	5.5	93
FE250	1.75	8.0	N/A	24.5	35	3.3	101
CE100	1.74	8.0	N/A	19.0	33	2.4	160

Ash Content

Standard 200 ppm (typical) for all ISO grades
500 ppm on extruded and 800 ppm on molded
Superpurified (SS Type) 5 ppm (max)

All properties measured room temperatures except for C.T.E.
C.T.E. = Coefficient of Thermal Expansion (R.T. to 1000 C)
Flexural Strength determined using third point loading