



# GRAFSTAR™ PJP Grade Graphite

## Technical Data Sheet

### Product Overview

GRAFSTAR™ PJP graphite is an economical low ash material with excellent thermal shock resistance. GRAFSTAR™ PJP graphite is well suited for the fine machining detail required in molds for casting metal shapes.

### Applications

- Rail wheel molds

### Sizes

Standard Sizes	
English	Metric
44 x 15 in	1118 x 381 mm
44 x 23 in	1118 x 584 mm
50 x 15 in	1270 x 381 mm
50 x 23 in	1270 x 584 mm
52 x 23 in	1321 x 584 mm

### Typical Properties at Room Temperature\*

Characteristic	English Units	WG		Metric Units	WG		SI Units	WG	
		WG	AG		WG	AG		WG	AG
Bulk Density	lbs/ft <sup>3</sup>	102		g/cm <sup>3</sup>	1.63		g/cm <sup>3</sup>	1.63	
Maximum Particle Size	inches	0.03		mm	0.76		mm	0.76	
Specific Resistance	10 <sup>-4</sup> Ω-in	3.6	4.0	μΩm	9.1	10.2	μΩm	9.1	10.2
Flexural Strength	psi		1960	kg/cm <sup>2</sup>		138	MPa		14
Young's Modulus	10 <sup>6</sup> psi		1.0	kg/mm <sup>2</sup>		703	GPa		6.9
Tensile Strength	psi		1255	kg/cm <sup>2</sup>		88	MPa		9
Compressive Strength	psi		4960	kg/cm <sup>2</sup>		349	MPa		34
Permeability	AFS		0.50	Darcy		0.16	Darcy		0.16
Hardness	Rockwell "R"	32		Rockwell "R"	32		Rockwell "R"	32	
C.T.E. (to 100 °C)	10 <sup>-6</sup> / °F	1.4	2.0	10 <sup>-6</sup> / °C	2.5	3.6	10 <sup>-6</sup> / K	2.5	3.6
Thermal Conductivity	BTU/hr-ft-°F	81	75	W/m-K	140	130	W/m-K	140	130
Ash Content	%	0.10		%	0.1		%	0.1	

#### Notes:

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

