



GRAFSTAR™ PJP Grade Graphite

Technical Data Sheet 6025

Product Overview

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 | |
|----------------|---------------|
| 44" x 15" | 1118 x 381 mm |
| 44" x 23" | 1118 x 584 mm |
| 50" x 15" | 1270 x 381 mm |
| 50" x 23" | 1270 x 584 mm |
| 52" x 23" | 1321 x 584 mm |

Typical Properties at Room Temperature*

| Characteristic | Unit | WG | AG | Unit | WG | AG | Unit | WG | AG |
|-----------------------|------------------------------|------|-----|----------------------|------|-----|----------------------|------|-----|
| Density | lbs/ft ³ | 102 | | g/cm ³ | 1.63 | | g/cm ³ | 1.63 | |
| Maximum Particle Size | inches | 0.03 | | mm | 0.76 | | mm | 0.76 | |
| Specific Resistance | 10 ⁻⁴ Ωin | 3.66 | 0.0 | μΩm | 9.3 | 0.0 | μΩm | 9.3 | 0.0 |
| Flexural Strength | psi | 1960 | 0 | kg/cm ² | 137 | 0 | MPa | 14 | 0 |
| Young's Modulus | 10 ⁶ psi | 1.0 | 0 | kg/mm ² | 701 | 0 | GPa | 6.9 | 0.0 |
| Tensile Strength | psi | 1255 | 0 | kg/cm ² | 88 | 0 | MPa | 9 | 0 |
| Compressive Strength | psi | 4960 | 0 | kg/cm ² | 348 | 0 | MPa | 34 | 0 |
| Permeability | Darcy | 0.5 | 0 | Darcy | 0.5 | 0 | Darcy | 0.5 | 0 |
| Hardness | Rockwell "R" | 32 | | Rockwell "R" | 32 | | Rockwell "R" | 32 | |
| C.T.E. (RT to 100 °C) | 10 ⁻⁶ /°F | 2.0 | 0.0 | 10 ⁻⁶ /°K | 3.6 | 0.0 | 10 ⁻⁶ /°K | 3.6 | 0.0 |
| Thermal Conductivity | BTU-ft/hr ft ² °F | 75 | 0 | W/mK | 130 | 0 | W/mK | 130 | 0 |
| Ash Content | % | 0.12 | | % | 0.12 | | % | 0.12 | |

Notes:

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

