



Technical Data Sheet 5077

AGSX Graphite

Product Overview

Densified prior to graphitization, GRAFSTAR™ AGSX material is good for applications requiring high densities and good mechanical properties.

Applications

- Furnace parts
- Powder metallurgy

Sizes*

- 3"-9" diameter rounds
- Available in 40", 48", 60", 65", & 72" lengths
- 75 - 225 mm diameter rounds
- Available in 1016, 1219, 1524, 1651, & 1829 mm lengths

Typical Properties at Room Temperature**

Characteristic	Unit	WG	AG	Unit	WG	AG
Density	lbs/ft ³	107		g/cm ³	1.72	
Maximum Particle Size	inches	0.03		mm	0.76	
Specific Resistance	10 ⁻⁴ Ωin	2.8	3.9	μΩm	7	10
Flexural Strength	psi	3350	2200	MPa	23	15
Young's Modulus	10 ⁶ psi	1.9	1.0	GPa	13	7
Tensile Strength	psi	2750	1600	MPa	19	11
Compressive Strength	psi	6500		MPa	45	
Permeability	Darcy	0.008	0.004	Darcy	0.008	0.004
Thermal Conductivity	BTU-ft/hr ft ² °F	100	70	W/mK	170	120
CTE (RT to 100 °C)	10 ⁻⁶ /°F	0.7	1.7	10 ⁻⁶ /K	1.2	3.1
Ash Content	%	0.15		%	0.15	
Porosity	%	16		%	16	

Notes:

* Other sizes available upon request

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