

Grade ATJW™ Isomolded Graphite

Since 1886, UCAR Carbon Company has been supplying quality carbon and graphite products, skilled technical service, and experienced application assistance worldwide.

Advanced Graphite Materials

Grade ATJW™ Isomolded Graphite

Isostatically molded UCAR® Grade ATJW is a halogen gas purified version of UCAR Grade ATJ™. Machined parts are typically purified to 20 ppm or less.

Typical Applications

- CZ silicon crystal growth
- Electronic and aerospace fixtures
- Quartz processing

Sizes

Grade ATJW Isomolded: Machined and then purified to <20 ppm.

Typical Properties at Room Temperature

| | <u>ENGLISH</u> | | <u>METRIC</u> | |
|-----------------------|------------------------------|-------|----------------------|-------|
| | | | | |
| Density | lbs/ft ³ | 109 | g/cm ³ | 1.75 |
| Average Particle Size | inches | 0.001 | mm | 0.025 |
| Specific Resistance | 10 ⁻⁴ Ω in. | 4.61 | μΩm | 11.7 |
| Flexural Strength | psi | 4200 | kg/cm ² | 300 |
| Young's Modulus | 10 ⁻⁶ psi | 1.40 | kg/mm ² | 980 |
| Tensile Strength | psi | 3740 | kg/cm ² | 260 |
| Compressive Strength | psi | 9500 | kg/cm ² | 670 |
| Permeability | Darcy | 0.002 | Darcy | 0.002 |
| Hardness | Rockwell "L" | 55 | Rockwell "L" | 55 |
| C.T.E. (to 100 °C) | 10 ⁻⁶ /°F | 1.4 | 10 ⁻⁶ /°C | 2.5 |
| Thermal Conductivity | BTU-ft/hr ft ² °F | 67 | W/mK | 115 |
| Ash Content | ppm | <20 | ppm | <20 |

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