

TECHNICAL DATA SHEET

Material Grade: HMH-J155
Product Type: Extruded Graphite
Industry: EDM / Furnace / Mold

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1. General Description

Extruded graphite is produced by continuous extrusion through a die, resulting in directional anisotropy along the extrusion axis. It offers stable mechanical strength, good electrical and thermal conductivity, and excellent machinability, making it suitable for simple-shaped components such as electrodes, heating elements, and general industrial parts.

2. Physical Properties

Property	Unit	Typical Value
Bulk Density	g/cm ³	1.55—1.60
Shore Hardness	HSD	45—55
Flexural Strength	MPa	≥ 8.0
Electrical Resistivity	μΩ·m	7.4—8.8
Thermal Conductivity	W/m·K	80—110

3. Chemical Properties

Item	Unit	Value
Carbon Content	%	≥ 99.5
Ash Content (Impurities)	%	≤ 0.3

Chemical Resistance:

Acid Resistance: Excellent

Alkali Resistance: Excellent

4. Thermal Properties

Property	Unit	Value
Max. Working Temperature (Air)	°C	≤ 450
Max. Working Temperature (Inert Gas)	°C	≤ 2500
CTE (100-600°C)	10 ⁻⁶ /K	2.0—2.5

5. Machining Capability

CNC Machining Supported

Minimum Tolerance: ±0.02 mm

Complex Geometry Available

Custom Drawings Accepted (PDF / DWG / STEP)

6. Typical Applications

EDM Electrodes

Heat Treatment Components

Mold and Die Inserts

7. Quality & Inspection

Dimensional Inspection Available

Material Certification on Request

Incoming & Final QC Inspection

8. Disclaimer

The information provided in this datasheet represents typical values and is not guaranteed. Actual material performance may vary depending on application, machining conditions, and service environment.