

## TECHNICAL DATA SHEET

**Material Grade:** HMH-J163  
**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 <sup>3</sup>	1.63—1.70
Shore Hardness	HSD	50—60
Flexural Strength	MPa	≥ 11.0
Electrical Resistivity	μΩ·m	5.5—6.8
Thermal Conductivity	W/m·K	100—130

### 3. Chemical Properties

Item	Unit	Value
Carbon Content	%	≥ 99.6
Ash Content (Impurities)	%	≤ 0.3

#### Chemical Resistance:

Acid Resistance: Excellent

Alkali Resistance: Excellent

## 4. Thermal Properties

Property	Unit	Value
Max. Working Temperature (Air)	°C	≤ 500
Max. Working Temperature (Inert Gas)	°C	≤ 2800
CTE (100-600°C)	10 <sup>-6</sup> /K	1.8—2.2

## 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.