Qingdao Haiminghao New Material Technology Co., Ltd.

TECHNICAL DATA SHEET

Material Grade: HMH-D185
Product Type: Isostatic Graphite
Industry: Semiconductor / EDM / Mold / Furnace

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1. General Description

Isostatic graphite is produced under uniform pressure in all directions, resulting in a dense and homogeneous structure with excellent isotropic properties and high machining precision. It is ideal for high-performance and high-precision components, and is widely used in semiconductor, photovoltaic, and advanced industrial equipment applications.

2. Physical Properties

Property	Unit	Typical Value
Maximum Particle Size	μm	≤7.0
Bulk Density	g/cm³	≥185
Shore Hardness	HSD	65–75
Flexural Strength	MPa	≥48
Compressive Strength	MPa	≥98
Electrical Resistivity	μΩ·m	≤ 15.0
Thermal Conductivity	W/m·K	100–130

3. Chemical Properties

Item	Unit	Value
Carbon Content	%	≥ 99.9
Ash Content (Impurities)	%	≤ 0.07

Chemical Resistance:

Acid Resistance:	Excellent
Alkali Resistance:	Excellent

4. Thermal Properties

Property	Unit	Value
Max. Working Temperature (Air)	°C	⩽650
Max. Working Temperature (Inert Gas)	°C	⩽ 3500
CTE (100-600℃)	10^{-6}/K	⩽ 5.0

5. Machining Capability

CNC Machining Supported

Minimum Tolerance: ±0.02 mm

Complex Geometry Available

Custom Drawings Accepted (PDF / DWG / STEP)

6. Typical Applications

Semiconductor Fixtures and Supports

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.