Qingdao Haiminghao New Material Technology Co., Ltd.

TECHNICAL DATA SHEET

Material Grade: HMH-Z168
Product Type: Vibration Molded Graphite
Industry: Furnace / Mold

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1. General Description

Vibration molded graphite is produced by compacting raw materials under controlled vibration, resulting in a relatively uniform microstructure and improved isotropic properties. It is suitable for moderately complex components and is commonly used in furnace parts, structural supports, and general high-temperature applications.

2. Physical Properties

Property	Unit	Typical Value
Maximum Particle Size	mm	≤ 2.0
Bulk Density	g/cm³	≥ 1.68
Shore Hardness	HSD	45–55
Flexural Strength	MPa	≥ 13
Compressive Strength	MPa	≥ 28
Electrical Resistivity	μΩ·m	≤ 9.0
Thermal Conductivity	W/m·K	70–100

3. Chemical Properties

Item	Unit	Value
Carbon Content	%	≥ 99.2
Ash Content (Impurities)	%	≤ 0.3

Chemical Resistance:

Acid Resistance:	Excellent
Alkali Resistance:	Excellent

4. Thermal Properties

Property	Unit	Value
Max. Working Temperature (Air)	°C	⩽ 420
Max. Working Temperature (Inert Gas)	°C	⩽ 2200
CTE (100-600℃)	10^{-6}/K	⩽ 2.7

5. Machining Capability

CNC Machining Supported

Minimum Tolerance: ±0.02 mm

Complex Geometry Available

Custom Drawings Accepted (PDF / DWG / STEP)

6. Typical Applications

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.