# **CeraMaterials**

# **Molded Graphite (M Series)**

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#### **Features:**

High density / fine grain size / High purity / High strength / Low specific resistance / ease of precision machining/ Excellent thermal shock resistance/ Good oxidation & corrosion resistance

# **Applications:**

Semiconductor (Monocrystalline Silicon) / Vacuum furnace / Continuous casting / Sealing products / Space & medical industry / Forge moulds EDM / Heat shields /Electronic tube anodes / Melting and sintering molds for ceramaic, electronic products, cemented carbides, non-ferrous & other metals/ etc.

| MOLDED               |          | M 1                  | M 2                  |
|----------------------|----------|----------------------|----------------------|
|                      |          |                      |                      |
| Bulk Density         | (g/cc)   | 1.78-1.80            | 1.85-1.88            |
| Ash Content          | (ppm)    | 500-1000             | 500-1000             |
| Shore Hardness       | (Ra)     | 40                   | 45                   |
| E Resistivity        | (μ.Ω.m)  | ≤12                  | ≤12                  |
| Flex Strength        | (MPa)    | 3035                 | 35—45                |
| Compressive Strength | (MPa)    | 5055                 | 60—82                |
| Max Grain Size       | (µm)     | 43μm                 | 43μm                 |
| CTE (cr              | m/cm-°K) | 4.5×10 <sup>-6</sup> | 4.5×10 <sup>-6</sup> |

### Notes:

- Ash content of all grades can be purified to 50 PPM.
- Special property requirement specially produced.
- Density, mechanical strength and anticorrosion can be improved by further impregnation.

# **Size Capabilities:**

| Rods          | Diameter  | Length    |
|---------------|-----------|-----------|
| Size Range    | 0-1300mm  | 0-2000mm  |
| Standard Size | 110-500mm | 180-400mm |

| Blocks        | Length     | Width      | Thickness |
|---------------|------------|------------|-----------|
| Size Range    | 0-900 mm   | 0-400 mm   | 0-320 mm  |
| Standard Size | 200-900 mm | 125-400 mm | 53-320 mm |

# Notes:

- Larger size specially pressed.
- Machined parts done to drawings
- Anticorrosion cover available(SiC Cover, Pitch Cover, etc)

