

MAGNESIA-CHROME BRICK (MC-70)

RELIABLE HIGH-TEMPERATURE PERFORMANCE WITH BALANCED SLAG RESISTANCE

The **Magnesia-Chrome Brick MC-70** is formulated with high-purity fused magnesia and chromite, providing an optimal balance between **thermal shock resistance**, **slag corrosion resistance**, and **mechanical strength**. This product is widely used in **non-ferrous metallurgy**, particularly in zones requiring enhanced durability in oxidising and mildly reducing atmospheres.

TECHNICAL SPECIFICATIONS

PROPERTY	MC-70
MgO (%)	≥ 70
Cr ₂ O ₃ (%)	≥ 14 – 18
Apparent Porosity (%)	≤ 18
Bulk Density (g/cm ³)	≥ 3.05
Cold Crushing Strength (MPa)	≥ 90
Modulus of Rupture at 1400°C (MPa)	≥ 10
Refractoriness Under Load (0.2 MPa, °C)	≥ 1650
Thermal Conductivity at 1000°C (W/m·K)	2.2 – 2.5
Maximum Service Temperature (°C)	1750
Bond Type	Fused Magnesia / Direct-Bonded Chrome

KEY APPLICATIONS

- Flash Smelting Furnaces (Walls & Roofs)
- Slag Cleaning Furnaces
- Rotary Kilns for Copper/Nickel Production
- Secondary Smelting Chambers
- Tapping Channels and Slag Runners

PERFORMANCE CHARACTERISTICS

- Stable structural integrity under cyclic thermal load
- High corrosion resistance to both **basic and amphoteric slags**
- Maintains **dimensional accuracy** over prolonged campaigns
- Adaptable for both **vertical and horizontal furnace configurations**

PACKAGING & SUPPLY

- Delivered in export-ready packaging on heat-treated pallets
- Optional corner- and key-brick formats available
- Full quality traceability and technical compliance documentation provided

INSTALLATION NOTES

- Use with compatible chrome-based mortars for optimal joint sealing
- Proper drying and controlled preheating procedures are recommended
- Inspect for tight brick alignment in tapping and high-erosion zones

ENVIRONMENTAL & SAFETY NOTES

- Manufactured under controlled Cr(VI) levels to meet health and safety standards
- Promotes extended refractory service life, minimising waste generation
- Full MSDS and handling guidelines available upon request



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