

FUSED REBONDED MAGNESIA-CHROME BRICK (FMGe-95)

HIGH-PERFORMANCE REFRACTORY BRICK FOR METALLURGICAL FURNACES

The **Fused Rebonded Magnesia-Chrome Brick (FMGe-95)** is a premium-quality shaped refractory product engineered for extreme service conditions. Designed for use in high-temperature zones of non-ferrous and ferrous metallurgical furnaces, it offers exceptional resistance to chemical corrosion, thermal shock, and slag attack. Its unique formulation, combining **fused magnesia and fused magnesia-chrome clinker**, delivers superior structural integrity and long campaign life in furnaces subjected to aggressive environments.

TECHNICAL SPECIFICATIONS

PROPERTY	FMGe-95
MgO (%)	≥ 72
Cr ₂ O ₃ (%)	≥ 16
Apparent Porosity (%)	≤ 17
Bulk Density (g/cm ³)	≥ 3.10
Cold Crushing Strength (MPa)	≥ 50
Modulus of Rupture at 1400°C (MPa)	≥ 10
Refractoriness Under Load (0.2 MPa, °C)	≥ 1700
Thermal Conductivity at 1000°C (W/m·K)	3.0 – 3.4
Maximum Service Temperature (°C)	1800
Brick Dimensions	230×114×65 mm (standard)
Bonding Structure	Fused grain rebonded

PACKAGING & SUPPLY

- Standard palletised shrink-wrapped stacks
- Heat-treated wooden pallets with plastic corner guards
- Each batch accompanied by **Quality Assurance Certificate**

INSTALLATION NOTES

- Requires professional installation using appropriate chrome-alumina mortars
- Compatible with standard expansion joint allowances
- May be combined with directly bonded bricks in transition zones for cost-performance balance

KEY APPLICATIONS

- Flash Smelting Furnaces
- Anode Baking Furnaces
- Copper Converters
- Slag Cleaning Furnaces
- Secondary Refining Units
- Cement Kiln Burning Zones (select applications)

PERFORMANCE CHARACTERISTICS

- **Excellent corrosion resistance** against acidic and basic slags
- **Low porosity** for reduced infiltration and enhanced thermal shock resistance
- **High refractoriness** ideal for furnace lining hot zones
- **Fused bonding phase** enhances erosion resistance and dimensional stability
- Engineered for long **service campaigns** in harsh industrial environments



www.dgc-africa.com

REACH OUT TO US

contactus@dgc-africa.com

ENVIRONMENTAL & SAFETY NOTES

- Cr content below hazardous waste thresholds for regulated disposal
- Reusable in certain secondary applications such as slag dams and monolithic backfill
- Manufactured in ISO-compliant facilities with strict emission controls