



## Ceramsource MgO Basic Brick Series

We supply a complete line of basic refractory product, which are categorized as follows:

1. **MgO-Alumina (GMA)** bricks are widely used in open hearth of steel melting furnaces and non-ferrous furnaces.
2. **MgO-Alumina-Chrome (GMAC)** bricks are for even better application in hearth furnace and non-ferrous furnaces.
3. **MgO-Alumina-Spinel (GMAB)** bricks are commonly used for cement rotary kilns, glass regenerators, and lime kilns.
4. **MgO-Chrome (DMC, SMC, RMC, MC)** bricks are recommended for refining furnaces such as RH, VOD, AOD.
5. **Burned Magnesia bricks (MZ)** for steel furnaces, lime kilns, glass tank, torpedo cars, and etc.
6. **MgO-Calcium (MCA)** for cement rotary kilns, refining furnaces like AOD, VOD, etc.
7. **MgO-Carbon (MCB, MAC, AMC, MCC)** for converters, EAF, ladle wall and bottom, refining furnaces like AOD, VOD, and LF.

### Magnesia-Alumina Bricks

Category		Magnesite-Alumina Grades					
Specifications	Grade Code	Magnesite Alumina GMA-80	Magnesite Alumina GMA-85	Magnesite Alumina GMA-88	Magnesite Alumina Chrome GMAC-85	Magnesite Alumina Spinel GMAS-8	Magnesite Alumina Spinel GMAS-12
	MgO % ≥		80	85	88	85	84
Al <sub>2</sub> O <sub>3</sub> % ≥		5 ~ 10	5 ~ 8	5~8	Al <sub>2</sub> O <sub>3</sub> +Cr <sub>2</sub> O <sub>3</sub> 5~8	8~13	12~14
ZrO <sub>2</sub> % ≥							1
Apparent Porosity % ≤		18	18	18	18	18	19
Bulk Density g/cm <sup>2</sup>		2.85~3.0	2.85~3.0	2.85~3.0	2.85~3.0	2.85~3.05	32.85~3.05
Cold Crushing Strength MPa ≥		40	40	40	40	40	40
Thermal Shock Resistance (TSR) 1100 °C Water		3~6	3~6	3~6	3~6	5~10	5~10

### Magnesia-Chrome Bricks

Category	Direct-Bonded Magnesia-Chrome Brick Grades			Semi Rebonded Magnesia-Chrome Brick Grades			Rebonded Magnesia-Chrome Brick Grades			Magnesia-Chrome Brick Grades			
	Grade Code	DMC -4	DMC -12A	DMC -18A	SMC -16A	SMC -16B	SMC -20A	RMC -16A	RMC -16B	RMC -24	MC -8A	MC -16A	MC -16B
Specs.													
MgO % ≥		80	66	58	60	60	55	65	60	52	65	50	45
Cr <sub>2</sub> O <sub>3</sub> % ≥		4	12	18	16	16	20	16	16	22	8	16	16
SiO <sub>2</sub> % ≤		2.0	1.5	1.5	1.5	1.8	1.5	1.2	1.6	1.2			
Apparent Porosity % ≤		18	18	18	17	17	17	16	16	16	20	20	23
Cold Crushing Strength Mpa ≥		40	40	40	40	35	40	45	40	45	35	35	30
Refractoriness Under Load (RUL) °C ≥		1600	1660	1660	1750	1700	1750	1750	1700	1750	1620	1620	1580