



## THE QUALITY OF MAGNESIA-CARBON BRICKS & LD-A80

The Magnesia-Carbon Bricks are made of magnesia and the choiced graphite. It is known that the magnesia has excellent refractoriness but its heat shock resistance is very poor. However, the graphite has the characteristics stated below. Therefore, as the magnesia-carbon brick is the combination of magnesium oxide and graphite, it has many advantages.

Features:

1. Resistance to corrosion and infiltration from furnace slag and steel fluid.
2. Resistance high-temperature attack.
3. Proper high temperature strength can be retained.
4. When in the reduction, it can resist extremely high temperature.

The ordinary high alumina bricks are made of natural or synthetic high alumina materials such as diaspore, andalusite etc. and using clay as binder. Their refractoriness is high compared with fire clay and silica bricks. It does not easily vitrified at high temperature which benefits the service life of bricks. These bricks contain about 50-75% Al<sub>2</sub>O<sub>3</sub> and very low impurities. It might be characterized by their good resistance to oxides of alkaline earth and many other metals as well as the furnace slags. In case that fireclay or silica bricks can't fulfill the requirements, replace them with ordinary high alumina bricks, you can expect an improvement.

### Typical Properties

Brand		MGB-5H	MGB-10	MGB-15 (MG-LS)	LD-A80
Properties					
Bulk Density(g/cm <sup>3</sup> )		3.00	2.92	2.90	2.85
Chemical Composition (%)	MgO	90	85	80	—
	Al <sub>2</sub> O <sub>3</sub>	—	—	—	80
	C	5	10	15	—
Cold Crushing Strength(Mpa)		40.0	35.0	30.0	75.5
Apparent Porosity(%)		5.0	3.8	4.0	18.3
Hot modulus rupture (Mpa) at 1400°C		—	—	—	8.2
Application		RH Ladle	Ladle	Ladle Slag Line	Ladle Wall, Bottom