



THE QUALITY OF HIGH ALUMINA BRICK-MULLITE SERIES

The gradual diminishing in deposit, natural sillimanite ores had been replaced by synthetic mullite. The chemical mullite is stable as that of corundum. It melts at 1850°C . High alumina bricks made of mullites are of excellent qualities surpassing that made of sillimanite. Kuan-Ho produces two kinds of mullite bricks, MRL & MRT. Beside mullite , MRL bricks contain certain amount of corundum while MRT bricks are made of pure

mullite. They are molded under high pressure and fired at high temperature. They are common in characteristics as:

- High refractoriness under load.
- Volume stable and low creep deformation at high temperature.
- High resistance to corrosion, abrasion and spalling.

Typical Properties

Brand		MRL		MRT			
		MRL-75	MRL-75L	MRT-70	MRT-70K	MRT-65S	MRT-60
Properties							
Refractoriness(SK)		> 38	> 38	> 38	> 38	> 37	> 37
Apparent Porosity(%)		17.7	15.0	18.0	18.4	19.0	19.0
Bulk Density(g /cm ³)		2.60	2.68	2.55	2.56	2.50	2.45
Cold Crushing Strength (kg f/cm ²)		860	940	650	800	850	600
Refractoriness under load (T ₂ °C)Load:2kgf/cm ²		> 1650	> 1650	> 1600	> 1600	> 1570	> 1570
Permanent Linear Change (%) 1500°C -2hrs		-0.4~ +0.2	-0.4~ +0.3	1400°C ±0.4	1400°C ±0.4	1400°C ±0.4	1400°C ±0.4
Thermal Expansion (%) at 1000°C		<0.6	<0.6	<0.6	<0.6	<0.6	<0.8
Chemical Composition(%)	Al ₂ O ₃	74.0	73.5	70.0	72.0	65.4	58.0
	Fe ₂ O ₃	1.1	1.2	1.2	1.1	1.2	1.3
Characteristics		High-burned	High-burned	—	High hot strength	Spalling resistance	—
Main Application		Torpedo car etc.	Torpedo car etc.	Hot-blast lime kiln etc.	Hot-blast lime kiln etc.	Reheating furnace	Hot-blast furnace, Reheating furnace