



THE QUALITY OF CASTABLE FOR BLAST FURNACE

Ramming mixes consist of refractory materials in carefully graded particle sizes and small amount of special binders to make the mixes more workable and easily bonded. Refractory materials, used are similar to those for bricks and other mololithic refractories such as fireclay, graphite, silica sand, high alumina, zircon and most basic materials.

They are supplied either in dry powder or paste. Dry mixes are prepared for use by adding water and mixing

while the wet form is ready for use. Once rammed into place, dried and heated, the ramming mixes forms a dense and strong monolithic refractory structure. There are various brands of ramming mix available, each mix has its own advantages or particular characteristics such as : volume stability, good strength over wide range of temperature, resistance to chemical corrosion. These mixes are especially suitable for metallurgical and processing industries.

Typical Properties

Brand		Properties					
		MT-CK	SL-TK	ASC-NCT	GN-ASC1	ASC-WG	NC-WM
Max. Service Temperature(°C)		1700	1700	1700	1700	1700	1700
Amount For Installation (kg/m ³)		2980	2950	2990	2300	2700	2800
Water Required For Mixing (%)		4.3-5.3	4.3-5.3	6.5-7.5 (Silicone)	11-13	8-10	7.5-8.5 (Silicone)
Bulk Density		2.98	2.95	3.00	2.35	2.70	2.80
Apparent Porosity(%)		9.53	9.50	10.0	23.9	15.0	15.0
Cold Crushing Strength After heating (Mpa)1450°C *3hrs		90	75	85	26	60	70
Modulus of Rupture Mpa	110°C *3hrs	3.5	3.0	—	3.5	4.4	—
	1000°C *3hrs	7.0	4.00	13.0	11.0	18.0	—
	1450°C *3hrs	13.0	12.5	13.7	5.4	15.0	14.5
Permanent Linear Change (%)	1000°C *3hrs	0.12	0.10	-0.03	—	0.1	—
	1450°C *3hrs	0.30	0.25	0.25	0.06	0.50	0.15
Chemical Composition (%)	Al ₂ O ₃	≥ 63	≥ 58	≥ 65	≥ 60	≥ 60	≥ 60
	SiC	≥ 17	≥ 27.5	≥ 17.0	≥ 20	≥ 20	≥ 22
	C	3.4	2.5	2.5	3.0	2.0	2.5
Application		BF Trough Castable	BF Trough Castable	BF Trough Castable	BF Trough Gunning	BF Trough Gunning	BF Trough Gunning
		(Iron Line)	(Slag Line)	(No Cement)	(Dry)	(Lower Cement wet)	(No Cement Wet)