Insulating fire brick

Description

Chinese Refractory raw material resources are abundant, which are suitable for the production of various grades of insulating firebrick. Limiting temperature of use range from 900℃ to 1650℃.Each grade of insulating firebrick is formulated to meet specific thermal and physical requirements.
Top grade insulating firebrick are made from high-purity refractory clays, with graduated additions of alumina for the higher temperature products, and a carefully graded organic filler, which burns out during manufacture to give a controlled, uniform lacuna structure. Each brick machined to precise size on all six faces. The maximum continue use temperature depends on application.

Typical application

Recommended for use as a primary hot face refractory lining or as back-up insulation behind other refractory in furnace, kilns, flues, refining vessels, heaters, regenerators, gas producers and main, soaking pits, annealing furnace, catalyst case and similar high temperature industrial equipment.

Features

1. Low thermal conductivity
2. Low thermal capacitance
3. Low impurity content
4. High hot compressive strength
5. Accurate dimension

specification

Items		Testing Temperature(℃) When reheated with 2% contracting rate	Volume Density g/cm3	Pressure Strength Mpa	Thermal Conductivity kcal/mh℃ (350℃)
A	A-1	900	≤0.50	≥0.50	≤0.13
	A-2	1000	≤0.50	≥0.50	≤0.14
	A-3	1100	≤0.50	≥0.50	≤0.15
	A-4	1200	≤0.55	≥0.80	≤0.16
	A-5	1300	≤0.60	≥0.80	≤0.17
	A-6	1400	≤0.70	≥1.00	≤0.20
	A-7	1500	≤0.75	≥1.00	≤0.22
B	B-1	900	≤0.70	≥2.50	≤0.17
	B-2	1000	≤0.70	≥2.50	≤0.18
	B-3	1100	≤0.75	≥2.50	≤0.20
	B-4	1200	≤0.80	≥2.50	≤0.22
	B-5	1300	≤0.80	≥2.50	≤0.23
	B-6	1400	≤0.90	≥3.00	≤0.27
	B-7	1500	≤1.00	≥3.00	≤0.31
C	C-1	1300	≤1.10	≥5.00	≤0.30
	C-2	1400	≤1.20	≥7.00	≤0.38
	C-3	1500	≤1.25	≥10.00	≤0.45

Main property	Classify temperature ℃	Apparent density kg/m3	Chemical component Wgt %				Bending strength Mpa	Cold crushing strength Mpa
			Al2 O3 %	SiO2 %	Fe2 O3 %	K2 O + Na2O %		
DM20	1100	550	45.00	50.00	1.00	1.00	0.70	0.80
DM23	1260	530	45.00	51.00	0.80	0.72	0.70	1.00
DM25	1350	800	52.00	41.55	0.62	0.81	1.20	1.80
DM26	1430	780	59.00	37.00	0.70	0.70	1.80	2.00
DM28	1540	880	64.00	32.00	0.60	0.60	2.00	2.50
DM30	1600	1000	70.00	28.00	0.33	0.21	2.00	3.00
JM23	1260	480	37.00	44.40	0.70	1.10	1.00	1.20
JM26	1430	800	58.00	39.10	0.70	1.70	1.50	1.60
JM28	1540	890	67.10	31.00	0.60	0.90	1.80	2.10
JM30	1650	1020	73.40	25.10	0.50	0.90	2.10	2.20