

LIGHT WEIGHT INSULATING FIREBRICK

PRODUCTION

Light Weight Insulating Firebrick

Insulating Firebrick (IFB) made from high purity refractory clays and other ceramic raw material, with light weight, mini-porosity well distributed. Working as lining materials, IFB keep furnace wall low heat loss and save the costs of fuels.

IFB low density means the lower thermal storage, fast heating and cooling. In application from 900 °C to 1650 °C in 6-grade, you can choose the most economical products according to service temperature. Series of YK Light Weight Insulating Firebrick is produced in accordance with ASTM Standard. Series of AB alumina hollow ball brick is made from alumina hollow ball and alumina powder, by adding compound agglutinant, formed by vibration and high-temperature sintering.

TECHNICAL SPECIFICATIONS

Type	YK23	YK25	YK26	YK28	YK30	YK32	AB96	AB98	
Classification Temperature (°C)	1230	1300	1400	1500	1550	1600	1650	1700	
Bulk Density (kg/m ³)	650	800	800	900	1000	1100	1350	1500	
Shrinkage after Heavy Firing at (°Cx8hr) (%) JIS R2613	0.3 (1230)	0.4 (1300)	0.4 (1400)	0.6 (1500)	0.6 (1550)	0.6 (1600)	0.4 (1650)	0.3 (1700)	
Pressure Strength (ASTM C93, Mpa)	1.1	1.8	1.9	2.5	2.8	3.0	8.5	9.5	
Tensile Strength (ASTM C93, Mpa)	0.8	1.2	1.2	1.4	1.6	1.8	--	--	
Thermal conductivity at 350°C (W/mk)	0.15	0.26	0.26	0.33	0.38	0.43	--	--	
Modulus of Thermal Expansion (%) (JIS R2617, °C)	0.46 (1000)	0.46 (1000)	0.47 (1000)	0.48 (1000)	0.48 (1000)	0.49 (1000)	--	--	
Chemical Composition (%)	Al ₂ O ₃	40	42	54	62	74	80	96	98
	Fe ₂ O ₃	1.2	1.0	0.9	0.8	0.7	0.5	0.4	0.4
Recommended Mortar	RM-1300	RM-300	RM-400	RM-1500	RM-1500	RM-1600	RM-1600	RM-1600	

Note: Various Sizes available and also can be produced according to special size requirement.

B& C SERIES OF INSULATING FIREBRICK

PRODUCTION

Series of firebrick for B, C Products are in accordance with JIS Industrial Standard of JAPAN, have excellent properties as light weight, low ferrous, low shrinkage after heavy firing, atmosphere erosion resistant and so on.

TYPICAL APPLICATIONS

- Lining of hot-surface of industrial furnace as carbon furnace, cracking furnace, heating furnace for oil refining, roller kiln, tunnel kiln.
- Back lining insulating layer of industrial furnace as glass tank kiln.
- Deoxidizing atmosphere furnace.

TECHNICAL SPECIFICATIONS

	B1	B2	B4	B5	B6	B7	C1	C2
Classification Temperature (°C)	900	1000	1200	1300	1400	1500	1300	1400
Bulk Density (kg/m ³)	650	650	780	780	870	960	1060	1140
Shrinkage after Heavy Firing at (°Cx8hr) (%) JIS R2613	0.68 (900)	0.8 (1000)	0.30 (1200)	0.30 (1300)	0.60 (1400)	0.90 (1500)	0.70 (1300)	0.80 (1400)
Modulus of Thermal Expansion (%) (JIS R2617, °C)	0.10 (900)	0.23 (1000)	0.50 (1000)	0.50 (1000)	0.48 (1000)	0.50 (1000)	0.50 (1000)	0.50 (1000)
Chemical AL ₂ O ₃	12	12	41	41	41	62	40	41
Composition Fe ₂ O ₃ (%)	4.2	3.6	1.2	1.2	1.4	0.9	1.2	1.2
Recommended Mortar	RM-1300	RM-1300	RM-1300	RM-1300	RM-1400	RM-1500	RM-1300	RM-1400

Note: Various Sizes available and also can be produced according to special size requirement.