

CCEWOOL® DJM series Mullite Insulating Brick

Description:

CCEWOOL® DJM series mullite insulating brick, using high pure mullite as raw material, is made by adding alumina powder according to different type and then sintering in high temperature. Classified by working temperature, there are DJM-20, DJM-23, DJM-26, DJM-28, DJM30, DJM32. These products can directly contact with fire, characterized with high temperature resistance, lightweight, low thermal conductivity, good energy saving effect, specially suitable for cracking furnace, hot blast furnace, ceramic roller kiln, porcelain kiln extraction, glass crucible and various electric furnaces as lining. It is an ideal product of energy efficiency and longevity.

Characteristics:

Low thermal conductivity: has good insulation effect, make the furnace wall thinner.

LTM: Due to its light weight and low thermal conductivity, lightweight mullite brick accumulates little heat, has obvious energy saving effect in intermittent operation kilns.

Low impurity content: a very low iron and alkali metal content of low-melting, thus enjoys high refractoriness. Due to high aluminum content, it can still maintain good performance in the reducing atmosphere.

High compressive strength under heated circumstance.

The exact dimensions: accelerate the speed of masonry, brickwork is thin and neat, making sure the high strength, high stability.

Can be processed into special shapes in order to reduce the number of blocks and brickwork.

Application:

Can be used as hot face lining or refractory backup applied in Smelting furnace, firing kiln, flue, refining apparatus, heating apparatus, reproducing apparatus, gas stoves and pipes, soaking furnace, annealing furnace, reaction chambers, and other similar industrial heat treat equipment.

Technical data and Size:

CCEWOOL® DJM series mullite insulating brick								
Item	DJM20	DJM-23	DJM-24	DJM-26	DJM-28	DJM-30	DJM-32	
Classification Temp(°C)	1200	1260	1300	1430	1540	1650	1760	
Bulk Density(g/cm ³)	0.5	0.6	0.7	0.8	0.9	1	1.25	
Crushing Strength(MPa)	1.1	1.2	1.4	1.6	2.1	2.5	3.5	
Modulus of Rupture(MPa)	1.0	0.9	1.2	1.4	1.6	2.1	2.1	
Permanent linear change (CT-30°Cx24h)%	0.5	0.5	0.6	0.4	0.5	0.9	0.9	
Reversible thermal expansion at 1100°C	0.5	0.5	0.6	0.7	0.8	0.9	1.1	
Thermal conductivity (W/m.k)	400 °C	0.12	0.12	0.14	0.27	0.32	0.41	0.49
	600 °C	0.14	0.14	0.16	0.29	0.34	0.43	0.5
	800 °C	0.16	0.17	0.18	0.31	0.36	0.44	0.51
	1000 °C	0.18	0.19	0.2	0.33	0.38	0.45	0.53
	1200 °C	-	-	-	0.3	0.41	0.47	0.56
Chemical Analysis(%)	Al ₂ O ₃	37	37	44.5	58	67	73	77
	SiO ₂	47	44.4	41.2	39.1	31	25.1	21.5
	Fe ₂ O ₃	0.7	0.7	0.7	0.7	0.6	0.5	0.4
Common size of insulation brick	230x114x65/75mm or customized size							