CCEWOOL ® DJM series Mullite Insulating Brick

Description:

Mullite insulation brick is a new type of refractory material, which 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:

1. Low thermal conductivity, with good thermal insulation effect;
2. Low heat capacity, due to low thermal conductivity, mullite lightweight insulation brick accumulate little heat energy, and shows obvious energy saving effect in intermittent operation.
3. Low impurity content, with very low content of iron and alkali metal oxide, our mullite insulation brick is characterized with high refractory performance; higher aluminum content enables our product remains good performance in the reducing atmosphere;
4. High compressive strength under high temperature;
5. Accurate appearance size speeds up the bricks laying, saves the use of refractory mortar and also ensures the strength and stability of brickwork and extend the life of the furnace lining.
6. Can be processed into a special shape, in order to reduce the number of bricks and joints.

Application:

Mullite insulation brick can be directly used for high temperature furnace lining; Mullite insulation brick has been widely used in shuttle kiln, roller kiln, glass and petrochemical furnace lining.

Mullite insulation brick is a kind of high-alumina refractories with mullite ($3Al_2O_3 \cdot 2SiO_2$) as its main crystal phase.

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(℃)		1200	1260	1300	1430	1540	1650	1760
Bulk Density(g/cm3)		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℃x24h)%		0.5	0.5	0.6	0.4	0.5	0.9	0.9
Reversible thermal expansion at 1100℃		0.5	0.5	0.6	0.7	0.8	0.9	1.1
Thermal conductivity (W/m.k)	400 ℃	0.12	0.12	0.14	0.27	0.32	0.41	0.49
	600 ℃	0.14	0.14	0.16	0.29	0.34	0.43	0.5
	800 ℃	0.16	0.17	0.18	0.31	0.36	0.44	0.51
	1000 ℃	0.18	0.19	0.2	0.33	0.38	0.45	0.53
	1200 ℃	-	-	-	0.3	0.41	0.47	0.56
Chemical Analysis(%)	Al2O3	37	37	44.5	58	67	73	77
	Si02	47	44.4	41.2	39.1	31	25.1	21.5
	Fe2O3	0.7	0.7	0.7	0.7	0.6	0.5	0.4
Common size of insulation brick	230x114x65/75mm or customized size							