

CCEFIRE® Refractory Castable

Description:

CCEFIRE® Refractory Castable is unshaped refractory material that doesn't need firing and features fluidness after adding water. Mixed by grain, fines and binder in fixed proportion, refractory castable can replace special shaped refractory material. Refractory castable can be used directly without firing, easy to construct, and has a high utilization rate and high cold crushing strength.

This product have the merits of high density, low porosity rate, good hot strength, high refractories and high refractoriness under load. It is strong in mechanical spalling resistance, shock resistance and corrosion resistance. This product is widely used in thermal equipments, heating furnace in metallurgical industry, boilers in electricity industry, and building material industry furnace.

Technical data and Size:

CCEFIRE® Refractory castable												
Type	Corundum	Corundum Mullite	Mullite		High-Alumina					Fire clay		
Item	DECA90	DECA80	DEC A60	DECA 85	DECA 55	DECA 65	DECA 75	DECA 85	DECA 70	DECA38	DECA45	DECA42
AL2O3 (%)	≥90	≥80	≥60	≥85	≥55	≥65	≥75	≥85	≥70	≥38	≥45	≥42
Refractoriness (°C)	≥1790	≥1790	≥1770	≥1790	≥1770	≥1790	≥1790	≥1790	≥1790	≥1690	≥1730	≥1710
Modulus of rupture (Mpa) 110×24h	≥2.5	≥3.0	≥2.0	≥3.0	≥2.0	≥2.0	≥2.0	≥2.0	≥4.0	≥1.0	≥2.0	≥1.0

	1200 ×3h	1500×3h	1500×3h	1500 ×3h	1500 ×3h	1400 ×3h	1400 ×3h	1400 ×3h	1400 ×3h	1200 ×3h	≥3.0	≥6.0	≥3.0
		≥6.0	≥6.0	≥6.0	≥6.0	≥6.0	≥6.0	≥6.0	≥6.0	≥8.0			
Linear Change	1500 ×2h	0+0.5	0+0.5	1.5									
Arter Heating (%)	1400 ×3h						-4	-4	-4		1200×3 h	1300×3 h	1300×3 h
											-2	-4	-4

Raw Materials

Own large-scale ore raw material base, professional mining equipment, and stricter selection of raw materials.

The incoming raw materials are tested first, and then the qualified raw materials are kept in a designated raw material warehouse to ensure their purity.

The raw materials of CCEFIRE refractory castable have low impurity content with less than 1% oxides, such as iron and alkali metals. Therefore, CCEFIRE refractory castable has high refractoriness.

Production Process

The fully automated batching system fully guarantees the stability of the raw material composition and better accuracy in the raw material ratio.

Quality Control

Each shipment has a dedicated quality inspector, and a test report is provided prior to the departure of products from the factory to ensure the export quality of each shipment of CCEFIRE.

A third-party inspection (such as SGS, BV, etc.) is accepted.

Production is strictly in accordance with ASTM quality management system certification.

The outer packaging of each carton is made of five layers of kraft paper, and outer packaging + pallet,, suitable for long-distance transportation.

Application Performance

Refractory castable is currently the most popular kind of unshaped refractory, which is mainly used to construct various heating furnace linings and other integral structures.

Aluminate cement refractory castable can be widely used in various heating furnaces and other thermal equipment without slag and acid and alkali corrosion.

In the sections prone to corrosion by molten iron, molten steel and molten slag and with high working temperatures, such as tapping troughs, ladles, blast furnace bodies, tapping channels, etc., the refractory castable made of high-quality granular and powdery materials with high alumina content and good sintering, combined with low calcium and pure high alumina cement, can be used.

Phosphate refractory castable can be widely used in heating furnaces and soaking furnaces for heating metals, and also in coke ovens and cement furnaces that have direct contact with materials.