Our Product Introduction

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Product Description

Product Description of Leading Provider of Rongsheng Casting Large Size Fire Clay Brick Kiln Refractory Brick For Glass Furnace

Casting large size fire clay bricks are generally used at the bottom of the glass kiln. This kind of fire clay brick is generally large, requiring a unit weight of more than 50kg, and some even weighing 400-500kg. It is not suitable to use ordinary press or ramming method to form, generally use the casting method.

Our company's casting large size fire clay bricks adopt high-power vibration platform, adopt special refractory cast material vibration molding process, kaolin raw materials, and produce large size fire clay bricks at the bottom of the glass kiln. The physical and chemical indicators and appearance of the large size kaolin casting bricks are superior to other similar products. In particular, the corrosion resistance of molten glass is much better than that of products formed by traditional mud pouring process and tamping process. It is especially suitable for building the bottom and wall of the glass melting furnace.

The main points of the production process for the production of casting large size fire clay bricks for float glass tank bottoms by vibrating casting are as follows: using kaolin clinker, mullite fine powder, oxide ultra-fine powder and hardener to form a self-hardening mud to make brick mud The material is mixed into a mud material that has both thixotropy (which can be molded by vibrating castable) and self-hardening, and can be demolded after a certain period of time after molding. In order to meet the requirements of the molding process, a small amount of degelling agent and a small amount of late-acting coagulant are appropriately added to the ingredient composition. Adding degelling agent can not only reduce the amount of water used from 10% to 13% to 5.5% to 6.5%, but also obtain a uniform structure; adding a slow-acting coagulant can simultaneously solidify the body and outside of the body, thereby shortening the demolding time.

Casting large size fire clay bricks formed by vibrating casting, due to the effect of surface tension during the vibration process, most of the gas that cannot be removed in the mud is present in a spherical shape, forming closed pores, so the brick has low air permeability and can effectively hinder oxygen from passing through the refractory. The wall diffuses in, thereby avoiding the brick cracking caused by the volume expansion caused by the oxidation of metal tin to tin oxide. Moreover, due to the low air permeability of the bricks, the hydrogen diffusion is also low, thereby avoiding glass defects caused by bubbles at the bottom of the tin bath, thereby increasing the yield of glass.

Product Features of Rongsheng Casting Large Size Fire Clay Brick For Glass Furnace

1: High refractoriness

The high refractoriness of clay bricks can reach 1680°C, and they are widely used in the masonry and maintenance of various

high-temperature kilns.
2: High softening temperature under load
The load softening temperature is 1250-1450 degrees Celsius, with a wide range of changes
3: Strong slag resistance
Chemical resistance, acid resistance is greater than alkali resistance.
4 Low thermal conductivity
The thermal conductivity is low, and the thermal expansion coefficient is small.

Product Specification of Casting Large Size Fire Clay Brick For Glass Furnace

Physical And Chemical Parameter of of Casting Large Size Fire Clay Brick For Glass Furnace			
Item	specified value		
	ZN-45	ZN-40	ZN-36
w(Al_2O_3),% ≥	45	40	36
0.2MPa Refractoriness Under Load, ≥	1430	1380	1350
Heating Permanent Line Change (1400 X2h),%	—0.2~+0.1	—0.3~+0.1	—0.4~+0.1
Bulk Density, g/cm³	2.00~2.40		
Apparent Porosity,% ≤	16	19(22)	22(24)
Cold Crushing Strength, MPa ≥	60	40(35)	35(30)

Henan Rongsheng Xinwei New Materials Research Institute Co., Ltd

+86-18538509097 Jackyhan2023@outlook.com bricksrefractory.com

11th Floors, Building 6, China Central Electronic Commerce Port, Daxue Road, Zhengzhou, Henan, China