Customizable Beta Alumina Refractory Bricks For Glass Furnaces

Basic Information

Place of Origin: Zhengzhou,ChinaBrand Name: Rongsheng Xinwei

Certification: ISO9001
Model Number: Rongsheng
Minimum Order Quantity: 1 Ton
Price: 200-800USD

Packaging Details: Packed on wooden pallets, with water-proof

cover, and tightened with plastic/steel bandages

Delivery Time: 10-20 Days
Payment Terms: TT; L/C
Supply Ability: 2000tons /month



Product Specification

Highlight: Beta Alumina Refractory Bricks

Glass Furnaces Beta Alumina Refractory Bricks

, Glass Furnaces Refractory Bricks

Product Description

Product Description of Beta Alumina Refractory Bricks For Glass Furnaces

Fused Alumina Bricks (Beta Alumina Bricks) are primarily composed of the β -Al₂O₃ crystalline phase, with a content of approximately 50%. These bricks have a dense crystalline structure and exhibit excellent corrosion resistance to molten glass at temperatures below 1350°C. As a result, they are widely used in the working pool and rear sections of glass furnaces. Common applications include flow channels, lip bricks, and gate bricks.

Due to the saturation of Al $_2$ O $_3$ by sodium above 2000°C, beta alumina bricks demonstrate exceptional stability against alkali vapors at high temperatures. Additionally, their thermal shock resistance is among the best of fused cast bricks. However, when in contact with SiO $_2$, the Na $_2$ O in beta alumina bricks reacts with SiO $_2$, causing $_3$ -Al $_2$ O $_3$ to convert to $_3$ -Al $_2$ O $_3$, which results in significant volume shrinkage. This may lead to cracks and damage to the bricks. Therefore, these bricks are only suitable for areas away from SiO $_2$ -containing dust, such as the upper structure of the working pool, breast walls near the burner ports, small furnace openings, and hanging walls.



Physical and Chemical Properties of Beta Alumina Refractory Bricks for Glass Furnaces:

Item	FUSED CAST ALUMINA	FUSED CAST ALUMINA	FUSED CA
	a-b Alumina TY-M	a- Alumina TY-A	b- Alun
Chemical Composition % Al2O3 SiO2 NaO2 Other oxides	94	98.5	
	1	0.4	
	4	0.9	(
	1	0.2	(
a-Al2O3 Crystallographic Analysis % b-Al2O3 Vitreous Phase	44	90	
	55	4	
	1	6	
	SiO2 NaO2 Other oxides a-Al2O3 b-Al2O3	a-b Alumina TY-M Al2O3 94 SiO2 1 NaO2 4 Other oxides 1 a-Al2O3 44 b-Al2O3 55	a-b Alumina TY-M a- Alumina TY-A Al2O3 94 98.5 SiO2 1 0.4 NaO2 4 0.9 Other oxides 1 0.2 a-Al2O3 44 90 b-Al2O3 55 4

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