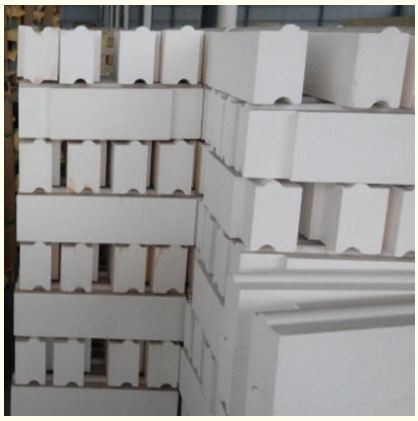
High-Temperature Stability With Zero Expansion Silica Bricks High Quality Furnace Refractory Brick For Glass Kiln Repair

Our Product Introduction

Basic Information

- Place of Origin: Zhengzhou ,China
- Brand Name: Rongsheng Xinwei
- Certification: ISO9001
- Model Number: Rongsheng
- Minimum Order Quantity: 1 Ton
- Price: 200-800 USD
- 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: 2000 tons/month



Product Specification

- Material: Fireclay
- Temperature Resistance: Up To 1700°C
- Porosity: ≤20%
- Surface: Smooth, Rough, Etc.
- Softening Point: High
- Fe2O3 Content: ≤ 2%
- Refractoriness Under Load: High, Medium, Low
- Volume Density: ≥2.20g/cm3
- Alkali Resistance: ≥85%
- Acid Resistance: Good
- Feature: High Refractoriness
- Packing: Wooden Pallets Or Cartons
- Cold Crushing Strength: >50Mpa
- Application: High Temperature Furnaces
- Model: As Required

Product Description

Introduction to High-Temperature Stability With Zero Expansion Silica Bricks High Quality Furnace Refractory Brick For Glass Kiln Repair

Zero Expansion Silica Bricks are a special type of silica refractory material with an extremely low thermal expansion coefficient, making them almost dimensionally stable even under high temperatures. This characteristic makes them particularly suitable for repair and maintenance work in high-temperature environments like glass kilns. Here are the key features and applications of zero expansion silica bricks in the context of glass kiln repair:

Key Features of Zero Expansion Silica Bricks for Glass Kiln Repair

Low Thermal Expansion Coefficient: These bricks exhibit very low thermal expansion at high temperatures, maintaining dimensional stability and preventing cracks and damage due to thermal expansion.

Excellent High-Temperature Performance: They can withstand prolonged exposure to high temperatures, maintaining their integrity and performance.

Superior Thermal Shock Resistance: The bricks can endure rapid temperature changes, reducing the risk of damage due to thermal shock.

Chemical Stability: They are resistant to acid and alkali corrosion, offering strong chemical resistance.

High Mechanical Strength: They can withstand the mechanical stresses typical in the high-temperature environments of glass kilns.

Applications in Glass Kiln Repair

Zero expansion silica bricks are primarily used in the following areas during glass kiln repair:

Crown (Kiln Roof): The crown of a glass kiln operates in a high-temperature environment. Using zero expansion silica bricks helps prevent cracking caused by thermal expansion.

Sidewalls: The sidewalls must withstand high temperatures and mechanical stress. The high refractoriness and low expansion of these bricks ensure the stability and durability of the sidewalls.

Around Burners: The area around burners experiences significant temperature fluctuations. Zero expansion silica bricks' thermal shock resistance helps withstand these fluctuations effectively.

Hot Repairs: During operational periods, hot repairs can be performed using zero expansion silica bricks without waiting for the kiln to cool down, significantly improving repair efficiency and production continuity.

Advantages of Zero Expansion Silica Bricks For Glass Kiln Repair

Reduced Downtime: Their low expansion and high thermal shock resistance allow for hot repairs, minimizing downtime and increasing production efficiency.

Extended Kiln Life: Using high-performance zero expansion silica bricks can significantly extend the overall service life of the glass kiln, reducing maintenance costs.

Improved Product Quality: Stable kiln structures and high-quality refractory materials contribute to the production of higher-quality glass products.

Product Specifications of Zero Expansion Silica Bricks

Product Specifications of Zero Expansion Silica Bricks					
Item			index		
			FS-97	PS98	FS-99
w(SiO_2)/%	μ0	≥	97.0	98.0	98.5
	o			1.0	
w(Al2O3)/%	μ0	≤	0.50	0.30	0.20
	o			0.10	
w(Fe2O3)/%	μ0	≤	0.30	0.20	0.10
	o			0.05	
Bulk Density/(g/cm^3)	μ0	≥	1.75	1.80	1.85
	o			0.02	
Apparent Porosity/%	μ0	≤	22.0	20.0	18.0
	o			1.5	

Cold Crushing Strength/MPa	μ0	≥	25	30	35
	o		10		
0.2MPa refractoriness under load (RUL)(Tao)/°C	μ0	≥	1500	1600	1650
	o		15		
Linear Expansion Rate(1000°C)/%		≤	0.20		
	o		0.10		
thermal shock resistance(1100°C,water-cooled)/time		≥	30	30	30

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