Rongsheng Factory High Alumina Checker Refractory Bricks Suitable For Various High-Temperature Applications

Our Product Introduction

Basic Information

- Place of Origin: Zhengzhou, China
- Brand Name: Rongsheng Xinwei
- Certification: ISO9001
- Model Number: RS-48, RS-55, RS-65, RS-75, RS-80
- 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: 20-30DAYS
- Payment Terms: TT; L/C
- Supply Ability: 2000 tons/month

Product Specification

- Highlight: **Rongsheng Factory Checker Refractory Bricks**, **High Temperature Checker Refractory Bricks**, **High Alumina Checker Refractory Bricks**

More Images





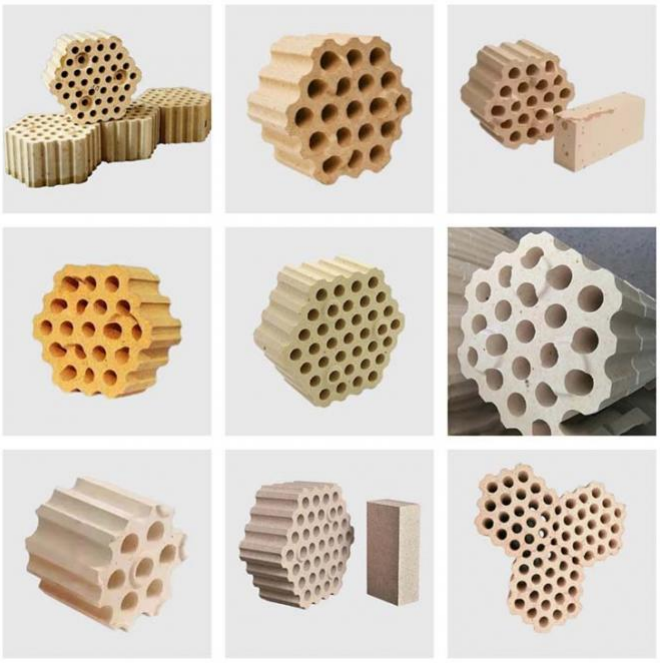
Our Product Introduction

Product Description

Product Description of Rongsheng Factory High Alumina Checker Refractory Bricks Suitable For Various High-Temperature Applications
High Alumina Checker Refractory Bricks are a type of brick used in high-temperature industrial applications. They are made from a high alumina content material, typically above 48% alumina oxide (Al2O3), which gives them excellent properties for withstanding extreme heat and harsh environments.

Physical and Chemical Properties of High Alumina Checker Refractory Bricks
1.High Temperature Resistance: Can withstand temperatures up to 1750°C (3182°F).
2.Thermal Shock Resistance: Excellent ability to withstand rapid temperature changes without cracking.
3.Mechanical Strength: High compressive strength, making them durable under heavy loads.
4.Corrosion Resistance: Resistant to slag and chemical attack, especially from alkalis and acidic environments.

Prodcut Applications of High Alumina Checker Refractory Bricks
Blast Furnaces: Used in hot blast stoves to preheat air blown into the blast furnace.
Regenerative Furnaces: Utilized in the regenerator of glass furnaces to store heat.
Steel Industry: Employed in various high-temperature zones within steelmaking processes.
Cement Kilns: Applied in areas where high thermal efficiency and durability are required.



Product Specification of High Alumina Checker Refractory Bricks

High Alumina Checker Firebrick Physical and Chemical Index:

Item		Properties				
		RS-80	RS-75	RS-65	RS-55	RS-4
Al2O3 (%)		80	≥75	≥65	≥55	≥48
Refractoriness (°C)		≥1790	≥1790	≥1790	≥1770	≥175
Bulk density (g/cm3)		2.65	2.5	2.45	2.4	2.3
Softening temperature under load (°C)		1530	≥1520	≥1500	≥1470	≥142
ReheatingLinear Change Rate (%)	1500°CX 2H	0.1	0.1	0.1	0.1	0.1
	1450°CX 2H	-0.4	-0.4	-0.4	-0.4	-0.4
Apparent porosity (%)		22	≤23	≤23	≤22	≤22
Cold crushing strength (Mpa)		55	≥50	≥45	≥40	≥35
Application		steel furnace, glass furnace, sodium silicate furnace, ceramic shuttle kiln, cement rotary kiln, blast furnace, electric furna furnace and reverberatory furnace.				

Manufacturing Process
Raw Material Selection: High-quality bauxite and other alumina-rich materials are chosen.
Mixing and Forming: Materials are mixed, shaped into the checker pattern, and pressed.
Drying and Firing: Formed bricks are dried and then fired at high temperatures to achieve sintering.
Quality Control: Rigorous testing for physical properties, chemical composition, and thermal behavior.

Product Advantages of Rongsheng High Alumina Checker Refractory Bricks
Energy Efficiency: The checker design enhances heat transfer, improving the efficiency of the furnaces.
Longevity: High durability and resistance to wear and tear result in a longer service life.
Reduced Maintenance Costs: Due to their robustness and resistance to degradation.
Environmentally Friendly: Can withstand harsh environments, reducing the need for frequent replacements and waste.

Comparison with Other Refractory Bricks
Versus Fireclay Bricks: Higher alumina content provides better high-temperature performance and slag resistance.
Versus Silica Bricks: More resistant to alkali attack and has better thermal shock resistance.
Versus Magnesia Bricks: Offers superior resistance to acidic slags, whereas magnesia bricks are better for basic slags.

Recent Developments
Advanced Manufacturing Techniques: Improved pressing and firing methods enhance brick consistency and performance.
Nanotechnology: Incorporation of nano-alumina particles to further improve thermal and mechanical properties.
Eco-friendly Materials: Development of bricks using sustainable raw materials and reducing environmental impact during manufacturing.

Installation and Maintenance
Installation: Requires precise alignment to ensure optimal performance. Typically installed by skilled professionals.
Maintenance: Regular inspections for cracks or damage, and timely repairs to extend service life.

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