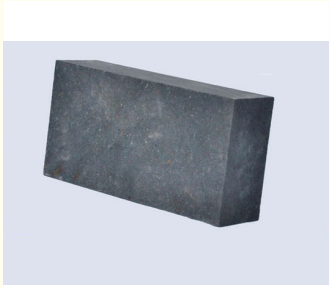
Factory Supply Blast Furnace Refractory Bricks Silicon Carbide Bricks

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: 200-800USD
- 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: 2000 tons/month



Product Specification

- Highlight: **Blast Furnace Refractory Bricks**, **Silicon Carbide Bricks**

Our Product Introduction

Product Description

Factory Supply Blast Furnace Refractory Bricks Silicon Carbide Bricks Produced By Rongsheng Refractory

Product Description of Factory Supply Blast Furnace Refractory Bricks Silicon Carbide Bricks Produced By Rongsheng Refractory

The refractory materials industry is an essential foundational industry that supports high-temperature technologies, with a particularly close relationship to the steel industry. New advancements in high-temperature industries, especially in steel smelting technology, have driven the technical progress of the refractory materials industry. In turn, this progress in refractory materials technology ensures the implementation of new technologies in high-temperature industries. The stable, high-yield, and long-lasting operation of various furnaces in the steel industry relies heavily on refractory materials. Different furnaces have different requirements for refractory materials, depending on their purpose and operating conditions. Moreover, the various types of refractory materials display distinct basic properties due to differences in chemical composition, microstructure, and production processes.

Currently, there are many types of refractory bricks used in blast furnaces. Generally, high-performance clay bricks or high alumina bricks are used for the upper and middle parts of the furnace body, while carbon-based products, such as silicon carbide bricks, are used for the lower part of the furnace body, belly, and bosh.

Silicon carbide refractory bricks are a type of high alumina refractory material made from silicon carbide (SiC). They offer excellent wear resistance, corrosion resistance, high-temperature strength, high thermal conductivity, low coefficient of thermal expansion, and good thermal shock resistance.

Silicon carbide refractory bricks can be classified based on the SiC content and the type of bonding phase. The properties of these refractory bricks largely depend on the bonding phase. According to the bonding phase, silicon carbide refractory bricks can be divided into:

Oxide-bonded: using aluminosilicate or silicon dioxide as the bonding phase;
Nitride-bonded: using silicon nitride (Si3N4), silicon oxynitride (Si2ON2), or sialon as the bonding phase;
Recrystallized: where silicon carbide particles are directly bonded through recrystallization.
Semi-silicon carbide refractory bricks can be further divided into several types, such as clinker silicon carbide refractory bricks + high alumina silicon carbide refractory bricks, zircon silicon carbide refractory bricks, silicon carbide graphite refractory bricks, mullite silicon carbide refractory bricks, and corundum silicon carbide refractory bricks.

The silicon carbide refractory bricks produced by Rongsheng Refractory for the chemical industry are made from high-quality 98% SiC as raw material, using oxide as a bonding agent and undergoing high forming and high-temperature firing. They feature high-temperature strength, excellent wear resistance, corrosion resistance, high thermal conductivity, low thermal expansion coefficient, good thermal shock resistance, and strong thermal radiation properties.

Physical And Chemical Indicators of Silicon Carbide Bricks For Blast Furnaces:

Item Name	Unit	Blast Furnace Silicon Ca
SiC	%	35-55
Apparent Porosity	%	18-20
Refractoriness	°C	>1790
Refractoriness Under Load	°C	1550
Cold Crushing Strength	MPa	60
Thermal Conductivity	W/(m·K) at 1200°C	6-8
Thermal Stability	Times (1100°C Water Cooling)	50

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