

# **Rongsheng Refractory Supply Alumina Carbon Bricks With Superior Performance For High-Temperature Kilns**

Packed on wooden pallets, with water-proof cover, and tightened with plastic/steel

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#### **Basic Information** • Place of Origin: Zhengzhou, China • Brand Name: Rongsheng Xinwei • Certification: ISO9001 Model Number: RSAC-60 • Minimum Order Quantity: 1 Ton • Price: 200-800 USD

bandages 10-20 Davs

TT; L/C

2000 tons/month

Wooden Pallets Or Cartons

- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:

# **Product Specification**

#### • Fe2O3 Content: ≤2% Chemical Resistance: High

- Water Absorption:
- Packing:
- Resistance To Spalling:
- Thermal Conductivity:
- Extended Kiln Life: Yes
- Compressive Strength:
- Abrasion Resistance:
  - China
- Thermal Expansion: High, Medium, Low ≥95%

≤6%

Good

≤1.3W/m·K

≥50MPa

Excellent

Acid Resistance:

Origin:

- Cold Crushing Strength: ≥40 Mpa
- Thermal Shock Resistance: ≥25 Times
- Modle: As Required

## More Images



## **Product Description**

#### Introduction of Rongsheng Refractory Supply Alumina Carbon Bricks With Superior Performance For High-**Temperature Kilns**

Alumina Carbon Bricks of Rongsheng Refractory represent a class of high-performance refractory materials specifically engineered for use in the most demanding high-temperature industrial environments. These bricks combine the advantageous properties of high alumina and carbon to deliver exceptional thermal stability and durability, making them indispensable in metallurgical and other heavy industries.

## Composition and Materials of Alumina Carbon Fire Bricks

Alumina Carbon Bricks are primarily composed of high-purity alumina (Al2O3) and carbonaceous materials such as graphite. The typical composition includes:

Alumina (Al 2 O 3): 60-85%

The blend of these materials results in bricks that offer superior performance in extreme conditions.

Properties of Alumina-carbon Bricks

High Thermal Conductivity: The carbon content significantly improves the thermal conductivity, ensuring effective heat



Introdu

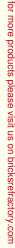
Carbon: 5-20%

Binders and Additives: Various organic and inorganic materials to enhance properties

## management Thermal Shock Resistance: These bricks exhibit excellent resistance to thermal cycling, making them ideal for applications

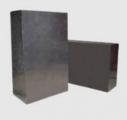
with rapid temperature changes. Mechanical Strength: High compressive strength and structural integrity even at elevated temperatures. Chemical Resistance: Superior resistance to chemical attack from slags and corrosive environments. Manufacturing Process

Raw Material Preparation: Selection of high-purity alumina and high-quality graphite. Mixing: Precise mixing of alumina, carbon, binders, and additives. Shaping: Using advanced forming techniques to achieve the desired brick shapes. Drying: Controlled drying to remove moisture and enhance structural stability. Firing: High-temperature firing to achieve final sintering and densification.









## **Product Applications**

Steelmaking: Essential in electric arc furnaces (EAF), ladle furnaces, and basic oxygen furnaces (BOF).

Non-Ferrous Metal Processing: Used in furnaces for processing aluminum, copper, and other non-ferrous metals. Foundries: Ideal for furnace linings and other high-wear areas in foundry operations.

Chemical Plants: Suitable for reactors and other equipment exposed to high temperatures and corrosive materials.

**Product Advantages** 

Longevity: Extended service life reduces the frequency of refractory maintenance and replacement. Energy Efficiency: High thermal conductivity enhances energy efficiency in high-temperature operations. Cost-Effective: Durable and long-lasting, these bricks lower overall operational costs

Versatility: Suitable for a wide range of high-temperature applications across various industries. Product Parameters of Alumina Carbon Bricks from Rongsheng Refractory Factory

Items	RSAC-60
Al2O3,% min	60
C,%min	12
Apparent Porosity,%max	12
Bulk Density,g/cm3.min	2.8
C.C. strength M/pa min	60
Refractoriness under load (0.2Mpa) (min)	1650
Thermal Shock Resistance(1000 ,water quenching,cycle),min	100

#### Quality Control

Material Testing: Rigorous testing of raw materials to ensure purity and consistency.

Dimensional Accuracy: Precision in manufacturing to meet exacting standards.

Performance Testing: Extensive testing under simulated operational conditions to verify performance metrics.

## Installation and Maintenance

Installation: Follow best practices for installation, ensuring tight joints and proper alignment to maximize performance.

Inspection: Regular inspection and monitoring to detect and address wear or damage early

Repair: Timely repair using compatible refractory materials to maintain the integrity of the lining.

## Conclusion

Alumina Carbon Refractory Bricks offer an exceptional combination of thermal stability, mechanical strength, and chemical resistance, making them a vital component in high-temperature industrial applications. Their ability to withstand the harshest conditions ensures reliability and efficiency, contributing to the overall success and cost-effectiveness of industrial processes.

If you want to inquiry more information about Rongsheng refractory Bricks and their applications, please visit Rongsheng Refractory's website

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