# Our Product Introdu

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

### **Basic Information**

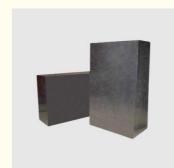
Place of Origin: Zhengzhou, ChinaBrand Name: Rongsheng Xinwei

Certification: ISO9001
Model Number: RSAC-60
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**

Fe2O3 Content: ≤2%
 Chemical Resistance: High
 Water Absorption: ≤6%

Packing: Wooden Pallets Or Cartons

Resistance To Spalling: Good
 Thermal Conductivity: ≤1.3W/m·K
 Extended Kiln Life: Yes
 Compressive Strength: ≥50MPa
 Abrasion Resistance: Excellent
 Origin: China

• Thermal Expansion: High, Medium, Low

Acid Resistance: ≥95%
 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 (Al<sub>2</sub>O<sub>3</sub>) and carbonaceous materials such as graphite. The typical composition includes:

Alumina (Al<sub>2</sub>O<sub>3</sub>): 60-85%

Carbon: 5-20%

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

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

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.

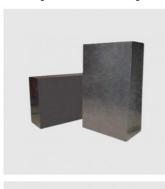
### **Manufacturing Process**

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.

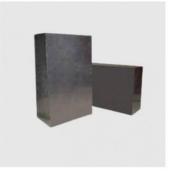
Drying: Controlled drying to remove moisture and enhance structural stability.

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 Pagashana Petractory Eastern

Product Parameters of Alumina Carbon Bricks from Hongsheng Herractory 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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