

HIGH ALUMINA BRICK



High alumina bricks of over SK35 contain over 45% Alumina and are made from raw materials of unusually high degree of purity of Bauxite and refractory clay. For serve under severe conditions, JUCOS Alumina bricks have excellent mechanical strength, good resistance to thermal spalling, and are highly resistant to chemical attack by volatile alkalis and some slag. We manufacture and design alumina bricks to meet the requirements of a great variety of service conditions thorough quality control.

Features Of High Alumina Brick

- Good performance in high temp refractoriness under load
- Higher temperate resistant with good refractoriness
- Lower impurity content
- Good thermal shock resistance performance
- Excellent resistance in slag abrasion
- Good cold crush strength

Applications Of High Alumina Brick

- Nonferrous Metal Furnace
- Rotary & Shaft Kiln
- Various Incinerator
- Reheating Furnace
- Permanent Lining For EAF Ladle
- General Industrial Furnace etc

Specifications Of High Alumina Brick

- Alumina contents range from 48% to 85%
- Widely used throughout metallurgical industry



ABOUT VUULCAN

Our mission is clear: to become the leading manufacturer of refractory materials in China, with a global outlook. Our international operations team is composed of world-class talent, equipped with the expertise and vision to serve clients worldwide. We pride ourselves on delivering comprehensive, high-quality services that meet the diverse needs of our global customers.

Just as fire has fueled human advancement throughout history,

Vuulcan is committed to driving innovation in the refractory industry. Our products not only protect the industries and infrastructures that drive the global economy but also symbolize a commitment to sustainable practices and technological progress. Vuulcan stands at the intersection of tradition and innovation, providing unmatched protection for the future.

● Product Data

Properties	SK-36	SK-37	SK-38	SK-40
Refractoriness (SK)	36	37	38	40
Apparent Porosity (%)	23	23	23	20
Bulk Density (g/cm ³)	2.30	2.35	2.40	2.65
Cold Crushing Strength (MPa)	45	50	52	70
@1,000°C Thermal Linear Expansion (%)	0.6	0.6	0.6	0.6
@1350°C x 2hrs Permanent Linear Change (%)	±0.3	±0.3	±0.3	±0.2
@0.2MPa Refractoriness Under Load (°C)	1420	1450	1500	1550
Chemical Composition (%)	Al ₂ O ₃	50	60	72
	Fe ₂ O ₃	2.0	2.0	2.0
Main Applications	Nonferrous Metal Furnace Rotary & Shaft Kiln Various Incinerator	Reheating Furnace Permanent Lining For EAF Ladle General Industrial Furnace etc.		

FIRECLAY BRICK

Hard Fireclay bricks are alumina silicate bricks with the refractoriness of SK 32-34 and contain 35-45% alumina. The bricks are made from various raw materials of fire clay, calcined chamotte, mullite etc. They are highly resistant to abrasion, spalling and corrosion. Because the bricks have low porosity, high strength, good resistance to thermal spalling and to abrasion and to creep, Jucos fireclay bricks are applied for the linings of Coke Ovens, Glass furace, Cement Rotary Kilns, Lime Kilns, Various Incinerators, Reheating Fumaces etc.



Features of Fireclay Brick

- Good performance in high temp refractoriness under load
- Lower thermal line expansion in high temp
- Lower impurity content
- Good thermal shock resistance performance
- Excellent resistance in slag abrasion
- Good cold crush strength

Applications of Fireclay Brick

- Blast Furnace
- Various Incinerator
- Reheating Furnace
- Cement Rotary Kiln, Various Rotary Kiln
- General Industrial Furnace etc.
- Glass Furnace

SPECIAL SHAPE FIRE BRICK



Hard firebrick is a kind of alumina silicate brick containing 35-45%, and the refractories are SK 32-34. Brick is made of refractory clay, calcined limestone, mullite and other raw materials, with good wear resistance, peeling resistance, corrosion resistance. It has the characteristics of low porosity, high strength, heat peeling, wear resistance, creep resistance, etc., and is widely used in the lining of coke oven, glass kiln, cement rotary kiln, lime kiln, various incinerators and heating furnaces.

Features of Fireclay Brick

- Good performance in high temp refractoriness under load
- Lower thermal line expansion in high temp
- Lower impurity content
- Good thermal shock resistance performance
- Excellent resistance in slag abrasion
- Good cold crush strength

Applications of Fireclay Brick

- Blast Furnace
- Various Incinerator
- Reheating Furnace
- Cement Rotary Kiln, Various Rotary Kiln
- General Industrial Furnace etc.
- Glass Furnace

● Product Data

Properties	SK-32	SK-33	SK-34	SK-35	
Refractoriness (SK)	32	33	34	35	
Apparent Porosity (%)	26	24	23	23	
Bulk Density (g/cm ³)	2.10	2.16	2.20	2.25	
Cold Crushing Strength (MPa)	20	30	35	40	
@1,000°C Thermal Linear Expansion (%)	0.6	0.6	0.6	0.6	
@1350°C x 2hrs Permanent Linear Change (%)	±0.5	±0.5	±0.3	±0.3	
@0.2MPa Refractoriness Under Load (°C)	1250	1300	1350	1380	
Chemical Composition (%)	Al ₂ O ₃ Fe ₂ O ₃	35 3.0	38 2.2	40 2.0	46 2.0
Main Applications	Coke Oven Incinerator Glass Furnace	Various Rotary Kiln Reheating Furnace Chemical Reactor	Blast Furnace, Torpedo Car Non Ferrous Metal Furnace General Industrial Furnace etc		

● Product Data

Properties	SK-32	SK-33	SK-34	SK-35	
Refractoriness (SK)	32	33	34	35	
Apparent Porosity (%)	26	24	23	23	
Bulk Density (g/cm ³)	2.10	2.16	2.20	2.25	
Cold Crushing Strength (MPa)	20	30	35	40	
@1,000°C Thermal Linear Expansion (%)	0.6	0.6	0.6	0.6	
@1350°C x 2hrs Permanent Linear Change (%)	±0.5	±0.5	±0.3	±0.3	
@0.2MPa Refractoriness Under Load (°C)	1250	1300	1350	1380	
Chemical Composition (%)	Al ₂ O ₃ Fe ₂ O ₃	35 3.0	38 2.2	40 2.0	46 2.0
Main Applications	Coke Oven Incinerator Glass Furnace	Various Rotary Kiln Reheating Furnace Chemical Reactor	Blast Furnace, Torpedo Car Non Ferrous Metal Furnace General Industrial Furnace etc		



SILICA BRICKSK

Silica bricks belong to acid refractory fire brick with above 94% high quality SiO₂ content materials. The refractoriness of raw silica materials increases with increasing SiO₂ content. Tridymite, ashlar, and vitric are minerals found in silica bricks and were created at high temperatures. Silica refractory brick in Topower Refractory has high stability under high temperature (1620-1670°C) and pressure stresses.

Features Of Silica brick

- Good performance in high temp refractoriness under load
- Super higher cold crush strength character
- Higher temperate resistant with good refractoriness
- Lower impurity content
- Excellent resistance in slag abrasion
- No shrink in burn repeatedly

Applications Of Silica brick

- Hot-blast furnace
- Coke oven
- Glass kiln

Specifications

- Silica contents range from 94% to 96%
- Widely used throughout Hot-blast furnace, coke oven, Glass kiln

SPECIAL-SHAPED SILICA BRICK

Silica bricks belong to acid refractory fire brick with above 94% high quality SiO₂ content materials. The refractoriness of raw silica materials increases with increasing SiO₂ content. Tridymite, ashlar, and vitric are minerals found in silica bricks and were created at high temperatures. Silica refractory brick in Topower Refractory has high stability under high temperature (1620-1670°C) and pressure stresses.



Features Of Silica brick

- Good performance in high temp refractoriness under load
- Super higher cold crush strength character
- Higher temperate resistant with good refractoriness
- Lower impurity content
- Excellent resistance in slag abrasion
- No shrink in burn repeatedly

Applications Of Silica brick

- Hot-blast furnace
- Coke oven
- Glass kiln

Specifications

- Silica contents range from 94% to 96%
- Widely used throughout Hot-blast furnace, coke oven, Glass kiln

Product Data

Properties	JGZ-96	JGZ-95	JGZ-94	JGZ98	
Apparent Porosity (%)	22	22	22	16	
True Density (g/cm ³)	2.34	2.35	2.35	2.31	
Cold Crushing Strength (MPa)	30	30	30	40	
Refractoriness Under Load (°C)	1660	1650	1640	1680	
Chemical Composition (%)	Fe ₂ O ₃ SiO ₂	96 1.0	95 1.2	94 1.4	98.5 0.1
Main Applications	Hot-blast furnace Coke oven Glass kiln				

Product Data

Properties	JGZ-96	JGZ-95	JGZ-94	JGZ98	
Apparent Porosity (%)	22	22	22	16	
True Density (g/cm ³)	2.34	2.35	2.35	2.31	
Cold Crushing Strength (MPa)	30	30	30	40	
Refractoriness Under Load (°C)	1660	1650	1640	1680	
Chemical Composition (%)	Fe ₂ O ₃ SiO ₂	96 1.0	95 1.2	94 1.4	98.5 0.1
Main Applications	Hot-blast furnace Coke oven Glass kiln				



vulcan

Vuulcan Refractories Co., Ltd.

No.108 Huaguang Road,
Zibo City, Shandong Province, China

miameng66@gmail.com
cuikai3030@gmail.com

(+86) 0533-5183030
(+86) 130-5488-5665
Whatsapp: (+86) 13054885665

www.vuulcan.com

Sparking a future of
refractories