



质优、诚信、共赢

QUALITY SUPREMACY, INTEGRITY AND WIN-WIN

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TKBRICKS

异型&高温耐火材料
生产厂家

*SPECIAL-SHAPED&HIGH TEMPERATURE REFRACTORIES
MANUFACTURER*

泰克西(山东)新材料科技有限公司

公司简介

Company profile

泰克西(山东)新材料科技有限公司前身成立于1990年,是以“淄博工业陶瓷厂淄川分厂”与“淄川金属镁厂”为主体组建而成的有限责任公司。公司位于世界短篇小说之王蒲松龄先生的故乡--山东淄川。自成立以来,公司一直致力于耐火材料的升级和研发,走的是“做异、做精、做专”的路线,逐步发展成为以异型、高温耐火材料出口为主的生产型企业。公司主要设备有:148米隧道窑1条,高温梭式窑1750℃ 1座,高温梭式窑1550℃ 2座,630吨压力机1台,500吨压力机1台,400吨压力机3台,振动成型压力机2台,振动成型大砖自动化生产线2条。

泰克西新材拥有以下七大系列耐火材料:焦炉硅砖、零膨胀硅砖;玻璃窑炉大砖及配套产品;水泥窑炉用砖;焚烧炉和干熄焦炉碳化硅砖;高温系列耐火砖:氧化铝空心球砖、刚玉砖、刚玉莫来石砖、莫来石砖、锆莫来石砖、红柱石砖、硅线石砖、高铝砖;低温系列耐火砖:SK系列粘土砖、窑车砖、大型预制件、磷酸盐砖;不定形耐火材料制品。其中公司优势产品为玻璃窑炉粘土大砖、焦炉硅砖和异型砖。产品应用于冶金、玻璃、建材、石化等世界范围内的行业。其中“TK BRICKS”为公司的国际品牌,主导公司的国际贸易业务。产品现已出口到美国、法国、哥伦比亚、阿尔及利亚、摩洛哥、澳大利亚、英国、韩国、日本、南非、印度尼西亚、巴拉圭、新西兰等20几个国家和地区。

泰克西新材积极响应国家产业技术政策和环保政策,致力于企业的改造升级和产品结构调整,创新履行社会责任,为打造绿色环保耐火材料企业而不懈努力。“海纳百川,有容乃大,以诚相见,言而有信”,泰克西新材始终遵循“忠诚诚信交朋友,踏踏实实干事业”的原则,恭迎国内外客户指导和业务洽谈!

The predecessor of TK BRICKS (Shandong) Refractories Co., Ltd. was established in 1990. It is a limited liability company established with "Zichuan Branch of Zibo Industrial Ceramics Factory" and "Zichuan Metal Magnesium Factory" as the main body. Since its establishment, the company has been committed to the upgrading and research and development of refractory materials, taking the route of "special-shaped, refined, and specialized", and has gradually developed into a production-oriented enterprise mainly exporting special-shaped and high-temperature refractory materials. The main equipment of the company are: 1 tunnel kiln with 148 meters, 1 high temperature shuttle kiln at 1750°C, 2 high temperature shuttle kilns at 1550°C, 1 630-ton press, 1 500-ton press, and 3 400-ton presses, 2 vibration forming presses, and 2 automatic production line for vibration forming large bricks.

TK has the following seven series of refractory materials: coke oven silica bricks, zero expansion silica bricks; large glass kiln bricks and supporting products; cement kiln bricks; lincinerator and coke dry quenching SIC bricks; high temperature series refractory bricks: alumina hollow balls Bricks, corundum bricks, corundum bricks, mullite bricks, mullite bricks, zirconium mullite bricks, andalusite bricks, sillimanite bricks, high alumina bricks; low temperature series refractory bricks: SK series clay bricks, kiln car bricks, Large prefabricated parts, phosphate bricks; unshaped refractory products. Among them, the company's dominant products are glass kiln clay bricks, coke oven silica bricks and special-shaped bricks. Products are used in metallurgy, glass, building materials, petrochemical and other industries around the world. Among them, the company's dominant products are glass kiln clay bricks, coke oven silica bricks and special-shaped bricks. Products are used in metallurgy, glass, building materials, petrochemical and other industries around the world. "TK BRICKS" is the company's international brand, leading the company's international trade business. Products have been exported to more than 20 countries and regions such as the United States, France, Colombia, Algeria, Morocco, Australia, the United Kingdom, South Korea, Japan, South Africa, Indonesia, Paraguay, and New Zealand.

TK is actively responds to the national industrial technology policy and environmental protection policy, is committed to the transformation and upgrading of enterprises and product structure adjustment, innovatively fulfills social responsibilities, and makes unremitting efforts to build a green and environmentally friendly refractory material enterprise. "All rivers are open to the sea, tolerance is great, meet each other with sincerity, and keep the word", TK always follows the principle of "loyalty, making friends, and doing business in a down-to-earth manner", and welcomes domestic and foreign customers for guidance and business negotiation!



1.工厂大门 FACTORY GATE



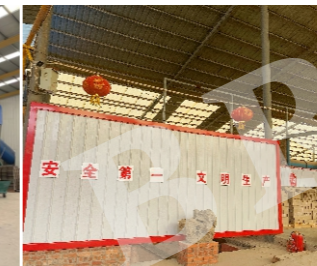
2.工厂刻石 FACTORY CRAVED STONE



3.配料系统 BATCHING SYSTEM



4.成型系统 FORMING SYSTEM



5.148米 隧道窑148M TUNNEL KILN



6.高温梭式窑SHUTTLE KILN



7.氧化铝空心球砖烧制 ALUMINA HOLLOW BALL BRICK FIRING



8.加工系统 PROCESSING SYSTEM



9.成品库 FINISHED BRICKS ZONE



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焦炉硅砖、熔融石英硅砖

1、Silica Brick 硅砖

焦炉硅砖物理性能：

- (1)荷重软化温度高。
- (2)热导率高。
- (3)高温时有良好的抗热震性。
- (4)高温体积稳定。

用途：

蓄热室墙、斜道、燃烧室、炭化室、炉顶



Performance:

The softening temperature under load is high.
High thermal conductivity.
Good thermal shock resistance at high temperature.
High temperature volume stability.

Uses:

Coke oven regenerator wall, chute, combustion chamber, carbonization chamber, furnace roof.

Items 项目	Silica Brick 硅砖			
	BG-94	BG-95	BG-96A	BG-96B
Al2O3 %	≤1.5		≤0.5	
Fe2O3 %	≤1.5		≤0.8	≤0.7
SiO2 %	≥94	≥95	≥96	
K2O+Na2O %	CaO≤2.5			
RefractorinessR °C 耐火度	≥1710		≥1710	
Refractoriness under Load KD °C 荷重软化温度	KD≥1650		KD≥1680	
Permanent Linear Change % 永久线变化	1450°C×2h 0~+0.2		1450°C×2h 0~+0.2	
Apparent Porosity % 显气孔率	≤24	≤22	≤21	
Bulk density g/cm3 密度	≤2.33 True Density 真密度	≤2.34 True Density 真密度	≤2.35 True Density 真密度	
Cold crushing strength Mpa 常温耐压强度	≥30	≥35	≥35	
0.2MPa creep rate % 蠕变率 (1000 °C)	≤1.0% Residue quartz残余石英率		≤1.0% Residue quartz残余石英率	

膨胀硅砖---熔融石英砖

性能：

具有极低的热膨胀系数、
优良的耐急冷急热性、
良好的高温结构强度、
SiO2含量高

用途：

该产品可广泛应用于各种焦炉的快速热修复工程当中，
该产品在使用时不发生裂纹剥落现象，接近零的低热膨胀性能，使焦炉修补后，长期使用安全可靠。

Zero expansion silica brick--- Fused silica brick

Performance:

Low coefficient of thermal expansion
Excellent resistance to rapid cooling
Rapid heating,
Good structural strength at high temperature
High SiO2 content.

Uses:

In the rapid thermal repair of various coke ovens.
The product does not have cracks and spalling during use,
and the low thermal expansion performance is close to zero,
which makes the coke ovens safe and reliable for long-term use after repairing.

Items 项目	Fused Silica Brick 零膨胀硅砖
Al2O3 % + Fe2O3 %	≤0.3
SiO2 %	≥99.0
Refractoriness under Load 0.2MPa KD °C 荷重软化温度	≥1600
Permanent Linear Change % 永久线变化	1450°C×2h0~+0.2
Apparent Porosity % 显气孔率	≤20
Bulk density g/cm3 密度	≥1.80
Cold crushing strength Mpa 常温耐压强度	≥45
Thermal vibration resistance (1100°C, water-cooled, non-cracking) 抗热振系数(1100°C, 水冷, 不裂)	≥30
Thermal expansivity 热膨胀数(1000 °C)	≤0.20

玻璃窑用耐火制品

GLASS FURNACE BIG CLAY BRICK

1. 玻璃窑粘土大砖

工艺: 振动成型。将特种耐火浇注料放在特定模具里, 利用大型平板振动台振动成型, 半成品烘干后经高温烧制, 再经切磨工艺加工而成。

主要原材料: 淄博产焦宝石, Al₂O₃含量为44%左右, Fe₂O₃<2%。成分稳定, 质地均匀、结构致密, 断面呈贝壳状, 白色, 用于生产优质粘土质耐火材料。

性能: 抗玻璃液腐蚀性和抗碱侵蚀性能好

无剥落

热震稳定性好

加工精度高, 安装方便

其理化指标及外观均优于国家标准

用途: 用于玻璃窑炉窑底, 浮法玻璃窑炉锡槽底, 玻璃电炉等部位。



1. Glass Furnace big clay brick

Process: Vibration molding. The special refractory castable is placed in specific moulds, vibrated with a large flat vibration table, and the semi-finished product is dried and fired at high temperature, and then processed by cutting and grinding.

Main raw materials: The flint clay (particles) produced in Zibo, Al₂O₃ content is about 44%, Fe₂O₃<2%. The composition is stable, the texture is uniform, the structure is dense, the section is shell-like and white, and it is used for the production of high-quality clay refractories.

Performance: Good resistance to glass liquid corrosion and alkali corrosion

No peeling

Good thermal shock stability

High machining accuracy and easy installation

Its physical and chemical indicators and appearance are better than national standards

Uses: Used for glass furnace bottom, float glass furnace tin tank bottom, glass electric furnace and other parts.

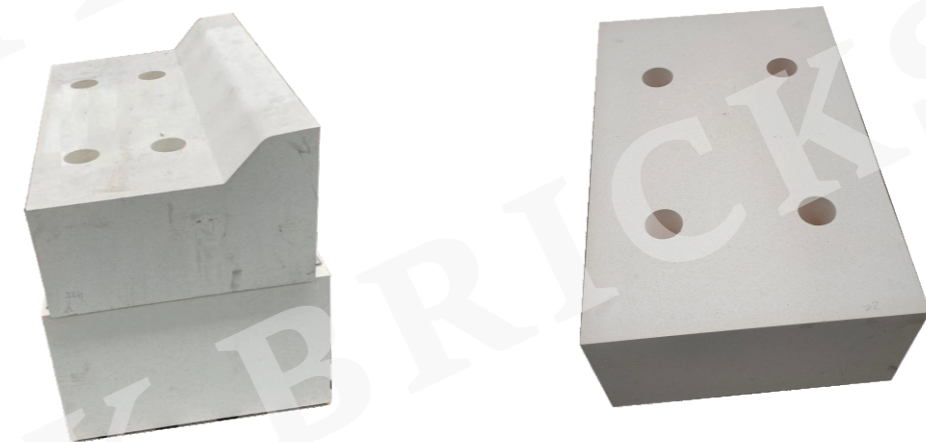
Items 项目	Physical and Chemical Indexes 理化指标	
	BN-40	BN-60
Al ₂ O ₃ %	≥43	≥61
Fe ₂ O ₃ %	≤1.3	≤1.3
Apparent Porosity (%) 显气孔率	≤18	≤19
Bulk Density (g/cm ³) ≥ 体积密度	2.35	2.45
Refractoriness °C ≥ 耐火度	1750	1770
Cold Crushing Strength MPA ≥ 常温耐压强度	50	60
Refractoriness under load, °C 荷重软化温度, °C	1400	1550
Variation of Re-Burning Line 1400°C × 2h 重烧线变化	+0.1/-0.4	+0.1/-0.3

玻璃窑用耐火制品

GLASS FURNACE BIG CLAY BRICK

2. 玻璃窑用耐火制品-锡槽底砖 BARH BOTTOM BRICK

Items 项目	Physical and Chemical Indexes 理化指标
	BARH BOTTOM BRICK
Al ₂ O ₃ %	43-49
Fe ₂ O ₃ %	≤1.0
Apparent Porosity (%) 显气孔率	18
Bulk Density (g/cm ³) ≥ 体积密度	2.4
Refractoriness °C ≥ 耐火度	1750
Cold Crushing Strength MPA ≥ 常温耐压强度	55
Refractoriness under load, °C 荷重软化温度, °C	1450
Variation of Re-Burning Line 1400°C × 2h 重烧线变化	+0.0/-0.2
H Diffusion Index H扩散指数 (mmH ₂ O) ≤	100
Thermal Shock Stability (1000°C, Water Cooling) 热震稳定性 ≥	10



玻璃窑用耐火制品

锆英石砖

GLASS FURNACE BIG CLAY BRICK

ZIRCON BRICK



Items 项目	Zircon brick Physical and Chemical Indexes 锆英石砖理化指标	
	Z-60	Z-65
ZrO ₂ %	≥60	≥65
Fe ₂ O ₃ %	≤0.3	≤0.2
SiO ₂ %	≤38	≤34
Apparent Porosity % 显气孔率	≤22	≤20
Bulk Density (g/cm ³) ≥ 体积密度	≥3.50	≥3.70
Cold crushing strength Mpa 常温耐压强度	≥100	≥120
Refractoriness under load, °C 荷重软化温度, °C	≥1630	≥1680

回转窑用耐火砖

ROTARY KILN REFRACTORY BRICK

Items 项目	Magnesia-alumina spinel bricks 镁铝尖晶石砖	Magnesia-hercynite spinel Brick 镁铁铝尖晶石砖
MgO %	≥80	≥66
Fe ₂ O ₃ %	*	≥4
Al ₂ O ₃ %	≤10	≥4
Apparent Porosity % 显气孔率	≤19	≤18
Bulk Density (g/cm ³) ≥ 体积密度	≥2.85	≥2.90
Thermal shock resistance 1100°C ≥ 热震稳定性 (1100°C 水冷)	≥10	≥6
Cold crushing strength Mpa 常温耐压强度	≥40	≥50
Refractoriness under Load 0.2MPa KD °C 荷重软化温度	≥1650	≥1650
Thermal conductivity (hot surface temperature 1000°C) W/m.k 导热系数 (热面温度 1000°C) W/m.k	*	3.5



硅线石砖

SILLIMANITE BRICK

Items 项目	Sillimanite brick Physical and Chemical Indexes 硅线石砖理化指标	
	AS-60	AS-65
Al ₂ O ₃ %	≥60	≥65
Fe ₂ O ₃ %	≤1.3	≤1.0
Apparent Porosity % 显气孔率	≤18	≤20
Bulk Density (g/cm ³) ≥ 体积密度	≥2.4	≥2.45
Refractoriness °C ≥ 耐火度	≥1750	≥1770
Cold crushing strength Mpa 常温耐压强度	≥60	≥80
Refractoriness under load, °C 荷重软化温度, °C	≥13.5	≥6



Items 项目	SiC-Mullite brick 硅莫砖	SiC-Mullite- Andalusite brick 硅莫红砖
Al ₂ O ₃ %	≥63	≥66
SiC+SiO ₂ %	≥30	≥30
Apparent Porosity % 显气孔率	≤17	≤20
Bulk Density (g/cm ³) ≥ 体积密度	≥2.75	≥2.70
Thermal shock resistance 1100°C ≥ 热震稳定性 (1100°C 水冷)	≥10	≥15
Cold crushing strength Mpa 常温耐压强度	≥85	≥95
Refractoriness under Load 0.2MPa KD °C 荷重软化温度	≥1680	≥1680
Thermal conductivity (hot surface temperature 1000°C) W/m.k 导热系数 (热面温度 1000°C) W/m.k		1.7
Wear resistance 常温耐磨性		8

回转窑用耐火砖

ROTARY KILN REFRACTORY BRICK

耐碱砖

ALKALI RESISTANT BRICK

粘土砖

AL-42 CLAY BRICK



Items 项目	Alkali resistant brick	AL-42	Al70
Al ₂ O ₃ %	≥35	≥42	≥70
Fe ₂ O ₃ %	≤2.0	≤1.5	≤1.5
Apparent Porosity % 显气孔率	≤21	≤18	≤20
Bulk Density (g/cm ³) ≥ 体积密度	≥2.20	≥2.25	≥2.55
Refractoriness °C ≥ 耐火度	≥1450	≥1700	≥1770
Cold Crushing Srength MPA ≥ 常温耐压强度	≥40	≥50	≥60
Refractoriness under load, °C 荷重软化温度, °C	≥1350	≥1400	≥1470

高铝砖

HIGH ALUMINA BRICK



磷酸盐砖

PHOSPHATE BRICK

Items 项目	Phosphate brick 磷酸盐砖
Al ₂ O ₃ %	≥75
Fe ₂ O ₃ %	≤2.1
Apparent Porosity % 显气孔率	≤21
Bulk Density (g/cm ³) ≥ 体积密度	≥2.75
Refractoriness °C ≥ 耐火度	≥1770
Cold Crushing Srength MPA ≥ 常温耐压强度	≥75
Refractoriness under load, °C 荷重软化温度, °C	≥1350

焚烧炉和干熄焦炉用耐火材料

INCINERATORS AND COKE DRY QUENCHING SIC BRICK

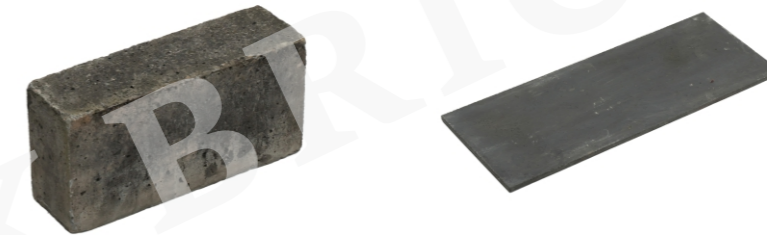
性能特点:

- (1) 高强度和良好的耐磨性, 以抵抗固体物料的磨损和热气流的冲刷;
- (2) 良好的体积稳定性和耐酸性, 以抵抗炉内酸性物质的侵蚀;
- (3) 良好的抗震性, 以抵抗炉温的变化对材料的破坏;
- (4) 良好的CO侵蚀能力, 以避免因CO侵蚀而因其炉衬崩裂;
- (5) 良好的设施性(不定型);
- (6) 良好的耐热、隔热性。



Characteristics:

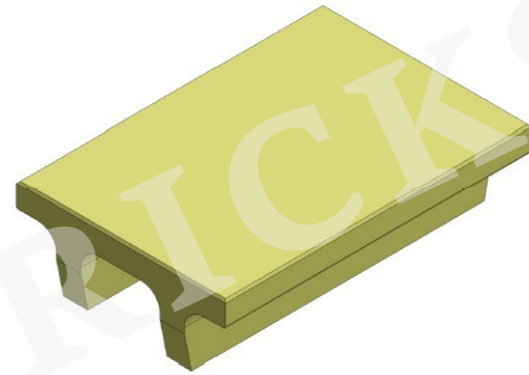
- (1) High strength and good wear resistance to resist the wear of solid materials and the erosion of hot air;
- (2) Good volume stability and acid resistance to resist the erosion of acid substances in the furnace;
- (3) Good shock resistance to resist the damage to materials caused by changes in furnace temperature;
- (4) Good CO erosion ability to avoid cracking of the furnace lining due to CO erosion;
- (5) Good facilities (unshaped);
- (6) Good heat resistance and heat insulation



Items 项目	Physical and Chemical Indexes 理化指标		
	SiC-85	SiC-65	SiC-40 (复合材料)
SiC %	≥85	≥65	≥40
Al ₂ O ₃ %	≤2	≤8	
Apparent Porosity (%) 显气孔率	≤11	≤12	≤24
Bulk Density (g/cm ³) ≥ 体积密度	≥2.7	≥2.50	≥2.76
Refractoriness °C ≥ 耐火度	≥1750	≥1770	≥1700
Cold Crushing Srength MPA ≥ 常温耐压强度	≥80	≥70	≥132
Thermal Conductivity (1000°C/W.(m.K))-1 导热率	≥13.5	≥6	
Abrasion resistance (m3) 抗磨损性			4.34
Themak shock resistance (cycles) (1100)热振稳定性, 次			≥50

窑车砖

KILN CAR BRICK



Items 项目	窑车砖 Kiln Car Brick 炉门衬砖 Door Lining Brick	
	Cordierite Brick 堇青石	AL-42 42粘土砖
Al2O3 %	≥38	≥42
MgO %	≥3.8	
Bulk Density (g/cm3) 密度	≥2.15	≥2.20
Refractoriness °C ≥ 耐火度	≥1550	≥1650
Refractoriness under load, °C 荷重软化温度, °C	≥1300	≥1350
Permanent Linear Change % 加热线变化	1300°C × 2h +0.1~-0.4	1350°C × 3h +0.2~-0.5
Apparent Porosity % 显气孔率	≤22	≤20
(1200°C) Thermal shock resistance (cycles) 耐热循环次数	≥50	≥30
Cold crushing strength Mpa 常温耐压强度	≥45	≥50

刚玉砖

CORUNDUM BRICK

刚玉莫来石砖

CORUNDUM-MULLITE BRICK

莫来石砖

MULLITE BRICK



Items 项目	Physical and Chemical Indexes 理化指标				
	75Mullite Brick 75莫来石砖	80Mullite Brick 80莫来石砖	90Corundum Brick 90刚玉砖	95Corundum Brick 95刚玉砖	99Corundum Brick 99刚玉砖
Al2O3 %	≥75	≥80	≥90	≥95	≥99
Fe2O3 (%)	≤0.6	≤0.6	≤0.2	≤0.2	≤0.1
Apparent Porosity (%) 显气孔率	≤18	≤19	≤19	≤18	≤18
Bulk Density (g/cm3) ≥ 体积密度	≥2.6	≥2.7	≥3.0	≥3.15	≥3.20
Cold Crushing Strength MPA ≥ 常温耐压强度	≥90	≥80	≥100	≥100	≥120
Refractoriness under load, °C 荷重软化温度, °C	≥1630°C	≥1650°C	≥1700°C	≥1700°C	≥1700°C

氧化铝空心球砖

ALUMINA BUBBLE BRICK

氧化铝空心球砖,是由氧化铝空心球和氧化铝粉为主要原料,结合其他的结合剂,经过高温烧制而成。属于超高温材料节能保温材料的一种。



1、使用温度高

可达1750度以上,热稳定性好。重烧线变化率小,使用更长久。

2、优化结构,减轻炉体重量

3、节约材料

4、节省能源

氧化铝空心球有明显的保温特性,导热系数低,可以起到很好的保温效果,减少热量散发,提高热效率,从而起到节约能源的目的。节能效果可达30%以上。

Alumina hollow ball bricks are made of alumina hollow balls and alumina powder as the main raw materials, combined with other binders, and fired at high temperature. It belongs to a kind of ultra-high temperature material energy-saving thermal insulation material.

1. High temperature

It can reach more than 1750 degrees and has good thermal stability.

2. Optimize the structure and reduce the weight of the furnace

3. Material saving

4. Save energy

Low thermal conductivity, which can play a good thermal insulation effect, reduce heat dissipation, and improve thermal efficiency, thereby saving energy. The energy saving effect can reach more than 30%.

Items 项目	Physical and Chemical Index 理化指标			
Al ₂ O ₃ %	≥80	≥85	≥90	≥98
Fe ₂ O ₃ (%)	≤0.3	≤0.3	≤0.3	≤0.3
Max Service °C 最高使用温度	≥1650	≥1680	≥1700	≥1700
Apparent Porosity (%) 显气孔率	≤22	≤22	≤22	≤22
Bulk Density (g/cm ³) ≥ 体积密度	1.40-1.80	1.40-1.80	1.40-1.80	1.40-1.80
Cold Crushing Strength MPA ≥ 常温耐压强度	≥12	≥10	≥10	≥8
Refractoriness under load, °C 荷重软化温度, °C	≥1650°C	≥1680°C	≥1700°C	≥1700°C
Thermal expansion coefficient X10 热膨胀系数	1500 °C ≤0.2	1500 °C ≤0.2	1500 °C ≤0.2	1500 °C ≤0.2
Refringing line change rate % 重烧线变化率 %	~7.8	~8.0	~8.0	~8.6
Thermal coefficient w, (m k) ≤ (average temperature 800°C) 导热系数w、(m k) ≤ (平均温度800°C)	0.7	0.8	0.9	1.5

锆莫来石砖

ZIRCONIUM-MULLITE BRICK

锆刚玉砖

ZIRCONIUM-CORUNDUM BRICK



Items 项目	Physical and Chemical Index 理化指标		
	Z6锆莫来石砖	Z25锆莫来石砖	Z-30锆刚玉砖
	Zirconium-mullite brick		
ZrO ₂ %	≥6	≥25	≥30
AL ₂ O ₃ %	≥55	≥45	≥45
Fe ₂ O ₃ (%)	≤0.5	≤0.3	
Apparent Porosity (%) 显气孔率	≤18	≤17	≤20
Bulk Density (g/cm ³) ≥ 体积密度	≥2.9	≥3.0	≥3.2
Cold Crushing Strength MPA ≥ 常温耐压强度	≥80	≥100	≥100
Refractoriness under load, °C 荷重软化温度, °C	≥1650°C	≥1700°C	≥1700°C

红柱石砖

ANDALUSITE BRICK

Items 项目	Physical and Chemical Indexes 理化指标		
	Andalusite Brick 55红柱石砖	Andalusite Brick 60红柱石砖	Andalusite Brick 65红柱石砖
	Al ₂ O ₃ %	≥55	≥60
Fe ₂ O ₃ (%)	≤1.5	≤1.0	≤0.8
Apparent Porosity (%) 显气孔率	≤22	≤21	≤20
Bulk Density (g/cm ³) ≥ 体积密度	≥2.3	≥2.4	≥2.5
Cold Crushing Strength MPA ≥ 常温耐压强度	≥50	≥55	≥60
Refractoriness under load, °C 荷重软化温度, °C	≥1630°C	≥1650°C	≥1700°C
The creep rate of 0.2 MPa	1500 °C	1500 °C	1500 °C
H % (20 ~ 50) 0.2MPa蠕变率 (20~50)h %	≤0.2	≤0.2	≤0.2
Refiring line change rate % 重烧线变化率 %	1500 °C × 4h ±0.2	1500 °C × 4h ±0.2	1500 °C × 4h ±0.2
Thermal shock stability, secondary (1100°C water cooling) 热震稳定性次(1100 °C 水冷)	950°C ≥30	950°C ≥30	950°C ≥30



低气孔粘土砖

LOW POROSITY CLAY BRICK



Items 项目	Low Porosity Clay Brick 低气孔砖			
	DN-10	DN-12	DN-15	DN-17
Al ₂ O ₃ %	≥46	≥45	≥42	≥40
Fe ₂ O ₃ %	≤1.1	≤1.2	≤1.5	≤2.0
Bulk density g/cm ³ 密度	≥2.40	≥2.37	≥2.30	≥2.25
Refractoriness R °C 耐火度	≥1700	≥1690	≥1750	≥1770
Refractoriness under Load KD °C 荷重软化温度	≥1520	≥1500	≥1470	≥1420
Permanent Linear Change % 加热线变化	1400°C × 2h +0.0	1400°C × 3h +0.05~-0.10	1400°C × 3h +0.1~-0.2	1400°C × 2h +0.1~-0.4
Apparent Porosity % 显气孔率	≤10	≤12	≤15	≤17
Cold crushing strength Mpa 常温耐压强度	≥65	≥65	≥55	≥50

粘土砖

CLAY BRICK



SK 系列砖

SK SERIES BRICK

Items 项目	HIGH ALUMINA BRICK 高铝砖			
	LZ-55 三级高铝砖	LZ-65 二级高铝砖	LZ-75 一级高铝砖	LZ-80 特级高铝砖
Al ₂ O ₃ %	≥55	≥66	≥75	≥80
Fe ₂ O ₃ (%)	≤2.6	≤2.0	≤2.0	≤1.8
Apparent Porosity (%) 显气孔率	≤24	≤20	≤19	≤18
Bulk Density (g/cm ³) ≥ 体积密度	2.35	2.50	2.60	2.70
Refractoriness °C ≥ 耐火度	1700	1770	1790	1790
Cold Crushing Strength MPA ≥ 常温耐压强度	50	60	70	80
Refractoriness under load 0.2Mpa, °C 0.2Mpa荷重软化温度, °C	1420	1460	1510	1550

Items 项目	CLAY BRICK 粘土砖			
	N-1	N-2a	N3	N4
Al ₂ O ₃ %	≥42	≥40	≥40	≥36
Apparent Porosity (%) 显气孔率	≤22	≤24	≤24	≤24
Bulk Density (g/cm ³) ≥ 体积密度	2.2	2.15	2.10	2.05
Refractoriness °C ≥ 耐火度	1750	1730	1690	1600
Cold Crushing Strength MPA ≥ 常温耐压强度	30	25	25	20
Refractoriness under load 0.2Mpa, °C 0.2Mpa荷重软化温度, °C	1400	1350	1330	1300

Items 项目	SK SERIES SK 系列			
	SK-32	SK-34	SK-36	SK-38
Al ₂ O ₃ %	≥36	≥42	≥55	≥72
Fe ₂ O ₃ %	≤2.5	≤2.2	≤2	≤1.8
Apparent Porosity (%) 显气孔率	≤24	≤22	≤20	≤19
Bulk Density (g/cm ³) ≥ 密度	≥2.15	≥2.20	≥2.25	≥2.43
Refractoriness °C ≥ 耐火度	≥1700	≥1730	≥1750	≥1780
Cold Crushing Strength MPA ≥ 常温耐压强度	≥35	≥40	≥50	≥60

耐酸缸砖 焦炉缸砖

QUARRY BRICK



Items 项目	Physical and Chemical Indexes 理化指标		
	Acid Quarry brick 耐酸刚装	Coke Quenching Quarry brick 焦炉缸砖	Coke Wharf Quarry brick 凉焦台缸砖
Al ₂ O ₃ %	≥80	≥85	≥90
Fe ₂ O ₃ (%)	≤0.3	≤0.3	≤0.3
Max Service °C 最高使用温度	≥1650	≥1680	≥1700
Apparent Porosity (%) 显气孔率	≤22	≤22	≤22
Bulk Density (g/cm ³) ≥ 体积密度	1.40-1.80	1.40-1.80	1.40-1.80
Cold Crushing Strength MPA ≥ 常温耐压强度	≥12	≥10	≥10
Refractoriness under load, °C 荷重软化温度, °C	≥1650°C	≥1680°C	≥1700°C
Refiring line change rate % 热膨胀系数	1500°C ≤0.2	1500°C ≤0.2	1500°C ≤0.2
Refiring line change rate % 重烧线变化率 %	~7.8	~8.0	~8.0
Thermal coefficient w, (m k) ≤ (average temperature 800°C) 导热系数w, (m k) ≤ (平均温度800°C)	0.7	0.8	0.9



耐火浇注料

大型预制件

REFRACTORY CASTABLE

LARGE PREFABRICATED BRICK

Items 项目	Heavy Weight Castable				Light Weight Castable				
	重质浇注料				轻质浇注料				
	A-90	A-75	A-70	A-40	QA-90	QA-70	QA-60	QA-40	
Al ₂ O ₃ %	≥90	≥75	≥70	≥40	≥90	≥70	QA-60	≥40	
Refractoriness °C	≥1790	≥1790	≥1750	≥1730	≥1790	≥1790	≥60	≥1700	
Bulk Density (g/cm ³) 密度	≥2.9	≥2.5	≥2.4	≥2.2	1.2-1.8	0.8-1.6	≥1750	0.6-1.4	
Cold Crushing Strength Mpa	110°C×24h	≥50	≥50	≥50	≥40	5-15	5-15	0.6-1.4	3-13
	1500°C×3h	≥70	≥70	≥70	≥50	8-20	8-20	3-13	6-16
Modulus of Rupture Mpa	110°C×24h	≥8	≥8	≥6	≥5			6-16	
	1500°C×3h	≥10	≥10	≥8	1350°C×3h ≥6				
Thermal Conductivity /W. (m.K) (300°C±25°C)					0.4-0.6	0.4-0.6		0.3-0.5	
Permanent Linear Change %	110°C×4h							0.3-0.5	
	1500°C×3h	±0.5	±0.5	±0.5	1350°C×3h ±0.5	±0.6	±0.6	1450°C×3h ±0.6	1300°C×3h ±0.6
Max service temperature /°C	1700	1600	1500	1400	1700	1600	1400	1300	

保温砖

INSULATION BRICK



Items 项目	INSULATION BRICK 保温砖					
	JM20	JM23	JM26	JM28	JM30	JM32
Al ₂ O ₃ %	≥35	≥42	≥48	≥52	≥58	≥65
Bulk density g/cm ³ 密度	0.6~1.0	0.6~1.0	0.6~1.0	1.0	1.2	1.3
Cold crushing strength Mpa 常温耐压强度	2-5	2-5	2-5	5	8	10
Refractoriness R °C 耐火度	≥1200	≥1300	≥1400	≥1450	≥1550	≥1600
Permanent Linear Change % 线膨胀率	1200°C×6h ≤0.5	1300°C×8h ≤0.5	1400°C×8h ≤0.5	1450°C×8h ≤0.5	1550°C×8h ≤0.4	1600°C×8h ≤0.4
Max Service Temperature °C 最大使用温度	1250	1350	1450	1500	1550	1600
W/m.K ≤ 导热率	0.24	0.24	0.24	0.38	0.42	0.48

电厂、水泥回转窑
熔铝炉口用不定形耐火材料

Un-shaped refractories for power plants,
cement rotary kiln, molten aluminum furnace openings

Items 项目	HX series wear resistant castables HX系列耐磨浇注料					
	SiC 碳化硅	Corundum 刚玉	HX160	HX135	HX130	Normal
Al ₂ O ₃ %		≥90	≥70	≥50	≥50	≥40
SiC %	≥70					
Refractoriness °C	≥1790	≥1790	≥1750	≥1750	≥1750	≥1690
Bulk density g/cm ³ 密度	≥2.6	≥3.0	≥2.8	≥2.6	≥2.4	≥2.2
Cold Crushing StrengthMPa	110°C×24h ≥60	≥65	≥60	≥50	≥40	≥35
常温耐压强度	1500°C×3h ≥80	≥82	≥80	≥70	≥55	≥45
Modulus of Rupture Mpa	110°C×24h ≥8	≥9	≥8	≥7	≥6	≥5
常温抗折强度	1500°C×3h ≥10	≥11.5	≥10	≥9	1≥8	≥7
Permanent Linear Change %	1500°C×3h ±0.5	±0.1	±0.15	±0.2	±0.2	±0.2
Abrasive Resistance 耐磨性cm ³	15	12	10	8	7	6

锆质捣打料

ZIRCONIUM RAMMING MATERIAL

Items 项目	锆刚玉	Si-96
	Zr-Fused Alumina	Zr
ZrO ₂ %	≥30	≥60
Al ₂ O ₃ %	≥45	≥1.5
SiO ₂ %	≤20	≤32
Fe ₂ O ₃ %	≤1.5	≤1.5
RefractorinessR °C 耐火度	≥1700	≥1700
Refractoriness under loadT ₂ °C 荷重软化温	≥1700	≥1750
Bulk density g/cm ³ 密度	≥3	≥3.3

硅质热补料

SILICA MENDING MATERIAL

Items 项目	Si-94.5	Si-96
	1#	2#
Al ₂ O ₃ %	≥94.5	≥96
RefractorinessR °C 耐火度	≥1700	≥1700
Refractoriness under loadT ₂ °C 荷重软化温	≥1500	≥1650
Modulus of ruptureMPa 抗折强度	110°C×24h	≥35
	400°C×24h	≥35
Bulk density g/cm ³ 密度	≤0.2	≤0.2

陶瓷纤维制品

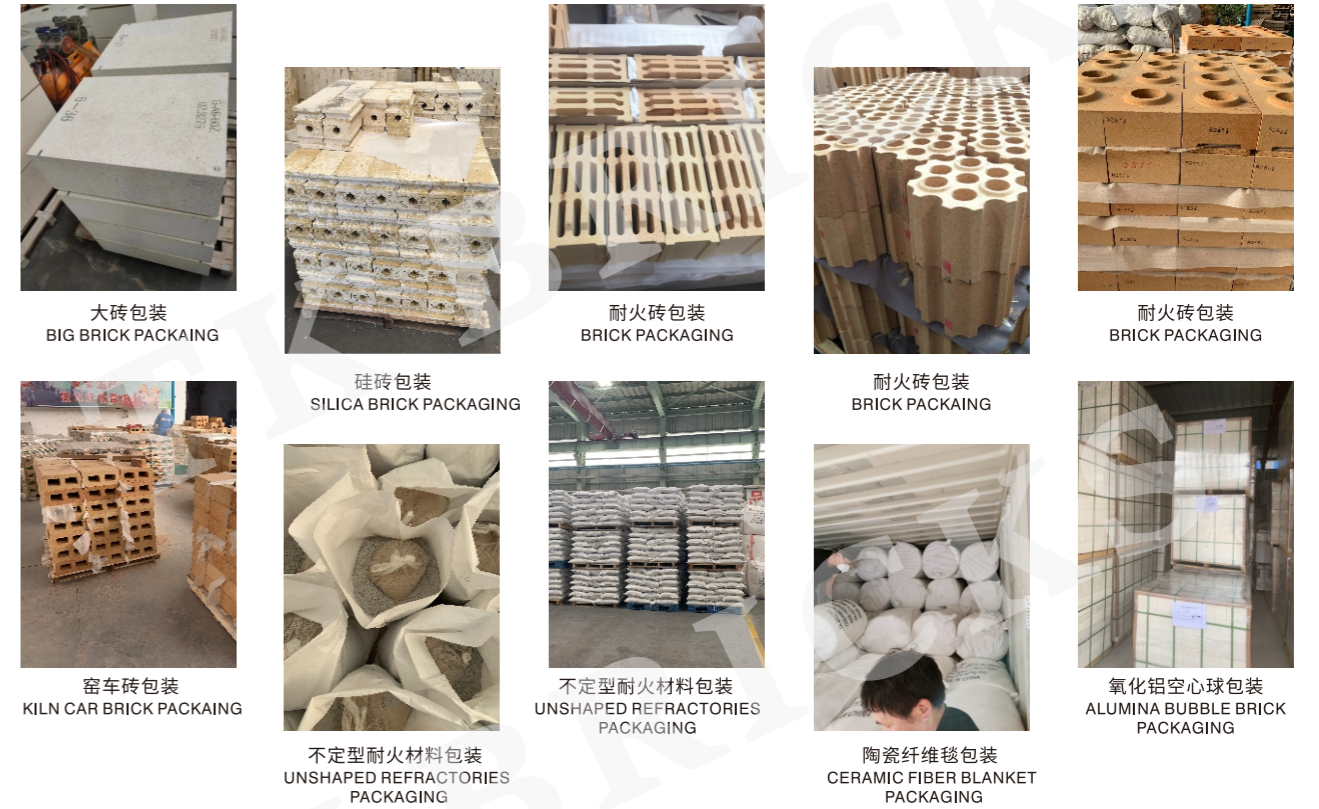
CERAMIC FIBER PRODUCTS



Items 项目	CERAMIC FIBER PRODUCTS 陶瓷纤维制品				
	COMMON 普通	STANDARD 标准	H PURE 高纯	H ALUMINA 高铝	ZIRCONIUM 含锆
Al ₂ O ₃ %	≥44	≥40	≥47	≥52	≥39
Fe ₂ O ₃ %	1.2	1	0.2	0.2	
ZrO ₂ %					≥15
Bulk density g/cm ³ 密度	96/128	96/128	96/128	128/160	128/160
Classification Temperature °C 分类温度	1100	1260	1260	1360	1430
Working Temperature °C 工作温度	1000	1050	1100	1200	1350
Permanent Linear Shrinkage % (after 24hours density 128kg/m ³) 永久线收缩率	-4	-3	-3	-3	-3
	1000°C	1000°C	1100°C	1250°C	1350°C
Tensile Strength(Mpa) Density 128kg/m ³) 抗拉强度	0.24	0.24	0.24	0.38	0.42

包装展示

PACKAGING DISPLAY



部分业绩

SOME ACHIEVEMENTS

