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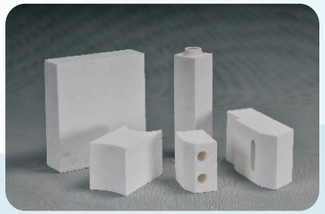
SINCE 1986

SHENNAN REFRACTORY






SNR Zhengzhou Shennan Refractory CO., LTD

ADD：Shennan Road，Heluo town, zhengzhou,Henan,China
TEL：+86-371-64152229 / 64151699 FAX：0371-86036378
URL：www.snrefractory.com E-MAIL：info@snrefractory.com

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Providing Continuous Innovation Refractories Solution To Customer

Shennan Refractory (SNR) founded in 1986 and located in Zhengzhou China, it's dedicated to the development, manufacture, management and service in the field of refractory materials. Armed with strong technical force, well-equipped facilities, advanced technologies and complete laboratory testing methods, it has established long-term friendship and cooperation with many domestic scientific research instisutions and universities. Shennan Refractory (SNR) have well-equipped with one set of 1200T, two sets of 630T and two sets of 400T electric CNC friction screw press, ten sets of hydraulic vibration forming machines, seven 1750℃ high temperature gas shuttle kiln, eight large-scale brick sawing, cutting and grinding machines and one advanced refractories testing center.

Shennan Refractory (SNR) is well known in domestic markets and abroad for the variety and quality of products. Products have been sold to more than 25 countries such as America, Germany, France, Spain, Italy, Japan, Korea, etc. The main products include Silica Brick, High Alumina Bubble Brick, Tank Bottom Big Fireclay Block, Sillimanite Brick, Corundum Brick, Zircon Brick, Mullite Brick, Magnesia Brick, High Alumina Brick, Insulating Bricks, Low Porosity Fireclay Brick and ramming mass, castables and refractory mortar of related materials.

The company's obligation is to supply high quality material, make long Lifetime of Glass Furnace. We will always improve ourselves to better serve for the customers all over the world.

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Silica Brick

Item		BG-94	BG-95	BG-96A
Chemical composition	SiO_2	≥94	≥95	≥96
	Fe_2O_3	≤1.5	≤1.5	≤0.8
	$Al_2O_3+TiO_2+R_2O$		≤1.0	≤0.5
Refractoriness ℃		1710	1710	1710
Apparent Porosity%		≤22	≤21	≤21
Bulk Density g/cm^3		≥1.8	≥1.8	≥1.8
True Density,g/cm^3		≤2.38	≤2.38	≤2.34
Cold Crushing Strength Mpa		≥24.5	≥29.4	≥35
0.2Mpa Refractoriness Under Load T0.6 ℃		≥1630	≥1650	≥1680
Permanent Linear Change On Reheating （%）1500℃X2h		0~+0.3	0~+0.3	0~+0.3
20—1000℃ Thermal Expansich10-6/℃		1.25	1.25	1.25
Thermal Conductivity (W/MK) 1000℃		1.74	1.74	1.44

Tank Bottom Big Fireclay Block

Item		Index
Physical properties	Refractoriness(℃)	≧1750
	Bulk Density (g/cm^3)	≧2.3
	Apparent Porosity(%)	≦18
	Cold Crushing Strength (MPa)	≧50
	0.2Mpa Softening Temp Under Load(℃)	≧1450
	Permanent Linear Change(%) 1400℃x2h	±0.2
Chemical Composition(%)	Al_2O_3	≧50
	Fe_2O_3	≦1.5

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Magnesia Brick

Item		Index			
		DMZ-95	DMZ-96	DMZ-97	DMZ-98
Chemical composition	MgO %	≥95	≥96	≥97	≥97.5
	SiO_2 %	≤1.5	≤1.2	≤1.0	≤0.5
	CaO %	≤1.5	≤1.2	≤1.2	≤0.6
Apparent Porosity %		≤18	≤18	≤17	≤15
Cold Crushing Strength Mpa		≥55	≥60	≥60	≥60
0.2Mpa Refractoriness Under Load T0.6		≥1650	≥1680	≥1700	≥1700
Bulk Density g/cm3		≥2.95	≥3.0	≥3.05	≥3.05
Thermal Stability 950°C Wind cycles		≥15	≥20	≥20	≥20

Zircon Brick

Item		Zircon Bricks		
		ZS65JA	ZS65JB	Zs60
Chemical Composition	ZrO_2% ≧	65	65	60
	SiO_2% ≦	33	33	36
	Fe_2O_3% ≦	0.3	0.3	0.5
Bulk Density（g/cm^2）≧		3.85	3.75	3.60
Apparent Porosity(%) ≦		16	18	20
Cold Crushing Strength(MPa)≧		100	100	100
0.2MPa Load Softening Start Temperature≧		1700	1700	1500
Thermal Shock Stability		excellent	excellent	

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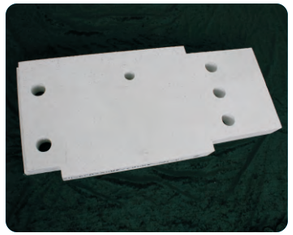
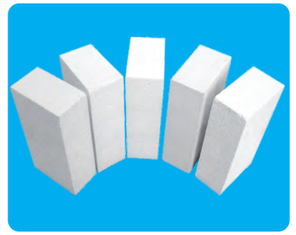
Sillimanite Brick



typical physical &chemical properties:

Item	Sillimanite brick S-65	Sillimanite brick S-60
	LS-65	LS-60
Al_2O_3 %	≥65	≥60
SiO_2 %	≤32	≤37
Fe_2O_3 %	≤0.5	≤1
B.D. g/cm^3	≥2.5	≥2.3
A.P. %	≤18	≤19
C.C.S. MPa	≥80	≥80
R.U.L. °C	≥1650	≥1600

Mullite Brick



Items	Mullite brick M72	Mullite brick M78	Mullite brick M80
Al_2O_3 %	≥72	≥78	≥80
Fe_2O_3 %	≤0.8	≤1.0	≤0.5
Bulk density g/cm^3	≥2.55	≥2.65	≥2.9
Apparent porosity %	≤17	≤18	≤19
Cold crushing strength mpa	≥80	≥80	5
Thermal shock resistance	Excellent	Excellent	Very good
Softening under load	---	≤1700	1700
Thermalexpansion %	--	0.6	0.6
(0.2MPa,0.6%)			

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Light Weight Mullite Brick

Item		JM-23	JM -26	JM -28	JM -30
Classification temperature (℃)		1260	1430	1540	1650
Bulk density (g/cm^3)		0.6	0.8	0.9	1.0
Crushing strength (Mpa)		1.2	1.6	2.1	2.5
Modulus of rupture (Mpa)		0.9	1.4	1.6	2.1
Permanent linear change (CT-30℃X24h)%		0.5	0.4	0.5	0.9
Reversible thermal expansion at 1100		0.5	0.7	0.8	0.9
Thermal conductivity (W/m.k)	400℃	0.14	0.27	0.32	0.41
	600℃	0.16	0.29	0.34	0.43
	800℃	0.18	0.31	0.36	0.44
	1000℃	0.2	0.33	0.38	0.45
	1200℃	-	0.35	0.41	0.47
Chemical Analysis (%)	Al_2O_3	37	58	67	73
	Fe_2O_3	0.7	0.7	0.6	0.5

High Alumina Brick

Item		Index LZ-80	LZ-75	LZ-65	LZ-55	LZ-48
Al_2O_3 ,%		80	≥75	≥65	≥55	≥48
Refractoriness °C		≥1790	≥1790	≥1790	≥1770	≥1750
Bulk density,g/cm3		2.65	2.5	2.45	2.4	2.3
Softening temperature under load		1530	≥1520	≥1500	≥1470	≥1420
Permanent linear change,%	1500°CX2H	+0.1 -0.4	+0.1 -0.4	+0.1 -0.4	+0.1 -0.4	
	1450°CX2H					+0.1 -0.4
Apparent porosity,%		22	+0.1	≤23	≤22	≤22
Cold Crushing strength Mpa		55	-0.4	≥45	≥40	≥35
Application		All industrial furnace				

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Insulating Bricks

Item		Silica	Fire clay			High alumina	
		QG-1.0	NG-0.6	NG-0.8	NG-1.0	LG-0.8	Lg-1.0
Al_2O_3≥	%	-	40	40	40	48	48
SiO_2≥		92	-	-	-	-	-
Fe_2O_3≤	%	-	-	-	-	2.0	2.0
Bulk density≥	g/cm^3	1.0	0.6	0.8	1.0	0.8	1.0
Cold crushing strength≥	Mpa	4.0	1.5	2.5	3.0	3.0	4.0
Testing temp. of reheating linear change≤2%	°C	1400	1200	1250	1350	1400	1400
Thermal conductivity (avg 350°C±25°C)	w/m.k	0.23	0.25	0.35	0.5	0.3	0.5

Low Porosity Fireclay Brick

Item		Three low clay brick	Lower porosity brick		Common clay brick	
		DDD	DN-12	DN-15	N-1	N-2a
Al_2O_3≥	%	46	45	42	-	-
Fe_2O_3≤	%	1.1	1.2	1.5	-	-
Apparent porosity≤	%	10	12	15	22	24
Bulk density≥	g/cm^3	2.40	2.37	2.30	2.15	2.10
Cold crushing strength	Mpa	70	68	60	30	30
Reheating linear change	%	-	+0.05	+0	+0.1	+0.1
Refractoriness under load(0.2Mpa)	°C	1520	-0.1	-0.2	-0.5	-0.5
Creep rate(0.2Mpa 1200°C x50hs) ≤	%	0.1	1500	1470	1400	1370
			-	-	-	-

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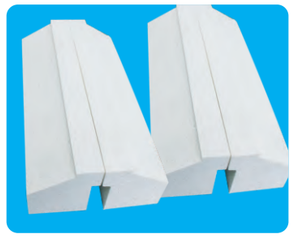
Corundum Brick



Items	Ultra Purity Corundum brick	99 Corundum brick	99 Corundum brick	Corundum Mullite Brick
Al_2O_3 %	≥99.3	≥98.5	≥90	≥80
SiO_2 %	≤0.15	≤0.3	≤8.5	≤18.5
Fe_2O_3 %	≤0.1	≤0.2	≤0.2	≤0.3
Bulk density g/cm^3	≥3.25	≥3.25	≥3.1	≥2.9
Apparent porosity %	≤18	≤18	≤18	≤18
Cold crushing strength MPa	≥100	≥100	≥100	≥100
Refractoriness under load (0.2Mpa,0.6%)	≥1700	≥1700	≥1700	≥1700
Reheating linear change rate (1600℃X 8h)	-0.2	-0.2	0.2	0.2
Thermal expansion % Tem.to 1300℃	8.1	8.1	8.1	7.6

Fused Silica Brick

Item	Fused silica brick	Fused silica saggar	Clay bonded fused silica brick
Max service temperature	1250	1250	1250
SiO_2%	⩾98	⩾98	⩾95
Al_2O_3%	⩽1	⩽1	⩽4
Fe_2O_3%	⩽0.2	⩽0.2	⩽0.3
Bulk density	⩾1.75	⩾1.7	⩾1.75
Cold crushing strength	⩾35	⩾30	⩾30
Themal shock resistance, cycles (1100℃ to cool water)	⩾50	⩾50	⩾40
Refractoriness under load (0.2MPa,0.6%)	⩾1650	⩾1600	—
Thermal expansion coefficient (Room temp to 1000℃)	0.6	0.6	0.8
Typical Application	Fused quartz products have excellent thermal shock resistance, thermal expansion rates close to zero. Can be used as a glass kiln and coke oven self-closed brick and the brick, the chemical industry's acid lining, etc.		