Refractory Bricks

High Alumina Bricks

Item	GL-48	GL-55	GL-65	GGL-65	GLS-70	RL-48	RL-55	RL-65	DRL-130	DRL-140	DRL-150
Al_2O_3 (%)≥	48	55	65	65	70	48	55	65	60	65	75
Fe_2O_3 (%)≤	2	2	2	1.5	2	—	—	—	—	—	—
Refractoriness (℃)≥	1750	1770	1790	1790	1790	1750	1770	1790	—	—	—
Apparent Porosity (%) ≤	18	19	19	19	17	24	24	24	22	22	21
Bulk Density (g/cm^3)≥	—	—	—	—	2.6	—	—	—	2.3	2.46	2.65
Cold Crushing Strength (Mpa)≥	49	49	58.8	60	60	39.2	44.1	49.0	55.0	55.0	60.0
Refractoriness Under Load (℃)≥	1450	1480	1500	1550	1600	1420	1470	1500	—	—	—
Permanent Linear Change (%)	1500℃X2h					1450℃X2h	1500℃X2h		1450℃X2h		1550℃X2h
	0~ -0.2	0~ -0.2	0~ -0.2	0~ +0.2	0~ +0.4	0.1~ -0.4	0.1~ -0.4	0.1~ -0.4	0.1~ +0.4	0.1~ +0.2	0.1~ +0.2
Application	Blast Furnace and Hot-Blast Stoves										

Item	JLZ-75	JHL-75	SHA-60	DL-80	DL-75	BDL-80	BDL-75	AL60	AL70	AL75
Al_2O_3(%)≥	75	75	60	80	75	80	75	60	70	75
Fe_2O_3(%)≤	—	0.8	1.5	—	—	—	—	1.6	1.6	1.5
Refractoriness(℃)≥	1790	1790	1790	—	—	—	—	—	—	—
Apparent Porosity(%)≤	20	18	20	21	21	20	20	19	20	19
Bulk Density (g/cm^3)≥	—	2.65	2.4	—	—	—	—	2.3	2.45	2.6
Cold Crushing Strength (Mpa)≥	65	90	50	75	65	60	55	45	55	60
Refractoriness Under Load (℃)≥	1550	1650	1640	—	—	—	—	1480	1500	1550
Permanent Linear Change (%)	1500℃X2h		—	1500℃X2h					1530℃ X2h	1600℃ X2h
	0.1~ -0.4	0.1~ +0.3	—	0~ 0.3	0~ 0.3	-0.2~ +0.2	-0.2~ +0.2	-0.1~ 0	-0.1~ 0	-0.1~ 0
Application	Coke Oven, Electric Furnace Steel Making									

Fireclay Bricks

Item	ZGN-42	GN-42	ZGN-42	RN-42	RN-40	DRL-130	DRL-125	DRL-120	JNLA	JN40-A	JN40-B	CN-42	CN-40
Al_2O_3(%)≥	42	42	45	42	40	44	42	39	30~36	40	40	42	40
Fe_2O_3(%)≤	1.6	1.7	1.2	—	—	—	—	—	2.5	2.0	2.0	—	—
Refractoriness (℃)≥	1750	1750	1750	1750	1730	—	—	—	1690	1730	1730	1760	1740
Apparent Porosity (%)≤	15	16	13	24	24	18	20	22	24	20	24	18	19
Bulk Density (g/cm^3)≥	—	—	—	—	—	2.3	2.15	2.1	2.0	2.0	2.0	—	—
Cold Crushing Strength (Mpa)≥	58.8	49	58.8	29.4	24.5	40	35	35	25	35	30	39.2	34.3
Refractoriness Under Load (℃) ≥	1450	1430	1500	1400	1350	1340	1300	1260	—	1450	1400	1430	1400
Permanent Linear Change (%)	1450℃X3h				1350℃X2h	1400℃X2h			—	—	—	1400℃X2h	
	0~-0.2	0~-0.3	0~-0.2	0~-0.4	0~-0.3	0.1~0.2	0.1~0.2	0.1~0.2	—	—	—	0~-0.3	0~-0.3
Application	Blast Furnace, Hot-Blast Stoves, Coke Oven, Ladle, Refining Furnace and Reheating Furnace												

Corundum Bricks

Item	GY-90	GY-94	GY-98
Al_2O_3(%)≥	90	94	98
Fe_2O_3(%)≤	1	1	0.3
Refractoriness(℃) ≥	1790	1790	1790
Apparent Porosity(%)≤	16	16	20
Bulk Density(g/cm^3)≥	2.95	3.1	3.1
Cold Crushing Strength(Mpa)≥	80	80	80
Refractoriness Under Load(℃)≥	1620	1650	1700
Permanent Linear Change(%)	1500℃X3h	—	1500℃X3h
	±0.2	—	±0.1
Application	Blast Furnace		

Corundum-Mullite Bricks

Item	GM-65	GM-65a	GM-75	GM-85
SiO_2(%)≤	30	—	20	13
Al_2O_3(%)≥	65	65	75	85
Fe_2O_3(%)≤	1	1	0.5	
Refractoriness(℃)≥	1790	—	1790	1790
Apparent Porosity(%)≤	19	22	22	—
Bulk Density(g/cm^3)≥	2.5	2.4	2.6	3
Cold Crushing Strength(Mpa)≥	90	80	70	—
Refractoriness Under Load(℃)≥	1650	1600	1700	1650
Permanent Linear Change(%)	1500℃X2h	1400℃X2h	1500℃X2h	1500℃X2h
	0~ 0	0~ 0	0~0	-0.5~ +0.5
Application	Hot-Blast Stoves			Blast Furnace

Magnesia Bricks

Item	MZ-97A	MZ-97B	MZ-95A	MZ95B	MZ-93	MZ-91	MZ-89	DMZ98	DMZ97	DMZ96
Density(g/cm³)≥	2.96	2.96	2.94	2.94	2.94	850	900	3.1	3.1	3
Cold Crushing Strength (Mpa)≥	60	60	60	60	60	60	50	90	90	90
Reheating Linear Change (%)	1650℃ x 2h 0~ -0.2		1650℃ x 2h 0~ -0.3		1650℃ x 2h 0~ -0.4		1650℃ x 2h 0~ -0.6	—	—	—
Refractoriness Under Load (℃)≥	1700	1700	1650	1650	1620	1560	1550	1700	1700	1700
Apparent Porosity (%)≤	16	18	16	18	18	18	20	14	14	15
MgO(%)	97.0	96.5	95.0	94.5	93.0	91.0	89.0	97.7	97.1	96.3
SiO_2(%)	1.0	2.0	2.0	2.0	3.5	—	—	0.58	0.97	1.2
CaO(%)	—	—	2.0	2.0	2.0	3.0	3.0	0.63	0.97	1.3
Application	Kiln Linning in Iron and Steel, Copper, Lead, Tin and Zinc Industries							The Tap Hole of Steel Furnace; Tap Hole and Slag Line in Non-Ferrous Industry		

Magnesia Chrome Bricks

Item	QZHGe4	QZHGe8	QZHGe10	QZHGe12	QZHGe16	QZHGe18	QZHGe20
Density(g/cm³)≥	3.02	3.04	3.05	3.06	3.08	3.1	3.12
Cold Crushing Strength (Mpa)≥	50	50	55	55	55	55	55
Refractoriness Under Load(℃)≥	1700	1700	1700	1700	1700	1700	1700
Apparent Porosity(%)≤	20	19	19	18	18	18	18
MgO(%)	85.0	77.0	75.2	74.0	69.0	58.0	89.0
Cr_2O_3(%)	5.5	9.1	11.5	12.0	16.0	18.0	20.0
SiO_2(%)	1.3	1.2	1.3	1.2	1.5	1.5	1.5
Application	Electric Furnace Linning, RH Furnace Upper Vessel, Safety Linning of RH Furnace Lower Vessel, VOD Furnace Linning and Non-Ferrous Furnace						

Fused-Rebonded Magnesia Chrome Bricks

Item	QBDMGe12	QBDMGe14	QBDMGe16	QBDMGe18	QBDMGe20	QBDMGe22	QBDMGe26
Density(g/cm³)≥	3.00	3.05	3.08	3.10	3.15	3.20	3.25
Cold Crushing Strength (Mpa)≥	50	50	50	50	50	50	50
Reheating Linear Change (%)(1650℃ x 2hrs)	0~ -0.2		0~ -0.3		0~ -0.4		0~ -0.6
Refractories Under Load (℃) ≥	1700	1700	1650	1650	1620	1560	1550
Apparent Porosity(%)≤	16	18	16	18	18	18	20
MgO(%)	68.0	65.0	60.0	58.0	55.0	50.0	50.0
Gr_2O_3(%)	12.0	14.0	16.0	18.0	20.0	22.0	26.0
SiO_2(%)	1.2	1.4	1.4	1.5	1.5	1.5	1.5
Application	AOD, RH Furnace Lower Vessel and Snorkels,Slag Line of VOD and Tuyere of Non-Ferrours Converter						

Magnesia Carbon Bricks

Item	MT-8			MT-10			MT-14		
	A	B	C	A	B	C	A	B	C
Bulk Density (g/cm^3)≥	3.12	3.08	2.98	3.1	3.05	3	3.03	2.98	2.95
Cold Crushing Strength(MPa)≥	45	45	40	40	40	40	40	35	35
Pure Rate of Magnesia Raw Material (%)	97.9	96.8	96.1	97.9	96.8	96.1	98.1	98	97.9
MgO(%)	82	81	79	80	79	77	76	74	72
C(%)	—	—	—	—	—	—	—	—	—
Apparent Porosity(%)≤	4.5	5	6	4	4.5	5	3.5	3.5	4
Hot Temperature Bending (1400℃*30min)(Mpa)≥	6	5	4	6	5	4	12	8	6
Application	The Linning of Converter and Electric Arc Furnace, and Slag Line of Ladle								

Item	MT-16			MT-18		
	A	B	C	A	B	C
Bulk Density (g/cm^3)≥	3	2.95	2.9	2.97	2.92	2.87
Cold Crushing Strength(MPa) ≥	35	35	30	35	30	30
Pure Rate of Magnesia Raw Material (%)	97.9	96.8	96.1	98	97	96
MgO(%)	74	72	70	72	70	69
C(%)	16	16	16	18	18	18
Apparent Porosity(%)≤	3.5	3.5	4	3	3.5	4
Hot Temperature Bending (1400℃*30min) (Mpa)≥	12	8	6	12	8	6
Application	The Linning of Converter and Electric Arc Furnace and Slag Line of Ladle.					

Item	MA-AL-C Bricks			AL-MA-C Bricks		MA-CA-C Bricks		
	MAT60	MAT70	MAT74	AMT65	AMT70	MGT5	MGT2	MGT13
Density(g/cm^3)≥	3.00	2.90	3.00	3.00	3.05	2.90	2.85	3.00
Cold Crushing Strength(Mpa)≥	40	35	30	40	35	40	35	25
Modules of Rupture(Mpa)≥	6	5	4	10	8	9	7	4
Apparent Porosity(%)≤	4	5	6	4	5	3	4	5
MgO(%)	55	68	71	10	10	70	75	70
Al_2O_3(%)	23.0	8.0	6.0	65.0	68.0	—	—	—
C(%)	8	10	10	7	7	5	2	8
CaO(%)	—	—	—	—	—	12	8	12
Application	The Sidewall and Bottom of Ladle					VOD, AOD and LF		

Silica Bricks

Item	MRG-94	MRG-95A	MRG-95B	MRG-95C	MRG-96
Density(g/cm³)≥	2.3	2.32	2.33	2.34	2.34
Cold Crushing Strength(Mpa)≥	29	35	40	35	35
Creeping Rate (1500℃x50hrs) (0.2MPa)(%)≤	-	0.8	0.8	0.8	0.8
Refractories Under Load(℃)≥	1650	1650	1650	1650	1660
Thermal Expansion(1000℃)(%)≤	130	1.25	1.28	1.30	1.26
Apparent Porosity(%)≤	24	24	22	24	22
SiO_2(%)	94	95.0	94.5	94.5	96.0
Fe_2O_3(%)	1.5	1.3	1.5	2.0	1.0
Application	Hot Blast Stove and Coke Oven				

Silicon Nitride Bonded SiC Bricks

Item		DZT-1	DZT-2	DZT-3	DZT-4	DZT-5
Bulk Density(g/cm³)		2.68	2.65	2.6	2.65-2.70	2.68
Cold Crushing Strength(Mpa)≥		180	160	150	150	180
Hot Modulus of Rupture(Mpa)≥	at 1000℃	55	50	45	45	55
	at 20℃	45	45	40	42	45
Thermal Conductivity (1000℃)(W/m.K)		17.2	16	15.5	15-18	16
Apparent Porosity(%)≤		16	17	19	18	16
SiC(%)		72.0	72.0	70.0	72.0	72.0
Si_3O_4(%)		22.0	21.0	20.0	21.0	21.0
Fe_2O_3(%)		0.3	1.5	2.0	0.5	0.3
Application		The Sidewalls and The Bottom of Blast Furnace, Cooling Wall and Refuse Incinerator and Boiler			Lining and Outlet Bricks for Aluminum Electrolytic Cell, Reaction Pot of Chemical Industry and Melting Chamber of High Temperature Furnaces and Pipes for Molten Aluminum Transferring etc	