ARVIND CERAMICS PVT. LTD.

GENERAL FIRE-BRICKS

Sl. No.	Brand	Al2O3 % min	Fe2O3 % max	P.C.E. OC min	A.P. % max	B.D. gm/ cc min	C.C.S. Kg/ cm^2min	RUL^0 C min at 2 Kg	PLC at deg C/hrs % max
1	AC 30	30	2.2	30	25	1.9	230	1300	1350/2/± 1.0
2	AC 40	40	2.5	31	23	2.05	280	1400	1400/2/± 1.0
3	AC 45	45	2.5	32	22	2.15	400	1430	1400/2/± 0.5
4	AC 50	50	2.5	32.5	23	2.2	400	1450	1400/2/± 2
5	AC 60	60	3	33	23	2.35	400	1470	1400/2/± 1
6	AC 70	66	4.8	34	24	2.5	600	1450	1350/2/± 1.0
7	RC 80	78	2.5	36	22	2.6	500	1480	1350/2/+ 1.0
8	RC 90	88	2	36	22	2.7	500	1490	1350/2/± 1.0
9	RC 50 Mullite	50	1.8	33	22	2.25	600	1480	1350/2/± 1.0

DENSE BRICKS

Sl. No.	Brand	Al2O3 % min	Fe2O3 % max	P.C.E. OC min	A.P. % max	B.D. gm/ cc min	C.C.S. Kg/ cm^2min	RUL^{0}C min at 2 Kg	PLC at deg C/hrs % max
1	AC - 30 D	34	2	31	20	2.05	250	1390	1350/2/± 0.5
2	AC - 40 D	40	2	32	20	2.1	300	1430	1400/2/± 0.4
3	AC - 42 D	42	2	32.5	19	2.15	500	1450	1450/2/± 0.3
4	AC - 45 D	45	1.8	33	18	2.2	500	1460	1480/2/± 0.5
5	AC 46-48A	47	1.8	33	14	2.25	400	1480	1450/2/± 0.3
6	AC - 55 D	55	1.7	34	18	2.35	500	1500	1550/2/± 0.5
7	AC - 60 D	60	1.3	34	18	2.45	450	1520	1500/2/± 0.5
8	AC - 62 D	62	1.5	36	16	2.5	600	1550	1600/2/± 0.5
9	AC 65 AD	65	1.5	35	16	2.5	600	1600	1600/2/± 0.5

MAGNESIA CARBON BRICKS

Sl. No.	Brand	MgO (%) (in magnesite used)	Fixed Carbon % (Approx)	A.P % max	C.C.S kg/ cm^2 min	B.D. gm/ cc min.	Application Area
1	AC MCB Safety	92	6.0	15	200	2.5	Safety, Low Thermal conductivity
2	AC MCB MZ	95	8.0	5	300	2.85	Metal Zone for ladle
3	AC MCB SZ	97	12.0	4	300	2.90	Slag zone for ladle
4	AC MCB FB	95	7.0	5	250	2.80	Free board for ladle
5	AC MCB SZS	98	14.0	4	300	2.95	Special slag zone
6	AC MCB MZS	96	10.0	4	300	2.90	Special metal zone
7	AC MCB SZ (OS)	98	16.0	3	350	2.95	EAF / EBT
8	AC MCB SZ (O)	97	18.0	3	350	3.00	Furnace with high oxygen lance
9	AC MCB LF SS	97	5.0	4	300	2.85	AOD to Caster Ladle for SS

MAGNESITE BRICKS

Sl. No	Brand	MgO % min	Fe2O3 % max	A.P % max	B.D. gm/cc min	CCS Kg/Cm^2 min	RUL deg C min	Application Area
1	AC MGR	82	4	22	2.5	300	1500	SAFETY
2	AC MGD	88	1.5	20	2.8	500	1550	EAF, LIME KILN

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MAGNESIA CHROME BRICKS

Sl. No	Brand	MgO % min	Cr2O3 % max	A.P % max	CCS Kg/Cm^2 min	RUL deg C min	Application Area
1	AC CMN	35	15	22	250	1550	Backup lining
2	AC FRD	50	6	22	350	1600	Backup lining

ALUMINA MAGNESIA BRICKS

Sl. No	Brand	MgO % max	Al2O3 % min	FC % max	A.P % max	B.D. gm/cc min	CCS Kg/Cm^2 min	Application Area
1	AC AMC 1	8	70	5	6	2.9	400	Ladle bottom
2	AC AMC 2	8	80	5	5	3	400	Ladle Metal Zone

SILICON CARBIDE BRICKS

Sl. No.	Brand	SiC % min	Al2O3 % min	Fe2O3 % max	B.D. gm/ cc min	A.P % max	CCS Kg/Cm^2 min	RUL Deg C	Application Area
1	AC SIC	80	5	1	2.5	16	600	1650	Ferro Alloy / Kiln furniture / DRI Tube

MORTARS

Sr. No.	Brand	Al2O3 % min	Fe2O3 % max	SiO2 % max	PCE OC min	Type of Setting	Water for tro-welling consistency	Service Temp.	Max Grain Size
1	AC 30 M	30	2.5	-	29	Ceramic	36-40	1300	0.5 mm
2	AC 40 M	40	3	-	30	Ceramic	36-40	1350	0.5 mm
3	AC 45 M	45	2.5	-	31	Ceramic	36-40	1400	0.5 mm
4	AC 50 M	50	2	-	31	Ceramic	30-35	1450	0.5 mm
5	AC 55 M	55	2	-	32	Ceramic	30-35	1470	0.5 mm
6	AC 60 M	60	2.5	-	32	Ceramic	25-30	1480	0.5 mm
7	AC 65 M	62	3	-	32	Ceramic	20-24	1500	0.5 mm
8	AC 70 M	70	3.5	-	33	Ceramic	20-24	1550	0.5 mm
9	AC 70 Mull	72	2.5	-	34	Ceramic	20-24	1600	0.5 mm
10	AC 75 M	74	2	-	35	Ceramic	18-22	1580	0.5 mm
11	AC 80 M	78	1.5	-	36	Ceramic	18-20	1630	0.5 mm
12	AC 90 M	88	1	-	36	Ceramic	15-20	1650	0.5 mm
13	AC M Insulating	30	2.5	-	29	Ceramic	40-45	1250	0.5 mm
14	AC MIS (Special Insulating)	55	1.5	-	30	Air Setting	25-30	1500	0.5 mm
15	AC Acoset 50	50	2	-	31	Air Setting	25-30	1450	1.0 mm
16	AC Acoset 70	70	3	-	33	Air Setting	25-31	1550	1.0 mm
17	AC SM (Silica Mortar)		1	95				1450	0.5 mm

SILICON CARBIDE MORTAR

Sl. No.	Brand	SiC % min	Al2O3 % min	SiO2 % max	Na2O % max	Grading mm	Service Temp deg C
1	AC SiC M	80	5	12	1.5	0-0.5	1600

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SPECIAL MONOLITHICS

Sl. No.	Brand	Al2O3 % min	Fe2O3 % max	Additives % max	Water Addition %	Grading (mm)	Type of Settting	Sintering Temp.	Application
1	AC - LF 90 (LCC)	85	2	13	4-6	0-5	Hydraulic	-	Roof Castable for furnace with high oxygen lance.
2	AC - LF 92 (ULCC)	89	1	9	4-6	0-5	Hydraulic	-	Special Ultra low cement castable for roof & casting well block, seating block, flow modifier
3	AC - SRA 95H	91	-	-	15-20	0-5	Hydraulic	1400	Ramming mass for fixing well block.
4	AC - SMA 90K	88	-	-	20-25	0-0.2	Chemical/ ceramic	1200	Mortar for Fixing nozzle.

BASIC MONOLITHICS

Sl. No.	Brand	MgO % min	SiO2 % max	CaO % max	Cr2O3 % min	Type of Settting	Sintering Temp.	Grading Range	Appllication Temp.
1	AC - M 84	80	8.5	-	-	Chemical	1550	0-4	1700
2	AC - 1/3	82	8	-	-	Chemical	1550	0-4	1750
3	AC - M 95	94	2.5	1	-	Ceramic	1550	0-5	1750
4	AC- M 90	90	4	2	-	Chemical/ceramic	1550	0-5	1700
5	AC - GUN	78	6	1.7	1.5	Ceramic	1550	0-3	1750
6	AC - Supergun	86	3.5	1.4	1.5	Chemical/ceramic	1500	0-3	1800
7	AC - Hearth Mass	85	5	6	-	Chemical	1300	0-8	1750
8	AC - IF Mass	88	-	-	-	Chemical	1450	0-10	1750
9	AC - MM	84	-	-	-	Ceramic	1400	0-0.5	1700
10	AC - CMM	40	-	-	25	Ceramic	1600	0-0.5	1650
11	AC - CMN	60	-	-	15	Ceramic	1650	0.-0.5	1700
12	AC - Fettling	45	5	50	-	Ceramic	1450	0-5	1680

FILLING MASS

Sl. No.	Brand	MgO % min	SiO2 % max	CaO % max	Zr2O3 % min	C % max	Cr2O3 % min	Grading Range	Application
1	AC - EBT 40	35	60	2	-	5	-	1-6	Dunite based
2	AC - Racfill	80	10	3	-	12	-	3-8	FM based
3	AC - EBT M	82	8	-	-	5	-	3-12	DBM based
4	AC - Nozzlax ZQ	-	65	-	25	5	-	0-1.2	Zircon major
5	AC - Nozzlax CQ	-	65	-	-	5	25	0-1.2	Chrome major
6	AC - Nozzlax QC		75			5	15	0-1.2	Quartz major

PRECAST SHAPES

Sl. No.	Brand	Al2O3 % min	Fe2O3 % max	PCE OC min	CCS kg/cm^2 min	Setting Temp.	B.D. gm/cc min	PLC % max	Application
1	AC PCPF - 45	45	1.50	32	900	1550	2.30	± 0.10 at 1500 deg.C for 2 hrs.	General Cast Shapes
2	AC PCPF - 55	55	1.80	34	950	1600	2.45	± 0.10 at 1500 deg.C for 2 hrs.	Cast Shapes for Burner Block
3	AC PCPF - 80	80	2.00	35	1100	1700	2.80	± 0.80 at 1500 deg.C for 2 hrs.	Cast Shapes for Reheating furnace block, well block, seating block, weir dam.
4	AC PCPF - 90	90	1.00	37	1200	1700	3.05	± 0.6 at 1550 deg.C for 2 hrs.	Special shapes of critical use.
5	AC PCPF-70 UL	70	0.50	36	1100	1700	2.60	± 0.6 at 1550 deg.C for 2 hrs.	

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RAMMING MASS

Sl. No.	Brand	Al2O3 % min	Fe2O3 % max	PCE OC min	Grading Range	Setting	Service Temp.
1	AC - Ram - 40	40	2.0	33	0-4 mm	Ceramic	1450
2	AC - Ram - 60	60	2.5	34	0-4 mm	Chemical	1600
3	AC - Ram - 70	70	3.0	35	0-4 mm	Chemical/Ceramic	1650
4	AC - Ram - 80	80	3.5	36	0-4 mm	Chemical	1700
5	AC - Ram - 90 (S)	90	1.5	37	0-4 mm	Chemical	1750

BASIC SPRAY MASSES

Sl. No.	Brand	MgO % min	Fe2O3 % max	SiO2 % max	Sint Temp deg C	App Temp Deg C	PLC	B.D gm/cc	Grading mm	Remarks
1	AC LITE T-80	78	5	14	750	1650	-5	1.85	0-0.5	Spray mass for tundish
2	AC VRT-80	78	5	14	750	1650	-1.5	2.3	0-1	Dry Vibrating mix for tundish

ULTRA LOW CEMENT MONOLITHICS

Sl No.	Brand	CHEMICAL ANALYSIS		CaO % max	B.D. (Gm/CC) On Blocks At 110 Deg C/24 hr	PLC (%) max At 1400 Deg C/ 3 hrs	PLC (Orton) min	C.C.S. (Kg/cm2)			Water for
		Al2O3 % min	Fe2O3 % max					at 110 Deg C / 24 hrs	at 700 Deg C / 2 hrs	at 1400 Deg C / 2 hrs	casting % max
1	AC - 7O UL	70	0.6	0.5	2.70-2.80	+0.5	34	600	700	1000	4-5
2	AC - 70 Royal	70	0.5	0.5	2.80-2.90	+0.5	35	600	700	1200	4-5
3	AC - 90 UL	90	0.5	0.5	3.00-3.10	+0.5	37	600	700	1200	4-5

BASIC MONOLITHICS FOR INDUCTION

Sl. No.	Brand	MgO % min	Cr2O3 % min	Grading mm	Sint Temp Deg C	App Temp Deg C	Remarks
1	AC RAM LMCX	70	8	0-5	800	1720	For small crucible for SPL Steel
2	AC - Coat M	88	-	0-0.5	-	Chemical	For Coil coating

COMPOUNDS

Sl. No.	Brand	Al2O3 % min	CaO % max	MgO % min	Alkali % max	Carbon % max	Remarks
1	SYNTHETIC SLAG - 1	35	50	3	1	1	Fused
2	SYNTHETIC SLAG - 2	35	40	13	2	1	Sintered
		min	min	min	max	min	
3	SLAG CONDITIONER -1	75					Alumina Ball
4	SLAG CONDITIONER -2	35	45	10			Unreacted Syn Slag
5	SLAG CONDITIONER -3			75		15	
6	SLAG CONDITIONER -4	75				10 (BnOm)	with Boric Acid

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CONVENTIONAL CASTABLES

Sl. No.	Brand	GENERAL PROPERTIES				PHYSICAL PROPERTIES		C.C.S kg/ cm^2		P.L.C %	CHEMICAL ANALYSIS	
		Base Raw Material	Max Grain Size (mm)	Water additon on site (%)	Reversible Thermal Expansion at 1000 Deg C (%)	Max service Temp (degC)	Dry Density (Kg/m^3 min at 210 Deg C	at 110 Deg C/24 hr	at 800 Deg C/3 hrs	at 1500 Deg C/3 hrs	Al2O3 % min	Fe2O3 % max
1	ACcrete	Chamotte	5.0	10.5-12.0	0.55	1580	2100	250	240	± 1.0	40	4.0
2	ACcrete Special	Kaolin	5.0	10.0,12.0	00.6				90	± 0.5	45	2.5
3	ACcrete Super	Bauxite	5.0	11-12.0	0.65	1680	2400	350	300	± 1.0	65	5.0
4	ACheat M	Diaspore	5.0	9-10.0	0.75	1800	2600	550	450	± 1.5	80	1.5
5	ACheat A	Ch.Bxt.	5.0	9-11	0.75					5	85	2.5
6	ACheat A Supreme	BFA	5.0	9-10.0	0.8	1820	2800	600	430	± 1.0	90	0.8
7	AC-90 S	Corundum	5.0	10-12.0	0.6	1709	2700	500	400	± 1.5	82	3.0
8	ACheat K	Kyanite	5.0	10-11.0	0.6	1683	2200	350	280	± 1.5	60	1.0
9	ACheat C	Grog	5.0	10-11.5	0.55	1665	2100	350	280	± 1.0	50	1.5

LOW CEMENT CASTABLES

Sl No.	Brand	GENERAL PROPERTIES				PHYSICAL PROPERTIES		C.C.S kg/cm ^{2}			P.L.C %		CHEMICAL ANALYSIS	
		Max Service Temp. Deg C	Max Grain Size (mm)	Water additon on site (%)	Reversible Thermal Expansion at 1000 Deg C (%)	P.C.E (OC min.)	Dry Density (Kg/m) min at 110 Deg C	at 110 Deg C/24 hr	at 800 Deg C/3 hr	at 1000 Deg C/3 hr	at 800 Deg C/3 hrs	at 1100 Deg C/3 hrs	Al2O3 % min	Fe2O3 % max
1	AC acmon 45	1550	6	5-6	0.55	32				0	± 0.20	± 0.30	45	1
2	AC acmon 60	1600	6	5-6	0.60	33	2600	750	800	900	± 0.20	± 0.30	60	1.5
3	AC acmon 70	1600	6	4.5-5.0	0.65	34	2700	750	800	900	± 0.20	± 0.30	70	1.5
4	AC acmon 80	1700	6	4.5-4.8	0.75	35							80	1.8
5	AC acmon 90	1700	6	4.2-4.5	0.85	36	3000	950	1000	1100	± 0.20	± 0.30	90	1

CEMENT

Sl. No.	Brand	Al2O3 % min	SiO2 % max	CaO % max	Fe2O3 % max	MgO % max	PCE OC min	Specific Surface (cm^2/ gm)	Specific Gravity	Final	CCS (Kg/cm2)	
											After 6 hr.	After 1 day
1	AC-Cement 75	72	0.7	23.6	0.3	0.8	31	4000	2.90-2.95	400	125	350
2	AC-Cement 50	48	4	35	5	0.9	13-14	3000	-	400	150	450

Note: We also manufacture refractory materials on the specifications required by the clients.

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