

Max. recomm. Temp. (°C)	Main component	Density (kg/m ³)	Max. grain size (mm)	Chemical composition						Thermal conductivity (W/mK)		MOR/CCS after firing to 1000°C (MPa)	Hot MOR at 900°C (MPa)	Open porosity to 1000°C (%)	Abrasion after firing to 1000°C, angle 90° (cm ³ loss)	Resistance to alkali attack (scale 0-10; 0 is best)	Resistance to thermal shock
				Al ₂ O ₃	SiO ₂	SiC	ZrO ₂	Fe ₂ O ₃	CaO	800°C	1200°C						

Low Cement Castables (LCC)

D39A	1500	Chamotte	2250	10	39	56	-	-	1.4	1.6	1.85	2	18/130	20	11-12	4.3	0	Low
D52A	1550	Chamotte, Mullite	2400	10	50	45	-	-	1.1	1.6	2	2.2	17/155	21	11-12	3.6	1	Medium
D59A	1650	Andalusite, Mullite	2500	10	62	33	-	-	1.1	1.4	2.35	2.4	18/155	19	11-12	3.2	1-2	High
D65TA	1650	Andalusite, Corundum	2600	10	65	30	-	-	1.4	1.6	2.3	2.65	19/160	21	11-12	4	2	High
D66	1600	Bauxite	2550	5	66	29	-	-	1.4	1.6	2.32	2.42	21/170	29	12-13	3	2-3	Low
D1700A	1700	Andalusite	2550	5	58	37	-	-	1	1.9	2.1	2.15	14/130	19	12-13	4	2	High
D1500SC	1500	Chamotte, Silicon carbide	2300	10	37	54	5	-	1.2	1.6	1.95	1.95	18/130	20	13-14	4.9	1	Medium
D1550SC	1550	Andalusite, Silicon carbide	2550	10	52	27	17	-	1.1	1.4	3.5	3.3	18/125	27	12-13	3.5	1	High
D1600SC	1600	Silicon carbide	2550	6	26	18	53	-	0.6	1.9	6.75	6.65	18/120	24	14-15	3.5	2	Extra high
D1650SC	1650	Silicon carbide, Mullite	2600	5	34	23	40	-	0.6	1.9	5.4	5.2	18/120	27	14-15	3.5	2	Extra high

Low Cement Castables (LCC), Easy Flow

D39A-EF	1500	Chamotte	2200	5	39	56	-	-	1.3	2	1.65	1.9	13/90	24	17-18	4.8	0	Low
D55A-EF	1600	Chamotte, Corundum	2450	5	55	40	-	-	0.8	1.9	2	2.2	19/130	32	14-15	2.6	0	Medium
D59A-EF	1600	Andalusite, Mullite	2450	5	62	33	-	-	1.1	1.4	1.95	2.1	14/100	24	16-17	4.7	2	High
D1600SC-EF	1600	Silicon carbide	2550	6	31	21	45	-	0.6	2.2	5.3	5.5	15/100	24	19-20	3.5	2	Extra high

Low Cement Castables (LCC), Gunning Mixes

GUN39A	1400	Chamotte	2050	5	44	50	-	-	1	2	1.36	1.77	10/45	-	22-24	12-15	1	Low
GUN59A	1600	Andalusite, Mullite	2250	5	60	35	-	-	1	2	1.41	1.85	7/45	-	20-22	10-13	3	Medium
GUN20SC	1300	Chamotte, Silicon carbide	2040	6	35	41	20	-	1	2	1.9	2	4/28	13	24-26	15-18	2	Medium
GUN50SC	1600	Silicon carbide	2250	6	26	21	48	-	1	2	3.3	3.4	4/35	-	25-27	30-32	1	High

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				Al ₂ O ₃	SiO ₂	SiC	ZrO ₂	Fe ₂ O ₃	CaO	800°C	1200°C						

Traditional Castables

Bs 1200	1200	Chamotte	2000	10	42	46	-	-	4	6	1.2	1.35	3/25	8	27-28	11.5	9	Medium
Bs 1300	1300	Chamotte	2000	10	46	36	-	-	6	10	1.25	1.5	4/35	8	24-25	11.3	9	Medium
B1500	1500	Chamotte	2100	5	49	41	-	-	1	6	1.15	1.35	5/35	10	24-25	11	9	High

Traditional Gunning Mixes

Cs1500	1500	Andalusite	2100	3	55	33	-	-	2	6	1.15	1.35	4/30	8	25-30	15	10	High
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Insulating Castables, for pouring and vibration

Bhi 1200	1200	Chamotte, Vermiculite	850	2	37	37	-	-	7	14	0.33	0.47	1-2 / 2.5	-	>50	-	10	-
Di 1300A	1300	Light-weight Chamotte	1500	4	25	66	-	-	2	3	0.94	1.06	6/30	10	35-40	20	2-3	-
Csi 1300	1300	Light-weight fire clay	1500	6	35	42.5	-	-	6.8	12	0.5	0.5	N/A / 15	-	-	-	-	-

Insulating Gunning Mixes

Csi 1300	1300	Light-weight fire clay	1500	6	35	42.5	-	-	6.8	12	0.5	0.5	N/A / 15	-	-	-	-	-
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Mortars

Universal	1700	Mullite, Bauxite	2300	0.5	59	34	-	-	1.5	0	-	-	1.2/-	Air setting mortar with sodium silicate. Supplied in buckets ready to use				
KM	1500	Chamotte	1550	1	40	52	-	-	1.5	0	-	-	-	Ceramic bonded mortar with hardening during firing				
Fireplace	1200	Chamotte	1800	1	40	36	-	-	6	13	-	-	-	Hydraulic setting and hardening mortar				

No Cement (NC), "High Performance" precast Materials (not sold as castable, only available for HASLEs CVF and Modular Lining solutions)¹

HyPerCast Premium	1200	Silicon carbide, Tab. Alumina	2870	3	45	7.5	44	3	0.09	0.35	10.1	8.9	28/231	47	14	1.55	1-2	Extra high
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¹ All properties were measured on precast specimens pre-fired to 1350°C

The technical data provided represent average reference values established by ASTM- DIN- and EN-test procedures. The values are determined in a laboratory and serve to give general information. Values are liable to natural deviations and are not to be cited as guaranteed properties or guaranteed values.

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