



SIDEWELL MELTER

1 Hearth

- ALKON® CAST LB 85 ALKON® SOL CAST HT: reference solution
- ALKON® CAST HYMOR 80 AL: reference solution in strong alloy environment
- ALKON® CAST BL 80 B3: for maximum abrasion resistance, preferred in precast shapes
- ALKON® SOL CAST B 85: for quick dry solution

Balance between abrasion resistance, corrosion resistance and refractoriness to be found

2 Lower walls, Belly band and spouts

- ALKON® CAST HYMOR 80 AL: reference solution including contact with salt bath in side well
- ALKON® CAST LB 85 ALKON® SOL CAST HT: in less strong environment

3 Upper walls hotface

- ALKON® CAST F 35 C/G: reference solution with installation versatility, on top of fibre board
- ALKON® CAST MM 60 and ALKON® GUN C 75: solutions in walls subject to aluminium splashes and corundum growth like burner walls
- CALDE® CAST M 28 D HR and CALDE® CAST 1560: reference solutions in walls less exposed
- CALDE® CAST ML 55 S5/ GUN MM 55 S5: alkali resistant solution when a lot of flux are used

To check: how much the quarl is subject to aluminium projections and flame rebounds.

4 Burner quarl

- CALDE® PLAST P 85 or ALKON® GUN P: P-bond plastic material references
- ALKON® GUN C 75: versatile solution
- ALKON® CAST HYMOR 80 AL: casting solution

5 Division wall

- ALKON® CAST HYMOR 80 AL: reference solution
- ALKON® CAST LB 85 ALKON® SOL CAST HT: in less strong environment

Can be delivered and installed in precast shapes.

6 Sill & ramp

- ALKON® CAST BL 80 B3: reference solution
- ALKON® CAST HYMOR 80 AL or ALKON® CAST LB 57 Z20: for extra resistance to dross & corrosion
- ALKON® SOL CAST B 85: for quick dry solution

7 Lintel and door jambs

- CALDE® CAST LX 58 with steel fibres: reference solution with high thermal shock resistance

- CALDE® WIRE MIX: in precast shapes for great durability against mechanical abuse and thermal shocks, replacing metal protective plates not suited for high temperature environment

8 Roof

- CALDE® CAST F 60 and CALDE® CAST M 28 D HR: reference solution
- CALDE® CAST LX 58: for extra thermal cycling
- CALDE® CAST ML 55 S5: alkali resistant solution

9 Roof backlayer & anchoring

- CALDE® CAST MW 130 M: gas barrier intermediate layer
- CALDE® CAST XL 140 or 116 C/G: insulating layer references

Metallic, ceramic and cast steel anchors and preferably combination can be used.

Design adapted to furnace mobility, roof shape, hanging supports and roof accessibility.

10 Door & Exhaust

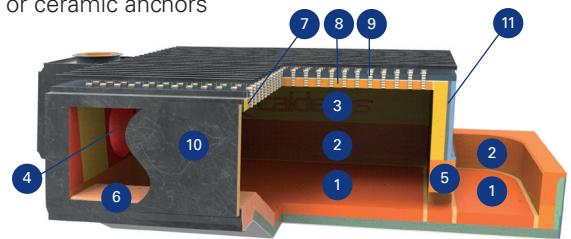
- CALDE® CAST M 28 D HR: reference solution
- CALDE® CAST MW 130 M: for lighter solution

Extra insulation can be brought via insulating fibre choice.

11 Upper wall backlayer & anchoring

- CALDE® CAST XL 116 C/G or CALDE® GUN XL 126 on top of insulating board: reference solution. Versatile and extra insulating

Metallic or ceramic anchors



Cold Repairs

- ALKON® SOL CAST B 85: fast repair reference solution in sill, ramps and hearth
- ALKON® CHEM PB 85: fast repair reference in belly-band for extra resistance to dross & corrosion, but to exclude in high flux contact areas
- ALKON® GUN C 75: fast repair solutions in all walls and roof

Specific patch or plastic solutions for small/finer repairs are also available.

Hot Repairs

- ALKON® GUN C 75: emergency hot repair solution in bath area
- ALKON® GUN F 50: emergency hot repair solution in upper area



REFRACTORY SPECIFICATIONS

Selection of products shall be done in accordance with furnace process conditions. Calderys invites you to fill in a dedicated questionnaire to confirm product selection regarding temperature level, cycling, alloys, salt/flux usage, and charging/skimming practices.

Selection of product/design shall be done in accordance with shut-down duration requirements; solutions can differ based on the importance of speed. Tailor-made solutions such as pumping/gunning, easy dry-out materials, up to full precast can be supplied to lower cost of ownership when production loss per day is of high value.

The performance of the final solution is sensitive to the installation quality, from the equipment performance to the manpower skills/ respect of refractory placement procedures. Calderys invites customers to engage its supervision of the installation work, up to full turnkey solutions to control the overall quality of the project: shutdown schedule, installation, dry-out and furnace commissioning.

Please ensure any product selection and/or design is validated by your Calderys sales representative.

Product name	Main component	Binding System	Max. Recomm. temp.(°C)	Density (g/cm ³)	Ease of Dry Out	Chemical analysis (avg %)			
						Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	SiC
ALKON® GUN F 50	Chamotte	Hydraulic	1400	2.1		50.0	34.0	1.0	
ALKON® CAST BL 80 B3	Bauxite	Hydraulic	1400	3.08	(-)	83.0	7.7	0.8	
ALKON® CAST HYMOR 80 AL	Corundum	Hydraulic	1420	3.13		84.0	3.1	0.1	
ALKON® CAST LB 57 Z20	Bauxite, Zircon	Hydraulic	1400	3.11		57.0	18.0		
ALKON® CAST LB 85 ALKON® SOL CAST HT	Bauxite	Hydraulic	1300	2.9		84.0	8.0	0.7	
ALKON® CAST MM 60	High alumina raw materials	Hydraulic	1450	2.5		61.0	26.0	0.9	
ALKON® CHEM PB 85	Bauxite	Chemical Inorganic	1400	2.93	(+)	85.0	2.4	0.8	
ALKON® GUN C 75	Corundum	Hydraulic	1420	2.73	(++)	78.5	1.8	0.2	
ALKON® GUN P	Bauxite	Chemical Inorganic	1600	2.63	(+)	83.0	8.2	0.9	
ALKON® SOL CAST B 85	Bauxite	Mineral Reaction	1200	2.95	(++)	85.0	8.4	0.5	2.8
CALDE® CAST 1560	Andalusite	Hydraulic	1650	2.45		59.0	36.0	1.1	
CALDE® CAST F 60	Chamotte	Hydraulic	1650	2.28		60.0	32.5	1.5	
CALDE® CAST LX 58	Andalusite	Hydraulic	1650	2.5		57.0	38.0	1.1	
CALDE® CAST M 28 D HR	Chamotte	Hydraulic	1550	2.25		45.5	47.8	1.3	
CALDE® CAST ML 55 S5	High alumina raw materials	Hydraulic	1550	2.48		55.0	35.0	0.9	5.0
CALDE® CAST MW 130 M	Lightweight chamotte	Hydraulic	1300	1.55		37.5	42.5	6.0	
CALDE® CAST XL 106 C/G	Vermiculite	Hydraulic	1060	0.56		30.0	31.0	9.0	
CALDE® CAST XL 116 C/G	Lightweight chamotte, Vermiculite	Hydraulic	1160	0.84		28.5	30.0	10.3	
CALDE® CAST XL 140	Lightweight aggregates	Hydraulic	1400	0.72		49.0	35.0	0.9	
CALDE® GUN MM 55 S5	High alumina raw materials	Hydraulic	1500	2.42		58.0	30.0	0.9	4.0
CALDE® GUN XL 126	Lightweight aggregates	Hydraulic	1260	0.95		31.0	38.0	9.3	
CALDE® PLAST P 85	Bauxite	Chemical Inorganic	1650	2.8	(+)	84.0	8.0	0.9	

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