



TRANSPORT LADLE (SHOP FLOOR)

1 Body

- ALKON® CAST MF 44 and ALKON® CAST MF 52 HR: reference solution
- ALKON® CAST MF 40 CFM: insulating dense solution
- ALKON® CAST 204 or ALKON® FLOW LB 75: for large ladle doing alloy treatment
- ALKON® CAST MT 90: for pure aluminium handling

Can be supplied in large precast shapes.

Ladle walls can be cast as thin as 60mm with self-flowing solutions. Ladle precast piece can be delivered and installed with a dry-vibrating mix filler.

2 Spouts

- ALKON® CAST 204: reference solution
- ALKON® CAST HYMOR 80 AL: for extra resistance to strong alloys & flux
- ALKON® CAST MM 60: in less strong environment

3 Bottom / Impact area

- ALKON® CAST 204: reference in large capacity ladle with high metal free fall
- ALKON® CAST BL 80 B3

4 Lid

- CALDE® CAST MW STRONG LITE or CALDE® CAST MW 130 M: standard solutions
- CALDE® CAST XL 116 C/G: extra insulating solution

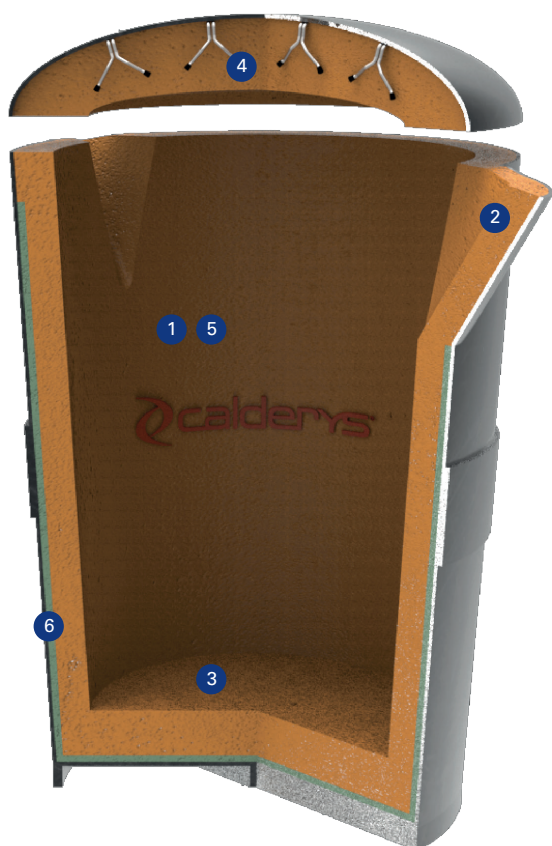
5 Hotface Coating

- ALKON® PATCH OZ 93 U: glass coating for easier aluminium skulls removal, to renew monthly

6 Back Layer

Insulating boards of various thermal insulation levels

- CALDE® CAST XL 116 C/G: in thick-walled ladles
- ALKON® DRY SF 40: dry back layer filler with precast shapes



Cold Repairs

- ALKON® CHEM PB 85 and ALKON® CHEM STIX PB 85: casting/patching 2 component quick setting solution for quick and durable repairs, showing mechanical strength and aluminium alloy high corrosion resistance.
- ALKON® STIX F 50 G1 and ALKON® STIX C 75: versatile solution by hand patching
- ALKON® PATCH PT 85 U: solution for thin repairs, ready to use

In-house Relining Solution

- In house relining turnkey solutions available with old ladle pick-up and relined one delivery

Precast Relining Solution

- Delivery of unique precast shape for fast relining at site without castable or brick installation steps, and avoiding long dry-out

On the Road Ladle

- ALKON® CAST 204 or ALKON® CAST HYMOR 80 AL: large ladle one piece casting solution
 - ALKON® CAST 204: bottom impact area
 - ALKON® CAST MW 16: hotface insulating solution in walls
- Precast solution and/or in house relining solution.
- Aluminium infiltration barriers.
- Layers of insulating bricks and boards to minimize thermal loss and to prevent hydrogen pick-up. Shell temperature as low as 50°C can be reached enabling transfers > 5 hours depending on ladle size.



REFRACTORY SPECIFICATIONS

Selection of products shall be done in accordance with furnace process conditions.

For transport ladle Calderys invites you to fill in a dedicated questionnaire to confirm product selection and refractory design metal temperature loss, abrasion resistance and resistance to chemical corrosion from alloys and treatment gas.

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 full precast or in-house relining 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/cm³)	Ease of Dry Out	Chemical analysis (avg %)			
						Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	SiC
ALKON® CAST 204	Bauxite	Hydraulic	1200	2.80	2.6	81.0	8.8	0.7	2.9
ALKON® CAST BL 80 B3	Bauxite	Hydraulic	1400	3.08	3.2	83.0	7.7	0.8	
ALKON® CAST HYMOR 80 AL	Corundum	Hydraulic	1420	3.13	2.9	84.0	3.1	0.1	
ALKON® CAST MF 40 CFM	Corundum	Hydraulic	1200	2.02	0.8	36.0	49.0	1.5	
ALKON® CAST MF 44	Chamotte	Hydraulic	1200	2.16	1.1	43.0	49.0	1.2	
ALKON® CAST MF 52 HR	Chamotte	Hydraulic	1420	2.36	1.3	50.0	42.0	0.8	
ALKON® CAST MM 60	High alumina raw materials	Hydraulic	1450	2.50	1.7	61.0	26.0	0.9	
ALKON® CAST MT 90	Tabular alumina	Hydraulic	1550	3.03	3.3	90.0	0.2	0.1	
ALKON® CAST MW 16	Bubble alumina	Hydraulic	1200	1.60	0.5	83.0	7.0		
ALKON® CHEM PB 85	Bauxite	Chemical Inorganic	1400	2.93	2.8	85.0	2.4	0.8	
ALKON® CHEM STIX PB 85	Bauxite	Chemical Inorganic	1400	2.70	1.9	81.0	1.4	0.5	
ALKON® DRY SF 40	Chamotte	Ceramic	1600	1.83	40.0	52.5	1.4		
ALKON® FLOW LB 75	Bauxite	Hydraulic	1200	2.70	2.1	73.5	20.0	12	
ALKON® PATCH OZ 93 U	Zirconia oxid	Chemical Organic	1700						
ALKON® PATCH PT 85 U	Tabular alumina	Chemical	1200	2.50		85.0		0.1	
ALKON® STIX C 75	Corundum	Hydraulic	1420	2.41	1.2	76.0	1.5	0.1	
ALKON® STIX F 50 G1	Chamotte	Hydraulic	1440	1.80	0.6	48.0	43.0	1.8	
CALDE® CAST MW 130 M	Lightweight chamotte	Hydraulic	1300	1.55	0.5	37.5	42.5	6.0	
CALDE® CAST MW STRONG LITE	Lightweight chamotte	Hydraulic	1320	1.58	0.5	40.0	38.0	5.5	
CALDE® CAST XL 116 C/G	Lightweight chamotte, Vermiculite	Hydraulic	1160	0.84	0.2	28.5	30.0	10.3	

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