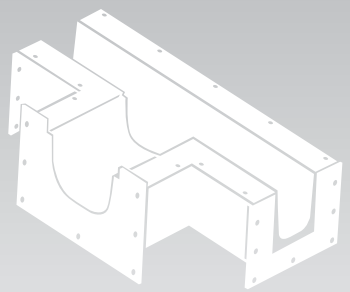
Rodabell Group Accurate Partner

Partnering with: PERMATECH SHAPING THE FUTURE OF REFRACTORY TECHNOLOGY

METAL TRANSFER

Consumables - FLOW CONTROL DAMS



Description:

RODABELL´s flow control dams are designed to provide an optimum molten aluminum flow control along the casting line. Another common application for this product is to completely block molten aluminum flow in designated areas of a launder system.

RODABELL is currently offering 2 main lines for this particular product:

- Machined from calcium silicate boards
- Precast shapes from fused silica

RODABELL´s dam designs include a slot at the edge of the piece where a ceramic rope is inserted. The addition of the rope gives the system a more precise adjustment to the launder section. This system reduces the risk of molten aluminum passing through a undesired launder area.

RODABELL´s engineering department is able to develop detailed drawings for any dam that we do not have in our product range.

Application:

Flow Control Dam for molten Aluminum metal transfer systems.

Advantages:

- Great mechanical resistance that provides an extended lifetime
- High thermal shock resistance
- Eliminates out gassing
- Easy to clean between castings

Sigma Series Composition

Description	%
Fused silica	75-90
Modifier	5-15
Calcium Aluminate	5-10
Amorphous silica	3-10
Crystaline silica (cristobalite)	<0.7

Mechanical properties

	Units	TR-M0	TR-N14
Bulk density	kg/m^3	850	848
Flexural strength	MPa	8	8.8
Compression strength	MPa	15	17
Hardness	Mpa	60	60

Thermal properties

	Units	TR-M0	TR-N14
Service temperature	ºC	850	850
Thermal conductivity	W/mK	0,26 (750º)	0,201 (700º)
Loss on ignition	%	3,1	8
Shrinkage	%	0,1/0,4	0,25/1,10
Coef. Termal expansion	K^{-1}	6,1*10^{-6}/K	7*10^{-6}/ºC