

SLAB CASTING

Consumables - CONTROL ROD/PIN



Descripción:

RODABELL's control pins have been specifically developed to provide the best molten Aluminum regulation in the casting process.

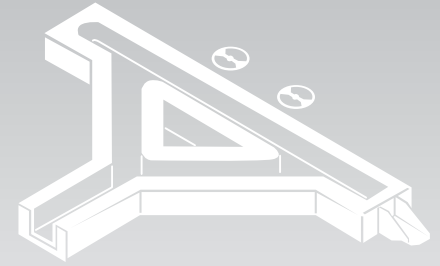
RODABELL manufactures and supplies control pins suitable for both Steady Eddy and traditional casting systems. We currently offer 2 main lines for this particular product:

Machined from calcium silicate boards

Precast shapes from fused silica

Our precast control pins from fused silica are manufactured using PERMATECH'S technology from its proprietary material SIGMA 2 series. The partnership between RODABELL-PERMATECH was created in 2010 with the purpose of supplying our customers with the latest technology on precast refractory components.

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



Application:

Control pin/rod for traditional or Steady Eddy slab casting processes.

Advantages:

- Great mechanical resistance that provides an extended lifetime.
- High thermal shock resistance
- Eliminated shrinkage and out gassing
- Easy to clean between castings

Sigma 2 Series Composition

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

Mechanical properties

	Units	VR-MO	VR-N14	VR-N17
Bulk density	kg/m ³	850	848	817
Flexural strength	MPa	8	8.8	8
Compression strength	MPa	15	17	16
Hardness	Mpa	60	60	60

Thermal properties

	Units	BT-MO	BT-N14	BT-N17
Service temperature	°C	850	850	850
Thermal conductivity	W/mK	0,26 (750°)	0,201 (700°)	0,201 (700°)
Loss on ignition	%	3,1	8	8
Shrinkage	%	0,1/0,4	0,25/1,10	0,2/1,36
Coef. Termal expansion	K ⁻¹	6,1*10 ⁻⁶ /K	7*10 ⁻⁶ /°C	7*10 ⁻⁶ /°C