



PYROTEK MONOLITHIC TABLETOP REFRACTORY

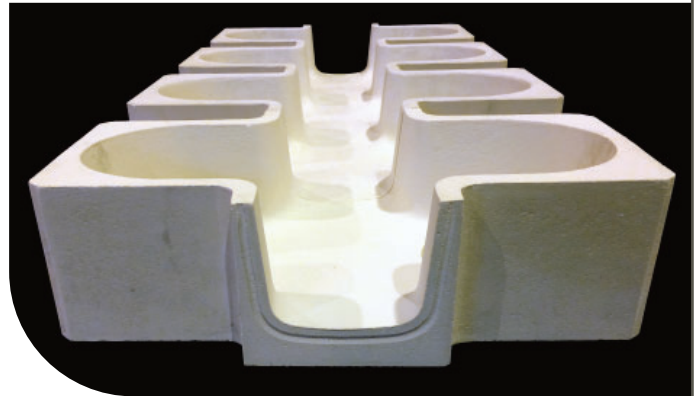
FOR VERTICAL DIRECT CHILL (VDC) BILLET CASTING

Pyrotek Monolithic Tabletop Refractories are precast refractory components used to distribute molten metal to mould positions in vertical direct chill (VDC) billet casting tables. All components are pre-fired, ready for use and offered in shapes and sizes for custom equipment designs.

Pyrotek offers two different refractory versions. Pyrotek Insural 140 has very low thermal conductivity and is used in casthouses worldwide. Pyrotek FS73 AL is robust, dense and strong and endures harsh operating environments.

Other fused silica refractories are available upon request. Contact a Pyrotek sales engineer for product information to meet specific project requirements.

When combined with ZYP Boron Nitride Lubricoat® coatings, the Pyrotek Monolithic Tabletop Refractory's service life can be extended.



BENEFITS

- No refractory ceramic fibres (non-RCF)
- Thermal shock resistant
- Non-wetting for easy cleaning

APPLICATIONS

- VDC billet casting tabletop refractory
- Precast shapes
- All aluminium alloys

PHYSICAL PROPERTIES

Material Property	Insural 140	FS73 AL
Density—g/cm ³ (lb/ft ³)	1.4 (87.4)	2.1 (131.1)
Modulus of Rupture—MPa (psi) at 25°C (77°F)	4.5 (653)	8.6 (1247)
Coefficient of Thermal Expansion—mm/mm·°C (in/in·°F)	1.4 x 10 ⁻⁶ (0.78 x 10 ⁻⁶)	0.8 x 10 ⁻⁶ (0.5 x 10 ⁻⁶)
Thermal Conductivity—W/m·K (BTU·in/ft ² ·hr·°F) at 300°C (572°F)	0.41 (2.84)	1.12 (7.77)
at 500°C (932°F)	0.44 (3.05)	1.07 (7.42)
at 700°C (1292°F)	0.47 (3.26)	1.10 (7.63)

NOTE: 72-hour cup test 7075 Alloy at 816°C (1500°F) for Insural 140. Wetting=1 and cleaning=2.

