PYROCAST XL

SMALL COMPONENT REFRACTORY

Pyrocast XL is a premium small component, fused silica castable refractory that is non-wetting to molten aluminium and its alloys at elevated temperatures. It is a high strength and erosion resistant material with optimized packing density. Parts cast from Pyrocast XL are heat-treated to remove any free and combined water prior to shipment. Because Pyrocast XL is lighter than molten aluminium, it floats, minimizing refractory inclusions.

COMPOSITION

Material	Approximate Percentage of Weight
SiO_2	54%
Al_2O_3	36.7%
CaO	6.3%
Other	3%

BENEFITS

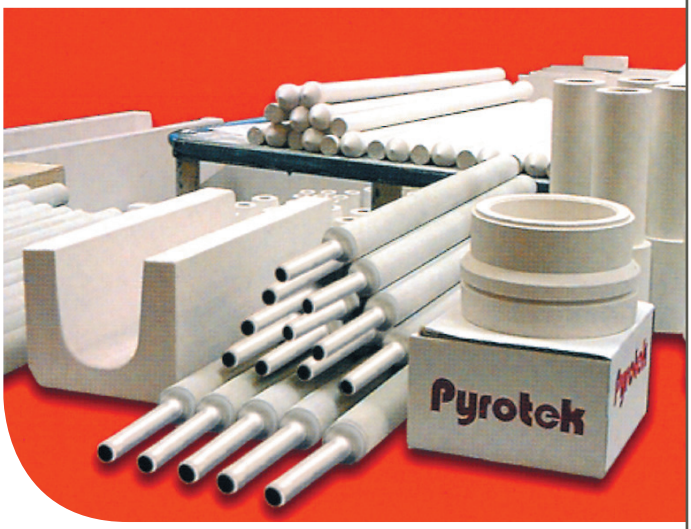
- Thermal shock resistant
- High erosion resistance
- High service temperature
- Smooth cast surface
- Dimensionally stable
- Easy cleanup
- Non-wetting

APPLICATIONS

- Thimbles
- Transition plates
- Down spouts
- Control pins
- Auto pour ladles
- Strip casting nozzles

AVAILABILITY

Precast shapes



PHYSICAL PROPERTIES

Property	Value
Cast Density–kg/m^3 (lb/ft^3)	1900–1950 (119–122)
Apparent Porosity	22–23%
Linear Change at 700°C (1292°F)	0.077%
Thermal Expansion Coefficient–mm/mm/°C (in/in/°F) at 200–700°C (392–1292°F)	0.82 x 10^{-6} (0.46 x 10^{-6})
Maximum Service Temperature	1000°C (1832°F)
Cold Crushing Strength*–MPa (psi) at 725°C (1337°F)	55 (7977)
Modulus of Rupture*–MPa (psi) at 725°C (1337°F)	14 (2031)
Thermal Conductivity–W/m·K (BTU·in/ft^2·hr·°F) at 460°C (860°F) at 610°C (1130°F) at 790°C (1454°F)	0.86 (5.97) 0.88 (6.11) 0.93 (6.45)
* Based on ASTM C133-84	

Note: The physical and chemical properties listed represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice.

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Product Type: 106, 144, 150, 158, 173, 180
Commodity Code: 02024