

Pyroform HP[™]

Pyroform HP[™] is the refractory of choice for billet and ingot casting as well as metal delivery launder systems all over the world. Pyroform HP[™] is a special blend of alumina-silica ceramic fibers with a superior inorganic bonding system giving a unique combination of properties not available in any other refractory product.

Pyroform HP™ is the refractory of choice because of its thermal shock resistance, abrasion resistance, high insulating properties, low specific heat and superior non-wetting ability. Pyroform HP™ has an extremely long life without metal contamination and reduces labor costs, installation time and eliminates costly dry-out procedures.

With the low specific heat of Pyroform, there is no need to pre-heat the system and provides less metal temperature loss compared to any other commonly used refractory, thus significant savings in energy. It will also allow to lower the temperature of holding or melting furnaces making it the lowest cost for refractory per ton of molten metal.



Properties	Features		
Low thermal conductivity	Excellent thermal insulation, minimizes temperature loss.		
Low thermal mass	No preheating required / fast cool down.		
Non-wetting	Easy skull removal.		
Low shrinkage	Reduces joint maintenance.		
Low bulk density	Floats in molten aluminium.		

Pyroform H^{P™} can be formed into an endless number of complex shapes for diverse applications such as casting table liners, launders, pot shells, and many other applications. Although RMG has developed a standard set of launder shapes that will meet most applications, will also create solutions to meet customized specific needs or fabrications.

Pyroform has been serving to the aluminium industry for more than 30 years. Over the years, several significant improvements have been made to the material. HP is the state of art version of Pyroform making it the refractory of choice.

Main Properties		
Material Type	HP-45	НР
Chemical Composition, % Al₂O₃ SiO₂ Other Inorganics	31 66 3	27 70 3
Properties at Room Temperature Density, kg/m ³ Modulus of Rupture, KPa (psi) Loss on Ignition, % Colour Coefficient of Thermal Expansion, x10 ⁻⁶ / °C	1041 3103 (450) <0.2 White 2.9	1169 4481 (650) <0.5 White 2.9
Normal Use Temperature, °C (°F)	871 (1600)	871 (1600)
Properties at 649 °C (1200 °F) Modulus of Rupture, KPa (psi) Shrinkage, %	3103 (450) < 0.05	4481 (650) < 0.05
Properties at 871 °C (1600 °F) Modulus of Rupture, KPa (psi) Shrinkage, %	3103 (450) 0.05	4481 (650) 0.1
Thermal Conductivity, W/m.K (Btu.in/hr.ft².°F) 260 °C (500 °F) 538 °C (1000 °F) 816 °C (1500 °F)	0.123 (0.85) 0.180 (1.25) 0.224 (1.55)	0.159 (1.10) 0.224 (1.55) 0.267 (1.85)

The values given herein are typical average values obtained in accordance with standard test methods and subject to normal manufacturing variations. They are supplied as technical data and may change without notice. Contact our company to obtain detailed information.