

Ladles “FibeRex™”

FibeRex™ ladles are formed around a metal perforated skeleton, making them very difficult to break. The specially formulated Pyrolite® fiber which has a very low thermal mass, is extremely insulative and requires no preheating.

Using FibeRex™ ladles will dramatically reduce the heat loss of the metal allowing to reduce the holding furnace temperature. The non-wetting features of the material dramatically reduce metal build upon the ladle, saving also in scrap metal and leaving the casting area clean.

FibeRex™ ladles can also be repaired with Pyroform E-Z Fill™ caulking and recoated with Pyroform™ Sealer. With those special non-wetting coating adheres gives longer life to ladles and requiring less frequent reapplication than that of iron ladles.

FibeRex™ ladles are available in standard sizes or custom shapes. Mounting brackets and hangers are available to fit any robot.



Pyrolite®	
Properties	Features
High insulating fiber structure	Extremely low metal heat loss. Low metal and oxide build up. Reduces holding furnace temperatures, saving costly energy. Repairable with E-Z Fill.
Metal cage inner skeleton	Strong, non-breakable.
Low thermal mass	Less energy taken out of metal. No pre-heating required. Energy savings and a safer work environment.
Low coefficient of expansion	Excellent thermal shock resistance.

Pyroform E-Z Fill™ is a non-wetting and caulkable patch compound that is used to repair FibeRex™ ladles.

Pyrolite® Main Properties	
Chemical Composition, %	
Al ₂ O ₃	29
SiO ₂	69
Other Inorganic	2
Properties at Room Temperature	
Density, kg/m ³	480
Modulus of Rupture, KPa (psi)	2415 (350)
Compressive Strength, psi	
5%	30
10%	40
Heat Loss, %	2-3
Colour	Opaque White
Maximum Use Temperature, °C (°F)	871 (1600)
Properties at 871 °C	
Modulus of Rupture, KPa (psi)	966 (140)
Shrinkage, %	0.7
Thermal Conductivity, W/m.K (Btu.in/hr.ft ² .°F)	
427 °C (800 °F)	0.123 (0.85)
649 °C (1200 °F)	0.190 (1.3)
871 °C (1600 °F)	0.267 (1.85)
Resistance to Molten Aluminium	Excellent

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.