



RFM AUTOPOUR LADLE

DIE CASTING REFRACTORY MATERIAL

Autopour ladles are made with reinforced fiberglass material (RFM®), a composite ceramic material that is both tough and tolerant of mild mechanical stress. Depending on the foundry die casting process requirements, RFM composite fiberglass fabric material can be combined with calcium silicate, fused silica, silicon carbide, or zirconium silicate slurry to provide an ideal solution. Refer to Pyrotek's Document No. 676 RFM technical datasheet for more composition property details.

RFM was developed in response to a need for a new refractory material to solve most common issues with steel, cast iron, or traditional ceramics.



RFM COMPARISON

Attributes	RFM (BEST OPTION)	Ceramics	Steel or Cast Iron
Resistance to Chemical Attack	RFM is naturally non-wetting to molten aluminium. To further enhance non-wetting properties, the finished RFM ladle is coated with boron nitride Lubricoat Blue ZS.	Can contain non-wetting agent to guard against aluminium attack. Careful preheating practices required to prevent non-wetting agent from burning. Frequent recoating required.	Protected by coatings. Requires frequent coating maintenance to prevent metal sticking and erosion. Potential of iron contamination.
Service Life	Field test results show extensive service life improvements.	Low mechanical strength and high preheating requirements lead to short service life.	Most ferrous products have to be welded and repaired to achieve their rated life.
Process Improvements	Can be engineered and designed to reduce oxides and inclusions, reduce skull, reduce furnace temperatures, be more energy efficient.	Thermal shock resistance. Longer life span than steel or cast iron.	Off-the-shelf and common with no added values to process improvements.

APPLICATIONS

- High pressure die casting
- Gravity die casting
- Sand casting

AVAILABILITY

Manufactured to project specifications

HEALTH AND SAFETY

Prior to use, refer to the product safety data sheet for proper handling and required personal protective equipment.

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