EMERGENCY RUN-OUT PITS

For Foundries by Silmeta Systems

A unique safety system proven to prevent steam explosions, increase safety and reduce costs and down time.

ALLIED MINERAL PRODUCTS

Global **Refractory** Solutions

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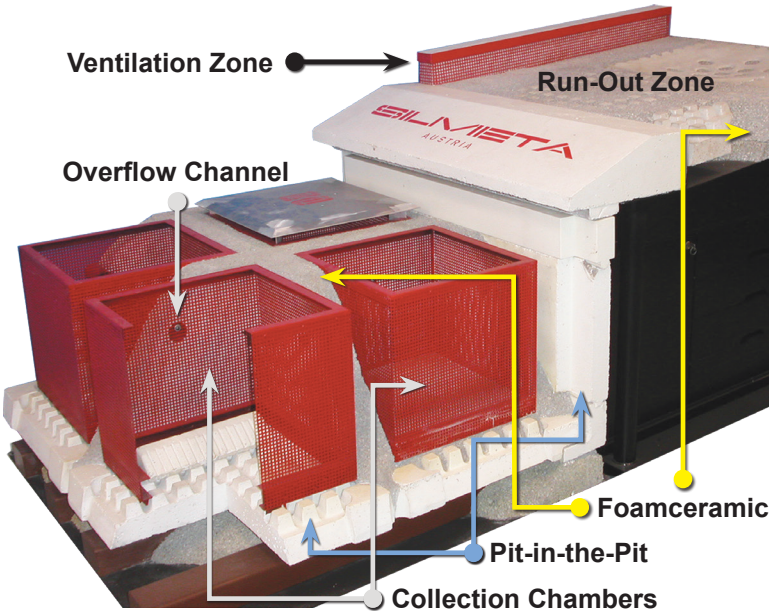
PREVENT STEAM EXPLOSIONS

EMERGENCY RUN-OUT PIT

EMERGENCY RUN-OUT PITS (ROPs) by Silmeta Systems combine patented material and design to prevent steam explosions that may occur as a result of a furnace breakout or emergency tapping. Silmeta's ROPs have been proven safety systems for over 29 years. With over 500 ROP systems installed, more than **200 furnace breakouts have occured without injury**.

Compatible Installation Sites

- **Iron Foundries**
  - Holding furnaces, including large channel induction furnaces
  - Medium or supply frequency coreless induction furnaces
  - Channel induction pouring furnaces (pressure pour furnaces)
- **Copper Foundries**
  - Medium or supply frequency coreless induction furnaces
- **Aluminum Foundries**
  - Medium frequency coreless induction furnaces

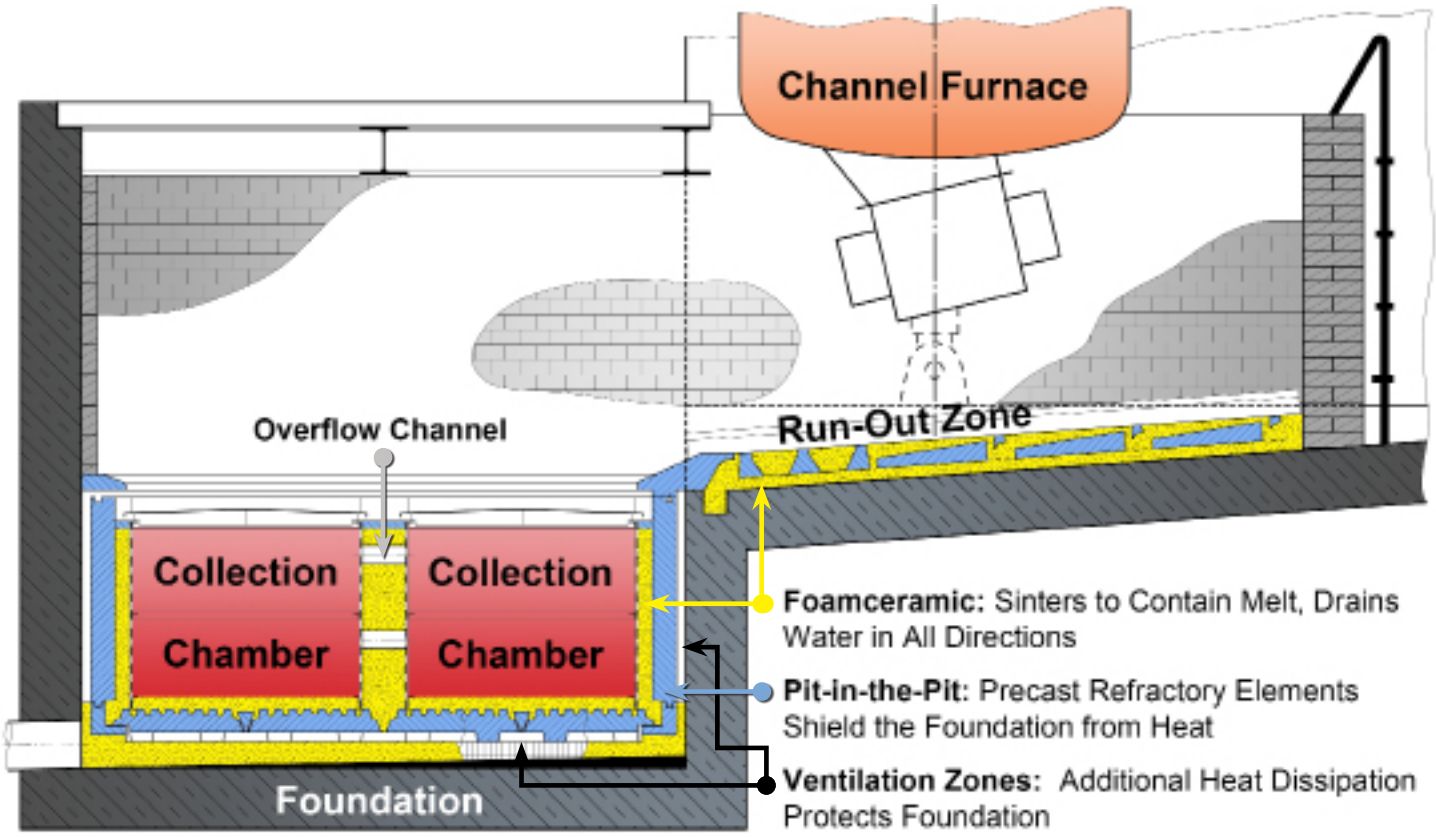


Benefits

- Each system is custom engineered and scaled to size and melt of the furnace it will serve.
- Silmeta's ROPs can be installed new or as a retrofit, with certain site specific limitations.
- Designed to contain 120% of the maximum melt, ensuring the entire melt is contained
- All water present escapes through Silmeta's patented Foamceramic, including the run-out zone immediately beneath the furnace. This sinters properly to contain the melt and isolate the water in the drainage system.
- Water can escape through the walls and floor of each collection chamber.
- Built-in crane hooks ensure a straight-forward removal of the cooled metal mass.
- Ventilation zones and precast refractory elements eliminate heat damage to the pit foundation.
- Once materials are on site, reinstallation after a breakout occurs in a matter of days. This ensures a rapid and cost conscious return to normal operation. Minor damage to any component is also easily repaired.

COMPLETE SAFETY SYSTEM

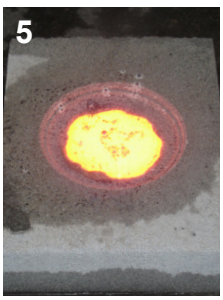
EMERGENCY RUN-OUT PIT



Testing

These photos show a standard test of Silmeta's Foamceramic technology:

1. A sample of molten metal is poured onto a dried block of Silmeta's Foamceramic.
2. Water is poured on the molten metal sample without effect other than fast cooling.
3. After the metal has solidified, the Foamceramic and metal are doused with water.
4. A second molten metal sample is poured on top of the water.
5. There are no "fireworks" to see, just the second metal sample cooling.
6. The metal solidifies without incident because the water has escaped through the Foamceramic.



WORKING TOGETHER FOR YOU

ALLIED & SILMETA

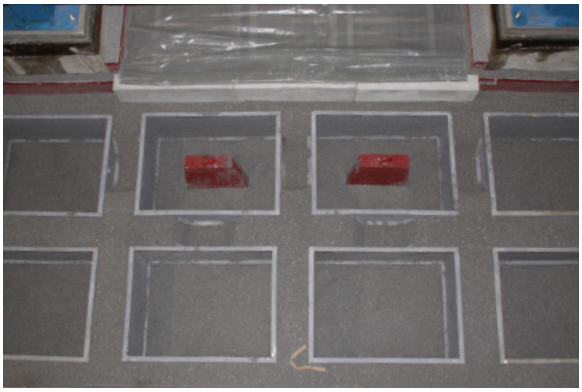
Allied Mineral Products and Silmeta Systems are the ideal team to provide Emergency Run-Out Pits in the U.S.

Allied's extensive experience in manufacturing precast refractory shapes positions them to deliver projects immediately. Allied provides a talented project management and installation team. These capabilities coupled with a large and knowledgeable sales force means Allied understands the product to determine what each customer needs.

Silmeta's expertise is a robust part of the equation. Established to provide foundries with high-quality equipment, Silmeta brings precise engineering and design to meet each furnace requirement. It wouldn't be a Silmeta ROP without their patented Foamceramic, specifically formulated for each type of melt. Add Silmeta's three decades of consulting experience for developing and installing ROPs with Allied's technical expertise and you have a winning combination to ensure effective installations.

With Allied and Silmeta working together, U.S. foundries can count on safety for their employees, quick installations and a faster return to operations after a breakout.

Because every furnace will eventually experience a breakout, Run-Out Pits designed by Silmeta Systems, and delivered in the U.S. by Allied Mineral Products, are an essential safety system for your foundry's operation.



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To learn more, contact your Allied representative or email info@alliedmin.com