



How Tachytherm molds improve cooling efficiency and cut costs:

A high thermal conductivity layer, just below the mold cavity surface, conducts heat away from the cavity walls and toward the cooling channels. This high conductivity envelope means that only the mold cavity must be cooled, not the entire mold base. Heat is virtually sucked from the cavity walls.

Conformal cooling channels remove heat from the mold cavity more evenly, eliminating hot spots, which delay mold opening. Uniform cooling also reduces part warpage.

The cooling channels are non-circular, and have turbulence-inducing features, to maximize heat exchange, even at lower flow rates.

None runs faster!

Contact ConforMAL, Inc.

reducecycletime@tachytherm.com

offers a competitive edge to the molder, and represents an exciting, differentiating product for the mold maker to offer in an increasingly demanding market.

Process licensing opportunities available.

Significantly Reduce Cycle Time!

- Improve part quality
 - Increase throughput
 - Reduce energy costs
- with a



Contact :

Robert E. Szokolay, President

ConforMAL, Inc.

569 East Minnehaha Avenue

Clermont, FL 34711

678 462 6290

reducecycletime@tachytherm.com

by

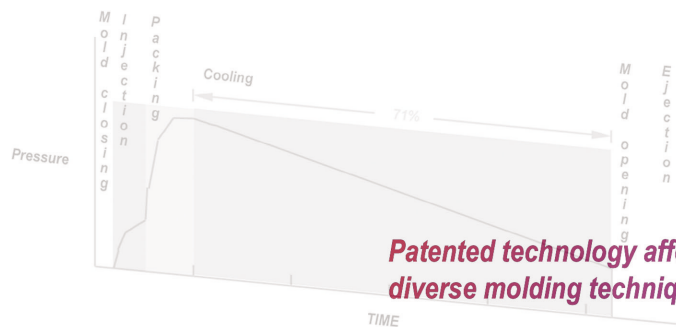
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Patented technology affords unprecedented thermal management for diverse molding techniques, including:

- Injection molding
- Embossing
- Rotational molding
- Blow molding

Advantages:

- Reduced molded-in stress
- Reduced cycle times
- Reduced energy expenditure
- Improved cosmetic quality
- Improved dimensional control
- Improved part-to-part consistency
- Widened design envelope
- Increased throughput

Applications:

- Difficult-to-mold geometries
- High aspect ratio micro-molding and micro-embossing
- Medical devices
- Large parts with long flow paths
- Thin-walled parts
- Parts with variable wall thickness
- Variotherm and impulse cooled molding
- Molding of heat- or shear-sensitive materials (e.g. acrylonitril)

Tachytherm
Tachyallasso-thermic molds
From the Greek words:
Tachy = Rapid
Allasso = Change or Exchange
Thermé = Heat

In a nutshell...

Tachytherm molds are better because they run faster than ordinary molds. They are built by a patented process, which produces a mold with unsurpassed cooling efficiency, through the use of high thermal conductivity materials and conformal cooling channels. Since cooling times with conventional injection molds are routinely 60-90% of entire injection molding cycles, this cooling efficiency typically equates to a total molding cycle time reduction in the range of 20-50%.

Compared to conventional molds, cooling in a Tachytherm mold is not only faster, but also more uniform. As a result, part distortion from locally varying shrinkage is reduced. Therefore, a Tachytherm mold will produce better parts, faster, with less energy.

Bottom line: Tachytherm molds save you money!

