Anything underlined in the body may be clicked to a direct hyperlink for more info
Close the hyperlinked box to exit the window and return to this newsletter

Discussed topics are boxed to reduce the need to scroll pages - read each box as a section.

MetalLife NEWS ThermalLife®

Badger Metal Tech, Inc.

Improving the Flow for Aluminum Castings

Print this Newsletter

Volume #011-10-04 Badger Metal Tech, Inc. October 2004

IN THIS ISSUE

Testimonies

EMAIL Us
Contact Us

MAKE IT BETTER HERE

A recent article in Die Casting Engineer magazine (Sept 2004 p40) discusses the problem facing magnesium die casters relating to cavity fill. In the article, solidification analysis is discussed along with its relationship to trapped gases that affect porosity levels. These trapped gases negatively affect the casting quality and integrity.

Although magnesium is being used more and more, many aluminum parts are still being produced especially for automotive components.

As a member of the general die casting community, we want to make you aware of two benefits that **MetalLife®** provides that relate directly to this problem in both magnesium and aluminum castings.

The **MetalLife®** resultant topography change provides a mechanism that enhances metal flow and at the same time helps break up the trapped gases in the molten metals thereby reducing porosity concentrations.

Magnesium castings, in most instances, are thinner than aluminum. Magnesium pour temperature is also lower than aluminum, which is a benefit in reducing thermal cracking.

Back to top

As the metal flows into a die, the molten metal solidifies with residual trapped gases causing porosity problems for die casters..

After a **MetalLife®** application, however, the molten metal flow is equalized, and interrupted so that any trapped gases that are present are broken down by the micro topography peaks into smaller and more homogeneous levels.

Many in the die casting community have been using this benefit to their advantage for years.

We had thought that this was common knowledge to the general die casting industry.

From the article, however, we see that many still struggle at times with porosity problem. That is the reasoning behind our doing a follow-up to the Die Casting Engineer magazine article.

By clicking on the side bar, more information can be found on our website. Call us to discuss your particular problem or to receive a quotation.

Back to top

Badger Metal Tech, Inc.
N60 W15088 Bobolink Ave. Menomonee Falls, Wisconsin 53051
Phone: 262-252-3804 Fax: 262-252-3956
Email: **metallife@badgermetal.com**
URL: **http://www.badgermetal.com**