

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



NADCA User Guides - Free to
Corporate Members

[Print this Newsletter](#)



Volume #020-06-07

Badger Metal Tech, Inc.

June 2007

IN THIS ISSUE Used Guide Links

NADCA 2007
Relieving Stress
In Die Casting
Dies

NADCA 2006
207-2006 Heat
Treat Criteria

NADCA 2006
Die Care
Maintenance
Manual

Tech Update
Section

NADCA has just published a NEW users guide - ("Relieving Stress in Die Casting Dies") by using Heat Stress Temper and **MetalLife®**. This new guide includes a technical overview of die casting die stress, heat checking causes, and the methods used to combat them. In addition there are test results conducted by Oak Ridge National Laboratory which support the positive effect of inducing **MetalLife®** compression to extend die life.

Besides this there are two other useful User Guides also available from NADCA. Corporate Members can obtain 1ea copy of these plus many other publications **FREE**

by just logging onto the NADCA website. The sidebar buttons in the newsletter are direct links to the NADCA site and the specific page where these "User Guide" publications can be ordered.

With these in hand, die casters now have **FREE** access to the three key ingredients for extending tool life. First choose a quality certified die steel, heat treat it correctly, then relieve the residual tensile stress build up, that shortens die life, by using heat stress tempering followed by **MetalLife®**. Finally care for the tool by following the recommended maintenance procedures.

[Back to top](#)

In the **September 2007 issue of the Die Casting Engineer magazine**, the first of a two part article will be published on "Understanding Residual Stress Effects and Corrective Action For Die Casting Tools".

Much has been written about the benefits of heat stress tempering, however, proper shot peening technique remains a mystery or unknown proven quantity for many die casters. This is the first of a two part series that attempts to explain some of the facts surrounding this type of mechanically induced compressive stress, along with the controls that are used to assure obtaining the maximum benefits from our proprietary **MetalLife®** process.

In **part 1**, we discuss general peening's History, Definition, Stress Curves, Depth, and the manufacturing effects that shorten

the life and performance on a far too significant number of die casting dies.

Part 2 in January 2008 will continue the discussion regarding the **MetalLife®** process, its numerous benefits, special controls that maximize these benefits, new technologies in the field, and some case studies that validate and confirm the benefits.

Have you ever wondered what part cavitation effect has on breakout and erosion? We answer this question which may surprise many die casters who equate breakout to heat checking when they are actually two different modes of failure.

Want to find out more?

[Cavitation Effect](#)

[Back to top](#)

[Tech Update Section](#)[back to topics](#)

Tired of all the security issues with Internet Explorer but fearful of trying something new?

We know how you feel. It seems every time you try something new, it messes up something else on your computer. Not so with the open source browser, [FoxFire](#).

Not only does it install in seconds, but you still can have your choice of browsers. The old internet Explorer

or the new tabbed, fast, easy to learn FoxFire.

Badger too, was very cautious about trying it, but have since dispelled those fears. If you would like to try it, just click on this button:

[Click to Download FireFox](#)

It is only 5.7 Meg in size, and has an excellent help file. You probably won't even need to read it. You can still use Explorer but now you have a choice.

More tips to come in future newsletters

Badger Metal Tech, Inc.

N60 W15088 Bobolink Ave. Menomonee Falls, Wisconsin 53051

Phone: 262-252-3804 Fax: 262-252-3956

Email: infonow@badgermetal.com

URL: <http://www.badgermetal.com>

Copyright © 2007. All Rights Reserved

If you wish to be removed from our email Newsletter please reply with **REMOVE** as the subject. We will delete your record from our database