**DOUG MARION** Metallurgical & Casting Expert

**Comprehensive Casting Solutions, LLC** 



## Contact

13133 Beech Street Weston, OH

# Technical Areas of Expertise

Fourth generation hands-on foundryman with **50+** yrs experience in all aspects of precision investment and sand casting, including the Shaw and 'no-bake' processes. Well versed in alloy chemistry, grain structure, alloying compositions. A world leader in metallurgical process control, best practice and defect analysis. Extensive understanding of shell systems and organic/ inorganic additives to optimize slurry and shell performance. Served on ASTM committees for alloy development (A01/ B01). process control systems.

# Key Skills

Alloy Chemistry Grain Structure Modification SPAL™/ EGAL™ Costing/ Quoting

## **Technical Publications**

"Dewaxing Investment Casting Molds", 56<sup>th</sup> Tech. ICI Conference

"Immediate Foundry Cost Reductions & Quality Improvements with SPAL<sup>™</sup>", 54<sup>th</sup> Tech. ICI Conference

## Awards

The Deming Award from FORD Q1 Program

Keating Award in Scientific Excellence – American Foundry Society 2007

AFS Gold Metal Award for No-Bake Sand Casting 2009

# Background

#### May 1991 - Present Vice President • MCM Precision Castings

Over see all foundry activity from engineering new castings, quoting, training wax, shell, pouring operations and sales. Custom makes all alloys from raw feed stock to all ASTM/ ASM and other specs.

## April 1982 - February 1991

## Foundry Supervisor • Rimer Precision Castings

Oversaw all foundry systems and processes from wax to metal finishing.

## Leading Industry Expert

Developed the Investment Casting Institute's Process Control Standards Program. This provides investment casting foundries a mechanism for self-evaluation of their process control, thereby, enhancing their industry effectiveness, profitability and overall performance while providing an ongoing means of facilitating process improvement.

Co-developed the SPAL<sup>™</sup> and EGAL<sup>™</sup> processes with Air Liquide to optimize metal castings for overall quality and reduced cost.

## Stewardship

Fun fact that Doug grows his hair for the purpose of donating it to make hair pieces/wigs for children surviving cancer through chemotherapy treatments.