

# FOUNDRY 101

Presented by ThyssenKrupp Waupaca

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ThyssenKrupp Waupaca



ThyssenKrupp

## FOUNDRY 101 Overview

General casting design considerations and how they apply to conventional casting processes will be covered, as well as our proprietary vertical green sand molding process. You will experience a virtual reality tour of our process. Pictures of actual parts in production are used to explain our process and the associated terminology. Design guidelines, design for manufacturability, CAD platform support, MAGMA solidification analysis, and more will be covered.

By identifying the cost drivers, ThyssenKrupp Waupaca is better equipped to identify design solutions to reduce cost. We trust that the information presented combined with good questions and answers during the program will leave you with a better understanding of foundry practices, specifically ThyssenKrupp Waupaca's custom vertical green sand molding process.

## FOUNDRY 101 Agenda

Sessions are 3.5 hours and cover both grey and ductile iron.

- Brief overview of ThyssenKrupp Waupaca
- Melting and metallurgy: gray iron, ductile iron
- Foundry terms defined
- Patterns and gating
- Cores and ThyssenKrupp Waupaca's core making processes
- ThyssenKrupp Waupaca's proprietary vertical green sand molding process
- Cost drivers
- Design guidelines
- Solidification models and casting simulation (Magma)