

STEEL FOUNDERS' SOCIETY OF AMERICA

2025 T&O Workshop preliminary program

2:00pm to 6:00pm Wednesday, December 10th



Porosity

Tom Stevens – SFSA Alumni

Liquid metal has the ability to absorb large quantities of hydrogen, nitrogen, and oxygen from many sources. During solidification, these gases have limited solubility and are rejected to the remaining liquid metal. When a critical limit occurs, spherical bubbles form in the liquid, creating a void in the structure. This talk explores the science behind this phenomenon and practical ways to reduce this defect.

Technology Roadmapping: Bringing focus to your innovation efforts

Melissa Martinez – MetalTek International

This talk will focus on technology roadmapping – what it is, types of technology roadmaps, why they matter and how, combined with a business's strategy, they support growth.

Continuous Improvement Program Savings

John Workman – Eagle Alloy

Eagle Alloy has had a strong continuous improvement program with contributions coming from all departments including HR, Engineering, Quality and production. Recent efforts to increase contributions from the floor have generated savings from the operators. An ESOP (Employee Stock Ownership Plan), Eagle Alloy's mantra is "Think like an Owner", and they do. We are sharing four years of continuous improvement ideas, so you may be able to find some that may help your foundry.

The 6C Framework to Build a Connected Factory

David Blondheim – Mercury Marine

Industry 4.0 (I4.0) relies on the crucial role of data collection and utilization. The benefits of I4.0 drive operational excellence in connected factories by elevating productivity, uptime, and quality. While the rationale of I4.0 adoption is widely acknowledged, the challenge lies in the practical implementation of a connected factory. The proposed 6C Framework is structured around six key components to solve these challenges: Criteria, Connect, Communicate, Collect, Consume, and Culture. The framework addresses the human and technical aspects of data collection to aid in adopting and implementing I4.0.

Obstacle Squares – Driving Standard Thinking

Andy Oskam – PRL Industries

Ever wonder what it means to achieve operational excellence or attain world class status? It's not magic, just a different way of approaching problems – a standard way. This session will demonstrate some foundational elements of Lean Thinking and provide a small taste of Toyota Kata discipline. Everyone in today's manufacturing workplace from sales and engineering to operations and quality, as well as top leadership, will benefit from this session.