

2018 SFSA Technical & Operating Conference

Preliminary Program - Subject to Change

Session 1 - Thursday December 6

Start time: 9:00am

Subject	Company	Presenter
1 Update on Silica Replacement (Silica v. Alzิปure v. Carbo)	Southern Cast Products	Doug Imrie
2 Molding System Conversion from Silica Sand to Carbo Ceramic	Regal Cast, Inc.	Greg Raudenbush
3 Ceramic Molding Media to Replace Silica Sand at Wear-Tek	Wear-Tek	Jerrold Miller
4 Observations on Dimensional Variation - Switching to Ceramic Sand	Omaha Steel Casting Co.	Bryan Steinbrueck
5 Staying with Silica Sand	MetalTek - Carondelet	William Yates
6 Developing a Molder Training Program	Columbia Steel Casting Company	John Cory
7 Employee Engagement - 2018 - The Year of the Supervisor	McConway & Torley, LLC	Jessica Luffy
8 Can't We All Just Get Along?--Stainless Foundry's Journey to Understand Each Other Better	Stainless Foundry & Engineering	Jeanne Wagner
9 Evaluation of Protective Fabrics to Molten Metal Impact (ASTM F955)	University of Alabama - Birmingham	John A. Griffin
10 2019 Market Forecast	Badger Alloys	Steve Cooke

Session 2 - Thursday December 6

Start time: 1:30pm

Subject	Company	Presenter
1 Productivity Increase in Pouring Area : The Mechanized Ladle	Magotteaux International S.A.	Bruno Dupire
2 Renewing the Deburring Department - An Overview of the Analysis of Issues and Solutions for the Development of an Effective Finishing Workstation	Fonderia Augusta srl	Lisa Molteni
3 Eagle Alloy - Robotic Grinding Update	Eagle Alloy, Inc.	Nic Tarzwell
4 Automated Venting in a Green Sand Mold	McConway & Torley, LLC	Aaron Poklembo
5 Electronic Data for the Operation Improvement	Fimex SA de CV	Guillermo "Willy" Oyarzabal
6 Implementation of Weld Mapping Software for Time Savings and Process Improvement	MetalTek Wisconsin Investcast	Jim Myers
7 The Implementation of R for Data Manipulation and Visualization		Jacob Melvin
8 Core Room Chromite Hopper Project	Harrison Steel Castings	Brock Grabiak
9 Evaluation of Mechanical Properties with M30C	Duraloy Technologies	Tyler Jankowski
10 The Effects of Chemistry and Heat Treatments to CA15 Mechanical Properties	Stainless Foundry & Engineering	Amber Nolf
11 Using 2 by 2 Contingency Tables to Improve Misrun	Regal Cast	Benjamin Previte
12 A Study into Deoxidation Practices	Andritz	Riley Simpson
13 Predicting Alloy Shrinkage and Die Expansion for Large Diameter Castings	MetalTek - Investcast	David Sternaman
14 The Effects of Variation in Die Material on Single Keel Bar Properties	Metaltek - Wisconsin Centrifugal	Tanner Wallenkamp
	Metaltek - Wisconsin Centrifugal	

Session 3 - Friday December 7

Start time: 9:00am

Subject	Company	Presenter
1 Feasibility of Printed Sand Cores for Trial Pattern Replacement	Andritz Inc.	Joshua D. Gardner
2 Integration of an Additive Sand Printer into Casting Operations	D.W. Clark	Jeffrey B. Burek
3 3D Printed Core Trials: Raw Materials Make a Difference	Eagle Alloy, Inc.	Ryan Horak
4 Rapid prototyping at Ferry Captain Foundry	Ferry Captain	Jean Baptiste Prunier
5 Endorsing Additive in a Global Supply Chain	Emerson - Fisher Controls	Nathan VanBecelaere
6 Coatings for Graphite Electrodes in Electric Arc Steelmaking	Harrison Steel Casting	Jeremy Knibbe
7 Carbon Pickup on Surface of Low-Carbon Stainless Steel	Badger Alloys	Mike Beining
8 Deoxidation Process Change to Prevent Under-Riser Cracking Caused by Aluminum Nitrides on Heavy Sections	Acerlan Matrix Metals	Mario Terrazas
9 Improvements in Heavy Section Mechanical Performance of Steel Castings	Goodwin Steel Castings	Steve Roberts
10 Green Sand Systems for Steel Castings – Lessons Learned from Iron Foundries	Penn State University	Robert Voigt
11 Acid Demand Value - A Literature Review and Observations	Omaha Steel Casting Co.	Bryan Steinbrueck
12 Major Changes in the Work Place	Viking Pump	Anne Shepherd
13 MMP - A Fully Solar-Powered Foundry	Midwest Metal Products, Inc.	Joe Plunger

Session 4 - Friday December 7

Subject	Company	Presenter
1 Digital Innovative Design for Reliable Casting Performance - An Update	SFSA	David Poweleit
2 Quench Time and Temperature Study	Bradken - Tacoma	Christian Hartwell
3 Contact Thermocouples Governing the Heat Treat Furnace	Corporación POK	J. Martin Nuñez
4 Magnetic Particle Inspection - Best Practices and Procedures	Iowa State University	Dave Eisenmann
5 Foundry Flaws and Fixes	Paul Rudd LLC	Paul Rudd
6 High-Yield Yield Improvement	Southern Cast Products, Inc.	Daniel Wile
7 Utilization of Quality Management Module in SAP to perform quality function in a Sand Cast foundry	ME Global - Tempe	Antony Pieter
8 Casting Defect Analysis Using Empirical Data and Magma	Regal Cast	Laura Verne
9 Test Block Study of M35-1: Comparing Simulated and Cast Results	American Foundry Group, Bixby	Abel Ardis
10 Automated Large Area Inclusion Analysis With Image J and RStudio	Harrison Steel Casting	Shawn Martin
11 Continuing the Conversation - Naturally Pressurized Gating	Highland Foundry Ltd.	Wade Marquardt
12 Investigation of the Relationship Between Secondary Phases and the Mechanical and Corrosion Properties in Cast Hyper Duplex Stainless Steel	Highland Foundry Ltd.	Wade Marquardt

Session 5 - Saturday December 8

Subject	Company	Presenter
1 Cast Alumina Forming Austenitic Alloys	MetalTek Wisconsin Investcast	Jim Myers
2 Microsegregation in Low-Alloy Cast Steels: Characterization and Homogenization	Safe Metal	Jean-Francis Carton
3 Development of a new Ferrite prediction Diagram for Cast Duplex Stainless Steels	Iowa State University	Scott Chumbley
4 Inclusion Characterization in Cr-Mo Alloy Steel Castings Using SEM/EDS Microanalysis and Hypermapping	ME Global - Minneapolis	Dan DeMiglio
5 Determination of Hydrogen Presence in Steel	Newport News Shipbuilding	Rick Boyd
6 Kinetics of Thermal Embrittlement and Optimization of Hydrogen Aging Treatments in HY Steel	Naval Surface Warfare Center	Matthew C. Draper
7 Advanced Modeling of Shrinkage Porosity and Application to Mn-Steel Castings	University of Iowa	Vahid Khalajzadeh, Christoph Beckermann
8 Determination of Pattern Allowances for a Distorted Steel Casting using an Inverse Elastoplastic Analysis	Oak Ridge Associated Universities	Daniel Galles