



SFSA CASTEEL REPORTER

Steel Founders' Society of America

a publication serving
SFSA steel casting industry Members

780 McArdle Drive Unit G, Crystal Lake IL 60014

Tel: 815-455-8240 Fax: 815-455-8241

<http://www.sfsa.org>

October — 2014

Casteel Commentary

Selling value is the topic of this month's Casteel Commentary. We need to avoid trying to sell on value that makes price the main topic. We need to sell solutions that allow us to capitalize on our technology and closeness to the customer.

Technical & Operating Conference

Register and pay before October 30 to take advantage of the reduced registration fees for the 68th SFSA Technical & Operating Conference. The conference will be held December 11-13 at the Drake Hotel in Chicago, with a Workshop session on the afternoon of Wednesday December 10. The conference program is attached to this newsletter and available online at <http://www.sfsa.org/sfsa/toconf>. The T&O committee has worked hard to put together a program of over 40 papers (over ¾ of which are being contributed by SFSA members). Take a look at the program - we believe you will agree that attending this year's conference will be of great value to SFSA members.

SFSA Annual Meeting

The SFSA Board of Directors has decided to rename two of our annual meetings to reflect the program and purpose more adequately. The traditional Annual meeting has for years been more focused on leadership issues in our industry. The Fall SFSA annual meeting will become the SFSA Fall Leadership Conference. The Spring Management meeting will also be renamed the SFSA Spring Leadership Conference. We will be expanding the subjects and programs to deliver more for those attending.

This year's Annual Meeting program was a strong success based on survey feedback from attendees. Members indicated that the SFSA Forecast for 2015, the analysis of the industry capacity, and the experience of the roundtable session is reason enough to attend the conference each year. In addition, this year's program also included presentations on product liability, energy management for steel foundries, Impact of U.S. economic trends, and more. The presentations from the meeting are located here for your use, <http://www.sfsa.org/meetings/annmtg14>. Please save the date for next year's Fall Leadership Conference which will be held in Washington DC on September 12-15, 2015.

Kent Peaslee Scholarship

Our industry lost a supporter, advocate, recruiter and technology leader when Dr. Kent Peaslee, the Chair of Steelmaking Technology and Curators' Teaching Professor of metallurgical engineering at Missouri University of Science and Technology, unexpectedly passed away last year. The SFSA Board of Directors recognized Kent's contributions by awarding him the SFSA Barlow award. We will be presenting this award at the SFSA T&O Conference this December. In addition, SFSA is developing a scholarship fund in his memory. As a support for this effort, the SFSA Board has decided to match your contributions dollar for dollar until the end of the year. Our current fund is over \$17,000. We would like to more than double that amount by the end of this year. Your contributions are fully tax deductible including any personal contributions. I would encourage you to be generous in

your support. Contributions should be made payable to the Steel Founders' Society and please indicate on the check that it is for the Kent Peaslee Scholarship Fund.

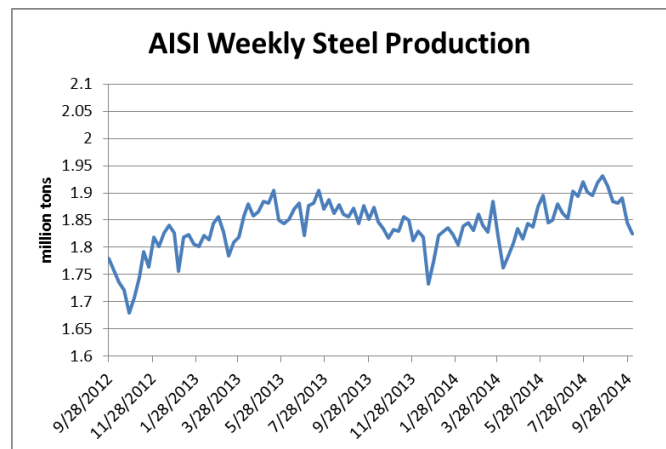
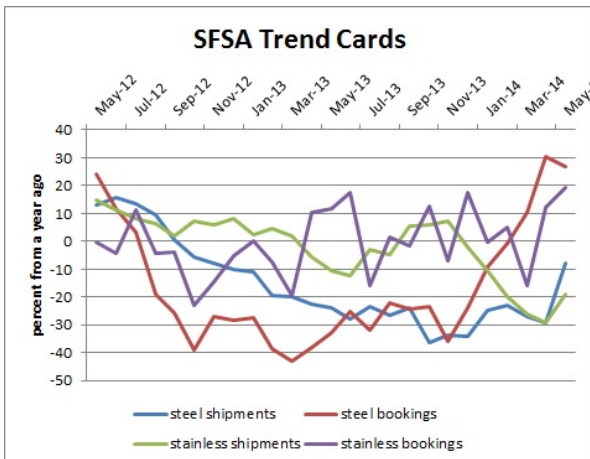
New Member Program - Grainger

SFSA has established a new affinity program with Grainger to save members money on all industrial supply purchases. All US members that spend less than \$100,000 annually with Grainger are eligible and automatically enrolled in the program to benefit from a minimum 10% discount on all catalog and online purchases in addition to free ground shipping. Deeper discounts are available for products frequently purchased in metalworking environments. <http://www.sfsa.org/sfsa/grainger-sfsa.pdf>

Steel Casting Wiki

SFSA staff and members have made some significant progress on the Steel Wiki website which improves how the Society serves our members in two important areas: access to up-to-date information, and collaboration and exchange of ideas between SFSA members. The wiki is intended to be updated, changed and improved as needed to best serve our industry. The wiki will also become an important resource of the artisan program for the technical and management leadership in your organization to share their knowledge for future generations. We are urging SFSA members to sign up for an account on the wiki and start using it. Go to http://wiki.sfsa.org/index.php/Get_an_account and sign up.

Market News



Steel casting shipments appear to have stopped declining but still remain relatively stagnant. Both stainless and steel casting shipments showed some improvement in May and bookings are positive compared to the prior year. The backlog still shows slow market conditions with steel and stainless steel castings having backlogs less than 8 weeks.

Steel mill production, which is tightly correlated with steel casting output, showed improvements in March through August but have fallen to lower levels since then.

Capital Goods orders continue a slow rise but are not rising fast enough to indicate improving conditions for steel castings.

Iron and steel casting shipments are also correlated tightly with steel casting sales and they show modest growth this year.

Casteel Commentary

We are taught in business that the key to making a sale and retaining the business is to have a compelling value proposition. I think this approach is fundamentally misguided. This approach empowers our customer to use competition to reduce the price, make our products a commodity subject to global market conditions and does not allow us to differentiate ourselves based on expertise and capability.

I heard a marketing consultant propose that he could not necessarily increase your sales but he could reduce your wasted time. His proposal was to ask a new prospect who was there current supplier and then to assert that if the current supplier was capable, they should keep the business. If the purchasing agent then said that they were always looking for new suppliers, your time is wasted with that prospect. He will be happy to try to get innovative approaches from you to improve his current supplier and to get an aggressive price to use in negotiating with his current supplier. Unless the purchasing agent indicates that they have a problem, a systemic issue, with their current castings, your opportunities are severely limited.

So clearly we are not primarily selling value. Our most compelling sales point is solutions. If we can with our technology or casting capability, solve a systemic problem for a customer, we can make a sale. This sale will not be as price sensitive our as subject to competitive displacement since we own and know the solution to our new customers problem.

Large companies talk about value but they are fundamentally driven to avoid risk. Changing suppliers is risk. Using competitive bids to reduce the price from existing suppliers is not risk.

Purchasers can only succeed by lowering costs or solving problems. We need to sell solutions not lower costs.

Raymond Monroe

**STEEL FOUNDERS' SOCIETY OF AMERICA
BUSINESS REPORT**

SFSA Trend Cards (%-12 mos. Ago)	12 Mo Avg	3 Mo Avg	May	April	March
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Carbon & Low Alloy

Shipments	-22.8	-8.0	39.0	-23.7	-39.4
Bookings	-8.0	26.7	-17.0	60.7	36.5
Backlog (wks)	7.9	7.7	8.0	7.5	7.5

High Alloy

Shipments	-9.0	-18.8	-3.5	-26.0	-26.8
Bookings	4.9	19.3	23.8	55.9	-21.7
Backlog (wks)	8.8	7.3	7.8	7.4	6.6

**Department of Commerce
Census Data**

Iron & Steel Foundries (million \$)

Shipments	1,687.7	1,721.7	1,734	1,709	1,722
New Orders	1,714.2	1,750.0	1,778	1,707	1,765
Inventories	2,237.6	2,246.7	2,250	2,239	2,251

Nondefense Capital Goods (billion \$)

Shipments	75.0	76.4	75.8	76.5	77.0
New Orders	81.2	82.1	80.7	82.6	83.0
Inventories	175.7	179.6	181.6	179.2	178.1

**Nondefense Capital Goods
less Aircraft (billion \$)**

Shipments	66.7	68.3	68.3	68.2	68.4
New Orders	68.5	70.2	69.2	70.2	71.0
Inventories	120.1	120.9	121.5	120.9	120.4
Inventory/Orders		1.7	1.75	1.72	1.70
Inventory/Shipments		1.8	1.78	1.77	1.76
Orders/Shipments		1.0	1.01	1.03	1.04

American Iron and Steel Institute

Raw Steel Shipments (million net tons)	8.1	8.3	8.4	8.2	8.3
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STEEL FOUNDERS' SOCIETY OF AMERICA

780 MCARDLE DRIVE UNIT G
CRYSTAL LAKE, IL 60014-8155
PHONE: 815/455-8240
FAX: 815/455-8241
www.sfsa.org



August 20, 2014

MEMORANDUM

TO: ALL SFSA MEMBERS
SUBJECT: 2014 68TH NATIONAL
TECHNICAL & OPERATING CONFERENCE

We take great pleasure in inviting you and your technical personnel to attend the 68th Annual Technical and Operating Conference on December 11-13, 2014. Your T&O Committee is presenting a solid program of practical papers relating to most operating areas of your plant and operating issues.

We have attached a copy of the programs for the National Technical and Operating Conference and the Workshop. The program brings the most comprehensive review of SFSA members' experiences and the most up to date reviews of the research program. The program reflects the considerable effort by the T&O Committee and the members who are willing to share their experiences. We are confident that you will find this program to be of great value to you and your company. We look forward to seeing you in Chicago in December.

The Conference will be held at the Drake Hotel located on Michigan Avenue in downtown Chicago and the format will be the Thursday, Friday and half-day Saturday. A Members' T&O Workshop has been scheduled on Wednesday afternoon, December 10, prior to the Conference.

The Conference registration fees are \$1170 for all three days including the Workshop or \$1085 for the Conference excluding the Workshop. However if you register and pay for the Conference by October 30, these prices are reduced to \$1070 and \$995 respectively. Should you wish to register for single days the fee is \$495 (\$440 if paid by October 30) per day on Thursday and Friday, \$395 (\$340 if paid by October 30) for Saturday only or for the Workshop. The Conference fee also includes a USB drive containing the proceedings. To register for the Conference please use the enclosed form, note and observe the attached cancellation policy.

Also, please make sure to make your hotel reservations before November 9. **The hotel must receive them no later than November 9 to guarantee accommodations and the special rate.**

After reviewing the program we are certain that you will want your foundry to attend this Conference given for and by the steel casting industry. We look forward to your participation in December.

Kind regards,

Rob Blair
SFSA

Steel Founders' Society of America

National T&O Conference – December 11-13 2014
Grand Ballroom, Drake Hotel, Chicago, IL

Session 1 Thursday Morning – December 11 8:30 AM

- 1.1 Affordable Care Act: An Update
Marc A. Schmucker, Bradken - Atchison
- 1.2 Hitting Par on the Course with HR
Amie Perez, Bradken - Atchison
- 1.3 Revitalizing SFSA Marketing
Teresa Decker, Spokane Industries
- 1.4 Transbay Node Update
John Cory, Bradken - Atchison
- 1.5 SFSA Wiki Project
Callen Richards, MetalTek International - Sandusky
- 1.6 Design Agent Teaming for Casting Conversions from Weldments
Matthew C. Draper, General Dynamics Electric Boat
- 1.7 Utilizing Information Through Collaboration
Brent K. Leger, Zac Hanks, Bradken - Amite
- 1.7 Utilizing Information Through Collaboration
Shawn Cefalu, MetalTek International - Sandusky

Industry Luncheon – French Room

Session 2 Thursday Afternoon – December 11 1:30 PM

- 2.1 Innovative Heat Treatments to Improve the Ductility of High Strength Steels
David C. Van Aken, Terrell Webb, Missouri University of Science & Technology
- 2.2 Improved Heat Treatment Schedules for High Alloy Castings
John DuPont, Dan Bechetti, Lehigh University
- 2.3 Influence of Welding and Post Weld Heat Treatment on Mechanical Properties of Eglin Steel
John DuPont, Robert Hamlin, Erin Barrick, and Brett Leister, Lehigh University
- 2.4 Sample Casting Routing Control
Jeanne Wagner, Stainless Foundry & Engineering
- Schumo Foundation Intern Papers - TBD

Discussion Session

Industry Reception

Preliminary Program –Subject to Change

- SFSA Member or staff
- Researcher or industry consultant

Session 3**Friday Morning – December 12****8:30 AM**

- 3.1 Argon/SPAL/Porous Plug
Barry Craig, MetalTek International - Carondelet
- 3.2 Grinding Media Study at MetalTek International
Steve Pilgram, MetalTek International
- 3.3 Pouring Cups
Jenni Duncan, Bradken - Chehalis
- 3.4 EGAL Implementation at AFG
Bryan Tiger, American Foundry Group
Terry LaSorda, Air Liquide
- 3.5 Energy Savings and Sustainability in the Foundry
Anoop Balakrishnan and Kyle Long, Harrison Steel Castings Company
- 3.6 ERP
Shawn Cefalu, MetalTek International - Wisconsin Centrifugal Division
- 3.7 Implementing an ERP... and Actually Making it Work.
Jessica Okhuysen, Corporaçion POK
- 3.8 ME Elecmetal Melting: Optimizing Expansion
Paul Henriksen, Travis Needham, ME Elecmetal - Minneapolis
- 3.9 New Facilities, Expectations and Issues
Dave Fazakerly, Eagle Alloy
- 3.10 Floating Cover Lids on Large Steel Castings
Albert Miller, Jr., Joe Hutto, Bradken - Amite

Industry Luncheon – French Room**Session 4****Friday Afternoon – December 12****1:30 PM**

- 4.1 Computed Radiography Equipment Selection and use at Decatur Caterpillar
Pat Hayes, Douglas Guyer, Caterpillar
- 4.2 Spokane Industries' Experience Converting from Film-Based to Computed-Radiography Inspection
David Jolin, Spokane Industries
- 4.3 Moon Rock Formation in Thermal Reclaimer Duct Work
Danny Kermicle, Magotteaux Pulaski
- 4.4 New EAF Transformer Selection, Installation, and Tuning
Benjamin Wells and Robert Finley, ME Elecmetal - Tempe, AZ
- 4.5 Practical Application of 3D scanning in the Foundry
Glenn McQuarter, Bay Cast
- 4.6 Progress in Determining Riser Sleeve Properties for Steel Castings
Thomas J. Williams and Christoph Beckermann, University of Iowa
- 4.7 Rapid Patternmaking
Frank Peters, Matt Frank, Iowa State University
- 4.8 Additive Manufacturing for Metal Casting
Jerry Thiel, University of Northern Iowa
- 4.9 Use of PMI/XRF Gun on Reclaimed Sand
Shawn Cefalu, MetalTek International - Wisconsin Centrifugal Division
- 4.10 Solar Panels for Power Management
Jeff B. Burek, DW Clark

Discussion Session

Preliminary Program –Subject to Change

- SFSA Member or staff
- Researcher or industry consultant

Session 5**Saturday Morning – December 13****8:00 AM**

- 5.1 API Spec. Revision
Jeanne Wagner, Stainless Foundry & Engineering
- 5.2 ASTM Update
Elaine Thomas, Bradken - Tacoma
- 5.3 Usage and Limitations of ASTM A370 Table 9 – Charpy V-notch Test Acceptance Criteria for Sub-sized Specimens
John Griffin, University of Alabama – Birmingham
Malcolm Blair, SFSA
- 5.4 Data Analytics for Foundries with R
Shawn Martin, Harrison Steel Castings Company
- 5.5 Surface Anomaly Mapper in the Foundry
Keith Pearl, Sivyer Steel Corporation
- 5.6 Porosity and Cleanliness Limitations on High Strength Steels
David C. Van Aken, Terrell Webb, Missouri University of Science & Technology
Robin Foley, University of Alabama - Birmingham
- 5.7 Development of Precision Statement for ASTM A833 – Telebrineller Portable Hardness Tester
John Griffin, Robin Foley, University of Alabama - Birmingham
Malcolm Blair, SFSA
- 5.8 Pour Time and Water Modeling Revisited
Charles Monroe, John Griffin, Robin Foley, University of Alabama - Birmingham
Raymond Monroe, SFSA
- 5.9 Simulation Software Comparison Study
Glenn McQuarter, Bay Cast
- 5.10 Under-riser segregation
Raymond Monroe, SFSA

Adjourn

Preliminary Program –Subject to Change

- SFSA Member or staff
- Researcher or industry consultant

T & O Workshop - 2014

STEEL FOUNDERS' SOCIETY OF AMERICA



National T&O Workshop Program

2:00 PM to 6:00 PM
Wednesday, December 10

- **Process Improvement and Six Sigma**
Amie Perez, Bradken
- **Physical Metallurgy and Welding of Nickel Alloys**
John DuPont, Lehigh University
- **Heat Treatment Principles**
Raymond Monroe, SFSA
- **Flux Core vs. Solid Core Welding Wire**
TBD

Preliminary Program –Subject to Change

REGISTRATION
 68th TECHNICAL AND OPERATING CONFERENCE & WORKSHOP
 December 10-13, 2014
 THE DRAKE HOTEL - CHICAGO, IL

Please register the following individuals for the 68th Technical & Operating Conference:

Company _____
Address _____
City, State, Zip _____

Please print or type

Choose either

	First Name _____	Last Name _____	Full Conference Including Workshop	Full Conference Excluding Workshop	or choose Individual days			
					Wed	Thu	Fri	Sat
1.	_____	_____	_____	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____	_____	_____	_____

Conference Fees**		Registration if paid in full by Oct. 30	Registration if paid in full after Oct. 30			
Full Conference Registration (3 days including Workshop)	_____ person(s)	@ \$1070	@ \$1170	=	\$	_____
Full Conference Registration (3 days excluding Workshop)	_____ person(s)	@ \$995	@ \$1085	=	\$	_____
Workshop (Wednesday)	_____ person(s)	@ \$340	@ \$395	=	\$	_____
Day 1 (Thursday)	_____ person(s)	@ \$440	@ \$495	=	\$	_____
Day 2 (Friday)	_____ person(s)	@ \$440	@ \$495	=	\$	_____
Day 3 (Saturday)	_____ person(s)	@ \$340	@ \$395	=	\$	_____
		TOTAL			\$	_____*

PLEASE SEND PAYMENT OR CREDIT CARD INFORMATION WITH REGISTRATIONS
REGISTRATIONS WILL NOT BE PROCESSED UNTIL PAYMENT IS RECEIVED

Amex-Visa-M/C No. _____ Exp. _____ CVV2 _____

Signature for Credit Card Payment _____

PLEASE MAKE HOTEL RESERVATIONS BEFORE NOVEMBER 9, 2014

Return form to: T&O Conference Registrations FAX: 815 455-8241
 Steel Founders' Society of America
 780 McArdle Dr Unit G
 Crystal Lake, IL 60014-8155, USA

Registration includes Conference Proceedings on a USB flash drive, along with the Conference Program.
 Bring your iPad, Internet tablet or other PDF-capable Internet-connected device to the Conference. SFSA will make the papers available via the Internet during the Conference. SFSA does not guarantee availability of any Internet connection.
 * SFSA will adjust your registration fees if they have been calculated incorrectly due to late registration or math error.

Hotel information for the 2014 Technical & Operating Conference

The Drake Hotel
140 East Walton Place
Chicago, Illinois
USA 60611-1501
Toll-free Reservations: 1-800-553-7253
Tel: +1-312-787-2200
Fax: +1-312-787-2549
Online Code STE

Use the online hotel reservation system at:

https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=11235860

*Please reserve your room by **Sunday, November 9, 2014**, to guarantee the group rate.*

1 Queen Bed	rates from 207.00 USD/Night
1 King Bed Lakeview	rates from 237.00 USD/Night
2 Queen Beds Family Room	rates from 267.00 USD/Night
1 King Bed	rates from 207.00 USD/Night
2 Twin Beds	rates from 207.00 USD/Night

Please note -

The Drake Hotel as well as all other hotels in the city will once again be busy at this time due to many conventions. There may be a problem with price and availability after the cutoff date.

We urge you to make your room reservations early.

STEEL FOUNDERS' SOCIETY OF AMERICA

**Meetings Registration
Cancellation Policy**

Cancellations must be received by November 26.

No refunds can be given after that date.

SUBSTITUTIONS ARE PERMITTED AT ANY TIME.