



Spring 2025 Edition

AFS NON-FERROUS FOUNDRY BULLETIN

Skills Training for Non-Ferrous Foundries

Surveys show that the AFS Institute is the highest-rated provider of skills training to the metalcasting industry – more so than suppliers, community colleges and other organizations. More than \$1 million was invested to develop this outstanding curriculum, which is delivered in 4 ways:

- Live Online via Zoom
- Live in the classroom
- Live in your foundry
- On-Demand via Foundry E-Learning

Now, it's your opportunity to optimize your workforce's skills. An optimally trained team leads to more efficient foundry operations, better problem solving, fewer casting defects and better morale throughout the organization! The Institute is offering several courses that are of keen interest to non-ferrous foundries. These offerings include:

Copper Metalcasting 101

Live Online | May 29
11 a.m. - 3 p.m. CT

Aluminum Melting 201

Live Online | June 3 - 5
10 a.m. - 2 p.m. CT

Green Sand Molding 201

Live Online | June 10 - 12
Noon - 4 p.m. CT

Gating and Riser Design 201

Live Online | June 17 - 19
Noon - 4 p.m. CT

Introduction to Foundry Supervisor Development

Live Online | June 23 - 25
11 a.m. - 3 p.m. CT

Design & Optimization for 3D Sand Printing plus Advanced Sensing Technologies

Missouri S&T, Rolla, MO | June 25 - 27
9 a.m. - 4 p.m. (6/25-26) CT
9 a.m. - Noon (6/27) CT

Companies registering 5 or more students for the same class qualify for our 5 students for the price of 3 discount. AFS members also receive special member pricing for courses.

To learn more or to register, visit www.afsinc.org/Institute. To discuss your foundry's training needs, please contact our Director of Training Solutions, *Jennifer Christian* at jchristian@afsinc.org.

Tremendous Aluminum Casting Insight Shared at CastExpo 2025

Representatives from numerous aluminum foundries enjoyed a robust schedule of technical sessions and business networking at CastExpo 2025 in Atlanta in April.

The sessions were planned by members of the AFS Aluminum and Light Metals Division. Attendees came away with principles they can put to work immediately on the foundry floor,

as well as deeper understanding of the results of recent research into aluminum casting.



Dave Weiss (Vision Materials) speaks at CastExpo 2025 as Mark Osborne (WABCO) listens.



Trianco President Jay Armstrong discusses aluminum supply at CastExpo 2025 as Dr. Alan Luo (Ohio State University) looks on.



AFS Invites Copper Foundry Personnel to September Workshop

The AFS Copper Alloys Workshop sold out in 2023. We encourage all copper foundry personnel to register early for the 2025 workshop which will be held September 17 - 18 in Schaumburg, Illinois, a convenient ride from O'Hare Airport.

The workshop is tailored to both new and experienced copper alloy metalcasters. The presenters will include veteran copper foundry experts. Attendees will come away with deeper insight into optimal melt practices, defect-avoidance strategies not to mention new and renewed friendships with copper-foundry peers.

AFS Copper Division Chair Jacob Johnson (Foseco) and Vice Chair Gerald Richard (MAGMA) extend a warm invitation to all copper foundry personnel to join the workshop.

The Copper Alloys Workshop will be a perfect follow-up to the informative copper sessions and Copper Luncheon held at CastExpo in April in Atlanta.

Topics to be addressed will include:

- Metallurgy of Cast Copper Alloys
- Casting Cost Analysis
- Project Management
- Copper Alloy Melting for Efficiency and Quality
- Crucibles & Refractory Linings for Induction Furnaces
- Tracking and Reducing Variation on Greensand Variables
- EHS Regulations for Non-Ferrous Foundries
- Weld Repair
- Case Studies on Gating & Riser; plus Gating Breakoff Technology

Don't miss out. Registration is open now at this link: www.afsinc.org/2025Copper.

Advanced AI Search Tool Set to Transform Metalcasting Knowledge Transfer

AFS has launched its groundbreaking AFS Library Advanced AI Search Tool, a next-generation research aide designed to revolutionize how men and women across the metalcasting industry discover and apply knowledge.

With instant AI-generated summaries, accurate citations, and fast access to nearly

18,000 industry resources, the new search tool empowers members of AFS to make smarter, data-backed decisions—faster than ever before. Whether conducting a review or exploring emerging trends, the AI Search Tool removes barriers and replaces time-consuming searches with seamless, intelligent discovery. The Tool is applied across the world's largest

English-language metalcasting library, with more articles being added every month.

AFS thanks EC&S, Elkem, LAEMPE REICH, and Sinto for sponsoring the new AI service. To learn more about the Technical Library, contact **Bo Wallace** at bwallace@afsinc.org.

EHS Expert George Curry Joins AFS Staff Team

In April, AFS welcomed George W. Curry, Jr. as the new Technical Director for Environment, Health and Safety. He is now the staff liaison to the EHS Division, the Engineering & Smart Manufacturing Division, and the Steel Division.

Curry is also available to assist AFS Corporate Members who would like to discuss EHS challenges. He brings a tremendous background to the role, having previously worked in EHS

capacities with Owens-Corning, BASF, and ExxonMobil. George earned his B.A. in Industrial Technology from Rowan University.

AFS Corporate Members may contact Curry for assistance at gcurry@afsinc.org or at 847-824-0181 ext. 224.



Olympic Gold Medalist Dominique Dawes Inspires CastExpo Audience

Hundreds of men, women and students from across the metalcasting community enjoyed hearing from Olympic Gold Medalist Dominique Dawes at the AFS CastExpo 2025 in Atlanta in April.

The 3-time Olympian inspired the audience by passing around her Olympic Gold Medal while delivering a stirring presentation titled, "Success is a Journey, Not a Destination."

Other Keynote Speakers at the 4-day CastExpo included Navy Seal Rear Admiral, Scott Moore; longtime metalcaster and Hoyt Lecturer, Frank Headington; and Harry Moser, Founder of The Reshoring Initiative.



*Dominique Dawes addressing the CastExpo 2025 crowd during her Saturday morning keynote address.
(Photo by Robb Cohen Photography & Video)*



*Founder of the Reshoring Initiative Harry Moser and
AFS 2025-2026 Vice President John Lancaster
(General Motors) at Moser's keynote speech.*



*CastExpo 2025 attendees listening to a keynote address.
(Photo by Robb Cohen Photography & Video)*

AFS Advises Commerce Department on Copper Imports Policy

On April 1, AFS submitted comments to the Commerce Department concerning its Sec. 232 investigation on imports of copper in all forms, including raw mined copper, copper concentrates, refined copper, copper alloys, scrap copper, and derivative products. The investigation could result in new tariffs, export controls, or other remedial measures.

The AFS letter highlighted the vital role of copper, brass, bronze, and some stainless-steel castings in key sectors such as agriculture, automotive, aerospace, construction, industrial, maritime, national defense, plumbing/HVAC, power generation, transmission, and distribution, and firefighting. AFS encouraged a targeted and thoughtful approach to any potential trade actions, including streamlin-

ing the permitting process for mining and minerals and offering investment tax credits for copper production.

AFS also requested that the administration refrain from tariffs on imports of copper and copper alloys used by U.S. metalcasters until such time as domestic sources can adequately meet U.S. market demands.



AFS members enjoy camaraderie at the College Football Hall of Fame and raise funds for the Foundry Education Foundation (FEF).

AFS Members Turn Football-Kicking Fun into FEF Fundraiser

The AFS Alumni (past Board members and national award recipients) met last month at the College Football Hall of Fame in Atlanta, just steps away from the convention hall that hosted CastExpo2025.

What began with attendees enjoying a delicious dinner followed by some fun by throwing passes toward a target and place-kicking footballs toward goal posts wound up becoming a “Kick for a Cause” Foundry Education Foundation (FEF) fundraiser!

Inspired by AFS Board member Michael Halsband (Sinto) delivering a powerful, soccer-style kick perfectly through the uprights, fellow AFS Board member Kelley Kerns (HA Group) came up with the idea of raising funds for FEF. Thanks to Kerns, Halsband and other attendees, a generous sum was raised for FEF.

Aluminum Casting Performance Initiative to Get Underway

This is the year that the Congressionally funded AFS Aluminum Casting Performance Initiative will get underway. The 5-year program will launch with three key research projects:

- New aluminum alloy developments/ approvals for Department of Defense applications
- Development of enhanced artificial intelligence tools
- Development of simulation capability tool for quality enhancement

AFS was selected for this research because of the Society’s proven ability in executing complex casting research projects and the presence of many aluminum foundries of all sizes in the Society’s membership and programs. The Society pursued the funding after Defense Department representatives approached and encouraged AFS to execute this much-needed aluminum-casting research.

The Department’s assessment of defense-critical supply chains was published in a February 2022 report that prioritized five areas of crit-

ical vulnerabilities posing the most pressing threat to national security. Castings and forgings were identified among the five key areas. The report noted, “The United States needs a robust and secure casting and forging industry and supply chain to provide reliable, timely delivery of the parts used in DoD’s operational systems and to sustain new systems.”

AFS will partner with foundries, expert consultants, FEF universities, and other organizations in executing the programs.

Join These and Other Fine Non-Ferrous Companies as AFS Corporate Members!

If your company is not already a Corporate Member, you're missing out on benefits that will make your company more successful. Over the last several years, the number of AFS Corporate Members has risen from 794 to more than 1,075. This reflects the valuable reports, bulletins, discounts, education benefits, technical consulting and superior member service that comes with Corporate Membership.

Following is an abridged list of fine companies involved in part or in full in the non-ferrous sector that already enjoy Corporate Membership status. Take advantage of this opportunity to join them and others by completing the enclosed Corporate Membership Application! Or contact **Vice President of Business Development, Ben Yates** at 847-824-0181 ext. 224 or by emailing byates@afsinc.org to discuss how AFS will advance your company's technical, safety, training and business goals!

- Aalberts Integrated Piping Systems
 - Adalet
 - Aero Metals
 - Akron Brass
 - Alcast Foundry
 - Alpha Foundry
 - Alu-Bra Foundry
 - Aluminum Alloys
 - Aluminum Mold & Pattern
 - American Foam Cast
 - American Pattern & CNC Works
 - Aristo-Cast
 - Armstrong RM
 - ATEK Metal Technologies
 - Aurora Metals Division of Hiler Industries
 - Badger Alloys
 - Batesville Products
 - Bernier Cast Metals
 - Boose Aluminum Foundry
 - Boose Quality Castings
 - BRP US
 - Buck Company
 - Calumet Brass
 - CaneKast
 - Carley Foundry
 - Cast Technologies Inc.
 - Century Brass Works
 - Demir Engineering
 - DR Metals
 - DW Clark
 - Eck Industries
 - Excal Inc.
 - ExOne Company
 - Fairmount Foundry
 - Falcon Foundry
 - Fall River Group
 - Federal Metal
 - Flury Foundry
 - Ford Meter Box
 - Fresno Valves & Castings
 - Friends Foundry
 - Fusium
 - Gamma Foundries
 - Gemeni Inc.
 - General Foundry Service
 - General Motors
 - H&H Castings
 - Harmony Castings – Premier Aluminum – Stahl Specialty – Watry - Ligon Industries
 - Impro Industries
 - Industry 63
 - LA Aluminum Castings
 - Lesueur
 - Lite Magnesium Products
 - Littlestown Products
 - Mahoney Foundries
 - Manufacturers Brass & Aluminum
 - Matthews International
 - MCC International
 - McWane – Clow Valve
 - Melling Engineered Aluminum Castings
 - Mercury Marine
 - Meskan Foundry
 - MetalTek International
 - Midland MFG
 - Mitchell Aerospace
 - Monett Metals
 - Morris Bean & Co.
 - Mueller
 - Multi-Cast
 - Naval Foundry & Propellor Center
 - Newport News Shipbuilding
 - Non-Ferrous Cast Alloys
 - Northern Precision Casting
 - Norwood Foundry
 - P&W Foundry
 - Palmer Foundry
 - Patriot Foundry & Castings
 - Perfection Molders
 - Perma-Cast
 - Piad Precision Casting
 - Protocast
 - Quality Non-Ferrous Foundry
 - Rheocast
 - Richmond Foundry
 - Riverside Brass & Aluminum Foundry
 - Rock Island Arsenal
 - Ross Aluminum Castings
 - Shellcast Foundries
 - Silver Dollar Castings
 - Sloan Valve
 - Southern Aluminum & Machine
 - Southern Cast Products
 - Southland Metals
 - Spring City Electrical MFG
 - St. Paul Brass & Aluminum Foundry
 - Standard Alloys & MFG
 - Standard Manufacturers Services
 - Sure-Cast Aluminum Foundry
 - TCI Aluminum
 - Techni-Cast
 - TEI
 - Thomas Machine & Foundry
 - United Brass Works
 - Urschel Lab
 - Vermont Foundry
 - Victaulic
 - WABTEC/Graham-White
 - Ward Corp.
 - Weatherly Casting & Machine
 - Wisconsin Aluminum Foundry
 - Wisconsin Precision Casting
 - Woodland Alloy Casting
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Foundry Leadership Summit to Feature A-List of Compelling Speakers at Pennsylvania Resort

We invite you to join us for the Foundry Leadership Summit at the beautiful Nemaconlin Resort in Farmington, Pennsylvania, on September 22 – 24, 2025.

Following the voluntary Golf Tournament on day one, organized by Mark Didion (Didion International), AFS will present nationally renowned speakers on the economy, artificial intelligence, energy, and

business ethics, plus Fox News contributor and former Lead White House Speechwriter Marc Thiessen.

The program will also include a foundry CEO panel and an awards banquet where some of the industry's leaders will be honored.

Below are photos of past Foundry Leadership Summits including non-ferrous foundry leaders Sachin Shivaram (Wisconsin Aluminum Foundry), Kiley Eck Hayon (Eck Industries) and Amanda Torkelson (Alu-Bra Foundry).

We encourage you to register and make your hotel reservations now. Visit www.afsinc.org/2025FLS to learn more.



Sachin Shivaram (Wisconsin Aluminum Foundry) speaking with Technology futurist and author, Daniel Burrus at the 2021 Foundry Leadership Summit.



The 2025 Foundry Leadership Summit will be located at the idyllic Nemaconlin Resort in Farmington, PA.



Amanda Torkelson (Alu-Bra) and Oscar Ortiz (Alu-Bra) with Doug Kurkul (AFS) and one of her colleagues at the 2021 Foundry Leadership Summit in Scottsdale, AZ.



Kiley Eck Hayon (Eck Industries), Adam San Solo (USF Fabrication), Pete Satre (Allied Mineral Products) and others at the 2022 Foundry Leadership Summit enjoying the Welcome Reception.



AFS Corporate Member Advantage

For Metalcasters



Industry Intelligence

Bi-Annual Metalcasting Forecast

- This crucial marketplace outlook is free to Corporate Members (\$1,000 value)

Wage and Benefit Survey

- Key compensation information, free to participating Corporate Members (\$1,000 value)

World Foundry Organization Annual Census

- A look at the state of the worldwide metalcasting industry is delivered free to Corporate Members

Employment Law Update

- A monthly summary prepared by our partner law firm to keep you apprised of key developments concerning OSHA regulations and inspections, NLRB decisions, wage-hour rules, pending workplace legislation and many more topics.

EPA, OSHA and Public Policy Advocacy Webinars

- Quarterly webinars on Key Policy Issues Affecting Metalcasters.

Workforce & Career Development

Leadership Training & Sustainability

- AFS trains the current and future leaders of metalcasting

Building the Next Generation of Metalcasters

- Student chapters, Institute training, foundry demonstrations, Melting Point magazine and more attract new talent to the industry

Regional Chapters

- Individual members may join AFS regional chapters

Casting Connection

- Members can network, ask questions and get answers from peers through this metalcasting social network

Industry Job Descriptions

- AFS' complete, detailed list of metalcasting industry job descriptions is available for Corporate Members to use for recruiting, evaluations, or other workforce needs

Metalcasting Job Board

- Corporate Members get a 50% discount when they post jobs on the AFS Job Board

Event Discounts

- Save on registration for educational and networking events hosted by AFS (discounts vary)

AFS Energy Program

- Corporate Members can reduce their electricity and natural gas supply costs

Government Advocacy

Legislative Influence

- On Capitol Hill, AFS shapes a better business climate for metalcasters

Education

In-Plant Training

- Corporate Members receive special rates on in-depth training at their facilities (10% off is the discounted rate)

Instructor-Led Training

- Receive discounts on classes (in-person and online) for new and experienced metalcasters (\$200 discount per person)

Free AFS Members-Only Webinars

- All individual members and employees of Corporate Members participate in technical and management webinars (\$250 value per session)

Foundry E-Learning

- Only Corporate Member companies are eligible to a discounted subscription for unlimited access to AFS Institute e-Learning in English and Spanish (at an additional cost on an annual basis)

Technical/Management/ Research Support & Innovation

Driving Research

- 8% of corporate dues support AFS research

Committee Membership

- Individual members are eligible to sit on AFS committees, which conduct cutting-edge research and help establish industry standards

Technical Assistance

- The AFS technical services team is ready for your calls on technical, metallurgical, and EHS questions, as well as casting design assistance, with top priority going to Corporate Members

HR Consulting

- AFS provides foundry-specific insights and assistance for your human resources needs

Energy Consulting

- AFS can help with questions about energy costs, consumption and efficiency

Books & Publications

Modern Casting

- A subscription to one of the industry's leading trade magazines, delivered monthly (\$115 value)

International Journal of Metalcasting

- A subscription to AFS' metalcasting research journal (\$199 value)

Book Discounts

- Get price breaks on AFS-published technical books (discounts vary)

AFS Library

- Receive full online access to the AFS Library, the world's largest collection of metalcasting research papers and articles

AFS Insider News

- Stay up-to-date on industry news and AFS events with this weekly e-newsletter

AFS Nonferrous Bulletin

- Keep yourself informed about nonferrous news and events through this newsletter, available in both print and digital formats.

Business Opportunities & Branding

Trade Show/Exhibit Space Discounts

- Save money on exhibits and attendance at CastExpo and Metalcasting Congress (discounts vary)

Referrals

- AFS refers all phone, e-mail and online inquiries to Corporate Members

Logo

- Corporate Members can add credibility to their business by using the AFS logo on brochures and websites

AFS Shipping Solutions

- Take advantage of shipping savings and more with AFS' shipping program (savings vary)

Casting Source Directory

- Online and Print: Corporate Member metalcasters are featured in the Casting Source Directory.



Metalcasters Corporate Membership Application

Dues Category Based on Annual Sales Volume in Million Dollars	Annual Dues	Free Corporate Affiliate Members Including Corporate Contact
\$0 - 1.99 Million	\$1,240	2
\$2 - 3.99 Million	\$1,850	3
\$4 - 6.99 Million	\$2,480	4
\$7 - 10.99 Million	\$3,090	5
\$11 - 16.99 Million	\$3,690	6
\$17 - 24.99 Million	\$4,330	7
\$25 - 34.99 Million	\$4,940	8

Dues Category Based on Annual Sales Volume in Million Dollars	Annual Dues	Free Corporate Affiliate Members Including Corporate Contact
\$35 - 46.99 Million	\$5,545	9
\$47 - 60.99 Million	\$6,180	10
\$61 - 75.99 Million	\$6,785	11
\$76 - 93.99 Million	\$7,390	12
\$94 - 113.99	\$10,500	13
\$114 - 199.99 Million	\$14,845	14
Above \$200 Million	\$18,480	15

**Non-U.S. based company dues are 10% lower per federal regulations on association services.*

Your firm's sales volume last year from casting-related sales only (include all North American facilities) \$ _____

Company Name _____ Number of Employees _____

Company Address _____ City _____ State _____ Zip _____

Company Telephone _____ Company Website _____

Company Social Media _____

Key Contact for Membership* _____ Title _____ E-mail _____

Key Contact for Human Resources* _____ Title _____ E-mail _____

Key Contact for Marketing/Sales* _____ Title _____ E-mail _____

Key Contact for Engineering/Manufacturing* _____ Title _____ E-mail _____

** AFS Staff will follow-up with key contacts for their seat names.*

Sign key contacts up for *Modern Casting* magazine subscription. ☐ Yes ☐ No

Primary metal focus

- ☐ Aluminum
☐ Copper-base (brass, bronze, ect.)
☐ Iron
☐ Magnesium
☐ Steel
☐ Zinc
☐ Other _____

Primary process

- ☐ Green sand
☐ Investment
☐ Lost foam
☐ Permanent mold
☐ Other _____

Reason for joining AFS

- ☐ Enhanced exposure to casting consumers
☐ Industry insight/technical information
☐ Training/workforce development
☐ Support industry initiatives
☐ Other _____

Payment Information

☐ Check enclosed (U.S. funds only) ☐ Bill company **Charge to:** ☐ American Express ☐ Mastercard ☐ Visa **Membership Length:** ☐ One Year ☐ Two Years

The following information is required to charge your membership:

Account Number _____ Exp. Date _____ Security Code _____

Signature _____ Date _____

Return completed application to:

American Foundry Society | 35169 Eagle Way | Chicago, IL 60678-1351
Tel: 1-847-824-0181/1-800-537-4237 | Fax: 1-847-824-7848 | www.afsinc.org | e-mail: AFSmembership@afsinc.org