

DUCTILE IRON SOCIETY

NEWSLETTER



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DIS Past President Eric Nelson speaking at the Spring Member Meeting.

MEMBER NEWS & ANNOUNCEMENTS



2024 Membership renewals were sent out July 1st. If you have any questions about your membership renewal, please contact:

admin@ductile.org



VISIT OUR NEW WEBSITE

www.ductile.org



DIS recently launched a brand-new website! This revamped platform will provide a smoother experience for you, our members.

As we move forward, we kindly ask all users to navigate to:

www.ductile.org/Resources/we lcome-to-the-new-dis-website and follow the instructions to create a new login account.
Remember, your email address will serve as your username.

If you are a foundry member, be sure to fill out your foundry capabilities as we plan to offer a public directory.

SPRING MEMBER MEETING

The Ductile Iron Society held the 2024 Spring Meeting at Hilton Garden Inn in Cedar Falls, Iowa from June 3rd - 6th. Thank you to everyone who made it to Cedar Falls and took time out of their week to join us! The meeting gave members and guests an opportunity to network, take part in professional development technical sessions, and participate in committee meetings all while having a great time.

COMMITTEE DINNER



To kick off the Spring Meeting, the DIS committees enjoyed dinner at The Pump Haus, on June 3rd. The "Research Committee Dinner" is updating to the "Committee Dinner" and all members of all committees are invited to attend. Contact the DIS <u>Technical</u> <u>Director</u> if interested in joining a committee.



COMMITTEE MEETINGS

Research Committee

- Reviewed active projects: 62, 66, 67, & 68.
- New project proposals:
 - Effectively Using HBI in Ductile Iron B. Tuttle
 - Green Sand Cold Sand M. Ring
 - Riserless Casting Design J. Lipshaw, T. Beach
- Subcommittee updates.

Member Services Committee

- New website and software is bringing in more prospective members.
- Creating a database to search for foundries by molding, iron grade, casting size, etc.

Marketing Committee

- Making Hot Topics searchable by adding keywords to each.
- Creating a new "Show & Share" quarterly virtual meeting for members to discuss timely and relevant topics.

RESEARCH PROJECT UPDATES

The Ductile Iron Society has four active projects:

Project #62: Effect of Ceramic Sand on Cast Iron Mechanical Properties - Scott Giese

- Project is completed.
- IJMC Paper is being drafted.
- Final Report / presentation scheduled for Fall 2024 Meeting.

Project #66 Impact of Steel Tramp Elements of Ductile Cast Iron - Paul Sanders

 Extended Goal – ran additional trial with mill scrap that yielded interesting results.

Project #67 Fracture Toughness - Joe Licavoli

- Scheduled for completion by late 2024.
- Additional budget approved of overage on third set of tests.

Project #68 Spectro Reference Materials - Lyle Herberling

- Reviewed project mold configuration; gray iron chill testing.
- The production of samples were suitable.

Programs & Publications Committee

- Eric Nelson with Eric Nelson Consulting, was appointed to the position of Vice-Chair
- Determined a list of potential speakers for the Fall 2024 Meeting.
- Brainstormed a theme for the 2025 Spring Meeting.

College & University Relations Committee

- Jay Morrison (Carpenter Brothers, Inc.) took on the role as Chair of the committee.
- The committee is looking for a volunteer for the position of Vice Chair. (A great opportunity for a recent grad to get involved!)
- The FEF T-Shirt Sponsorship is open, and a new slogan was voted on at the Member Meeting.
- The committee plans to attend FEF CIC in November.



TECHNICAL SESSIONS

20 Years of Energy & Sustainability in Metalcasting

Jay Morrison, Carpenter Brothers

How to Take a Reliable Melt Sample, How to Make Briquettes and Save Money

Kurt Bjarne Larson, Birn Foundry

Sustainability, Thinking Outside the Mold

Kimberly Noe, John Deere

Traceability Leads to Sustainability *Per Larsen, DISA*

Building the Green Foundry -Sustainability Initiatives at Waupaca

Bryant Esch, Waupaca

Energy Management and Cost Savings Opportunities

Brad Steinkamp, Charter Durabar

How to Calculate Sustainability - Practical Examples

Konstantin Nikolov, MAGMA Foundry Technologies

Case Study: Use of the Energy STAR Program within a Foundry's Energy Conservation Program

Michael Meyer, Grede Holdings LLC

Scope Three Emissions: The Unintended Benefits of Reshoring Raw Materials

Sean Golden & Dylan Siemen, CWC Textron

Energy Savings Achieved with Coatings

Archis Patankar, Foseco

Tire Wire Ingots, DBI *Lavon Detweiler, Entech, Inc*

Furnace Lining Optimization with Betz Example

revor Beach, Betz Industries



























Photos from the Spring Member Meeting.









Thank you to all the speakers who presented at the Spring Meeting!

John Deere Foundry Tour



Attendees of the Spring Meeting had the opportunity to tour the John Deere Foundry on June 6.

Thank you John Deere for hosting!

RESEARCH PROJECT PROPOSALS

Effects of Cold Temperature on Green Sand Properties

This proposal aims to evaluate properties of **cold** sand or as it's often called in the foundry, "Monday Morning Sand." The study will explore whether there is a correlation between sand temperature and the mechanical properties of green sand, particularly focusing on its impact during colder months. The proposed experiments involve testing green sand properties at different temperatures, assessing the development of clay in cold conditions, and determining if increased mulling time or adjustments in clay and water content can mitigate any negative effects. The research will be conducted with the support of American Colloid Hoffman Estates Laboratory, and findings will be shared with both the Ductile Iron Society (DIS) and the American Foundry Society (AFS). The study could potentially give data to the "Monday Morning Sand" phenomenon.



Investigating Chills for Heavy Section Ductile Iron

Driven by the Metallurgy Research Subcommittee, this project aims to maximize mechanical properties of heavy section ductile iron via chills. Since current production of heavy section ductile iron struggles to meet standard ASTM specifications, past DIS research has focused on characterizing heavy section ductile iron and identifying in-house heat treatments to compensate. This project approaches this issue differently. By experimentally determining the effect of chills on cooling rates and correlating them with mechanical properties, casting simulation models can be utilized to predict and optimize properties. The project is currently searching for Steering Committee volunteers to help determine the proper research objectives and write a "Request for Proposal" to be sent to outside investigators.



KEITH MILLIS SYMPOSIUM PAPERS

View the KMS presentation papers online by following the link below:



LETTER FROM DIS' NEW PRESIDENT



Lenny Basaj Metal Technologies, Inc.

Dear Members of Ductile Iron Society,

I am honored to be the incoming President of DIS and to start this next chapter of the society with all of you. Our society has a history of advancing research, fostering innovation, and providing value to our members. I am committed to building on this legacy, working to continue to advance the production of ductile iron and build connections within the industry.

As we move forward, my vision for DIS is centered on three core objectives:

- **1. Advancing Research and Innovation:** I believe that the heart of our society lies in the continuous advancement in minimizing variation, optimizing efficiency, and making DI the material of choice by design engineers. Together, we can drive research projects that directly impact our members.
- **2. Enhancing Membership Value:** I am excited to work with society committees to find ways to enhance the DIS membership. We are looking into lowering costs for conferences and seminars, increasing digital resources available to our members, and a directory for casting buyers to connect with non-captive foundries. I also welcome your feedback and ideas on how we can add value to a DIS membership.
- **3. Building a Stronger Community:** A society is only as strong as the connections between its members. I am passionate about fostering a collaborative community where every member feels valued and supported. We will work together to create more opportunities for engagement, mentorship, and collaboration, both online and in person. Late this fall we will launch our first "show-n-share" where we can connect over zoom to help brainstorm a foundry problem together. Listening to foundries sharing information is one of the best ways for new hires to learn.

As we set our sights on the future, I encourage each of you to actively participate in the success of our society. Your expertise, ideas, and passion are what make DIS special. Whether you are a long-standing member or new to our community, your contributions are welcomed.

Thank you once again for this opportunity. I am excited to lead the society with a spirit of innovation, <u>collaboration</u>, <u>and excellence</u>. Together, we will achieve great things.

Warm regards, Lenny Basaj President, Ductile Iron Society president@ductile.org

OUTGOING BOARD MEMBERS



Lizeth MedinaDirector



Jim McMinn
Director



Jean Bye

Secretary & Treasurer

WELCOME NEW BOARD MEMBERS



Jeremy McLimans

Director



Travis Hepfner

Director



Tim Hoyt

Treasurer

WELCOME NEW DIS MEMBERS



ASTECH, INC. Foundry Member



CIMCO RESOURCES

Associate Member



HWI

Associate Member



ID CASTINGSFoundry Member



KENT FOUNDRYFoundry Member





PADNOS
Associate Member



PROGRESSIVE FOUNDRY Foundry Member

SAVE THE DATES

2024 Fall Conference

October 15 - 17

Hilton Garden Inn St. Cloud, MN

550 Division Street, Waite Park, MN



Event Registration



Hotel Reservation



TOUR HOSTED BY GREDE

Guests can also call the hotel directly at **320-640-7990**. Use **GROUP CODE: 937** for a discounted rate. Ends midnight 9/21.

2025 Ductile Iron Production Seminar (DIPS)



January 28 - 29

Allied Mineral 2700 Scioto Parkway, Columbus, OH

Stay tuned for more details and registration!

THANK YOU SPONSORS





























