## Welcome!

Making the Most of Your EWI Member Benefits (Webinar)

By Dale Robinson will begin shortly.

#### Please note:

- Your microphone and camera are <u>not required</u> and will <u>remain disabled</u>.
- All attendees will remain in listen and view only mode.

#### If you have any questions:

Please submit questions through the Q&A button on your tool bar.

For optimal viewing, the toolbar at the top may be used to optimize the following:

**View Options** 

- select Zoom Ratio
- choose Fit to Window









## Goals for Today

- Help EWI Members take advantage of the value and benefits provided by member services
  - "Re-introduce" you to the depth and breadth of EWI's advanced manufacturing process technologies
  - Refresh your understanding of each member service and what it provides
  - Explain the various ways to access member services





## Your Advanced Manufacturing R&D Partner

## Improve Your Manufacturing Competitiveness

Advance your ideas from concept to production faster and with less risk

## Access Key Technology Experts on As-Needed Basis

Solve your toughest problems with world class experts and state-of-the-art equipment





## People + Technology



Columbus OHIO

Joining
Forming
Materials Engineering
Structural Integrity

Modeling
Inspection
Polymers
Testing

100+

Subject Matter Experts 14 PhD, 28 MS, 37 BS



Buffalo
NEW YORK

Additive Manufacturing
Automation
Data Science
Workforce Training

160,000 total square feet

\$50M+
Capital Equipment

EWI develops and helps implement advanced manufacturing processes that provide a business impact

## Benefit from Diverse Market Experience



Aerospace



**Space Exploration** 



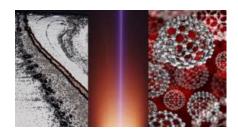
Defense



Oil & Gas



Advanced Energy



Government



Automotive



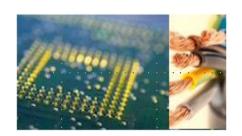
Transportation



Heavy Industry



**Medical Devices** 



**Consumer Electronics** 



Packaging



## EWI Areas of Technical Expertise





## Access a Wide Range of Manufacturing Process Technology

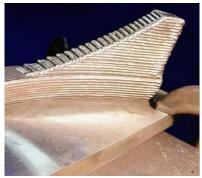








Forming





Additive Manufacturing





Structural Integrity





Inspection Technologies





Testing & Characterization

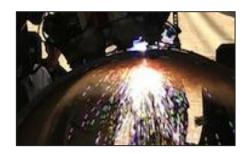




Advanced Automation



## **EWI Materials Joining Expertise**



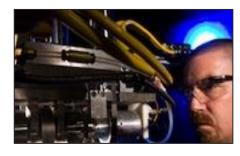
Arc Welding & DED



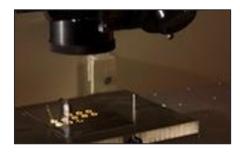
**Friction Processes** 



Resistance & Solidstate Processes



**Ultrasonic Processes** 



**Laser Processing** 



**Plastics Joining** 



Microjoining



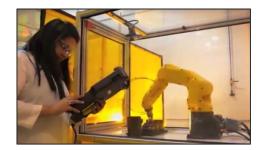
Soldering & Brazing



## EWI Ancillary Manufacturing Technologies



**Additive Manufacturing** 



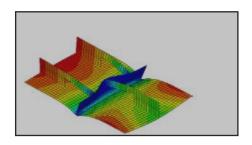
**Advanced Automation** 



Materials Engineering



**Advanced Forming** 



Modeling & Simulation



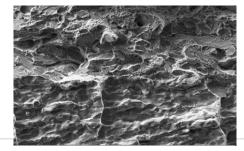
**Nondestructive Evaluation** 



**Characterization Services** 



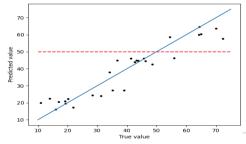
Structural Integrity



Corrosion & Environmental Testing



Training



**Data Science** 

## Poll Question #1





## **EWI Member Services**





## EWI Membership Services

- Technical Inquiries
- Design Reviews
- Engineering Site Visit
- Library Services
- Cyber Security Assessment
- Member Communications







## **Technical Inquiries**

- Access EWI's 100+ engineers with decades of experience
- Ask questions about any technical issue, problem, or goal

#### **Ways to Submit Requests**

Member Central <u>Technical Inquiry Form</u>

Email: memberservices@ewi.org

Phone: 614.688.5252

Contact Dale Robinson, Membership

Liaison; drobinson@ewi.org;

M 614.545.8979

#### **Examples**

"I need to discuss equipment and tooling for a pending application of ours."

"I need to know what test to perform to be confident that my relay-contacts won't weld under load."

"What are the key process parameters that must be controlled to manufacture consistent/repeatable continuous laser braze welds in automotive application?"



## Design Reviews\*

- A consultation with an EWI team of subject matter experts.
- 2-4 hour virtual or face-to-face meeting at an EWI facility

#### **Examples**

Manufacturing process selection

Design for manufacturability

Material selection

Initial failure analysis discussion



#### Ways to Submit Requests

Member Central Design Review Form

Email: <a href="mailto:memberservices@ewi.org">memberservices@ewi.org</a>

Phone: 614.688.5252

Contact Dale Robinson, Membership

Liaison; <a href="mailto:drobinson@ewi.org">drobinson@ewi.org</a>;

M 614.545.8979





## Engineer Site Visit\*

- Reassess your current processes
- Full-day, on-site consultation
- Design reviews, process evaluations, manufacturing audits, and technical guidance.
- EWI provides a summary of findings, identified opportunities, and recommended next steps.

#### **Ways to Submit Requests**

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M 614.545.8979



## **EWI Library Services**

- Literature searches
  - Submit your topic and keywords
  - Librarians search 30+ million abstracts
  - Librarians email abstracts to you for review
- Article retrievals
  - Copyright and article fees paid on your behalf
  - Send the librarians a direct link to an article for retrieval

#### **Ways to Submit Requests**

Member Central Ask a Librarian

Email: <u>library@ewi.org</u>

Phone: 614.688.5224

Contact Dale Robinson, Membership

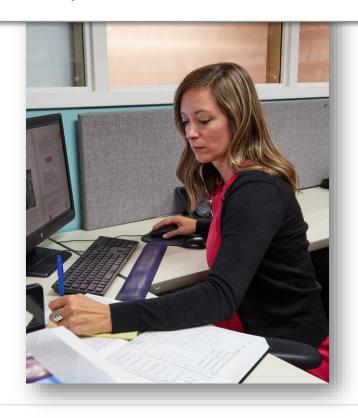
Liaison; drobinson@ewi.org;

M 614.545.8979

#### **Examples**

"Dissimilar materials and cracking mechanisms"

"I found this article with a Google search; can
you retrieve it for me?"





## Cyber Security Assessment

- Evaluate your company's vulnerability
- Free third-party assessment
- Conducted by experts in "manufacturing" cyber security
- All EWI members are eligible through the National Association of Manufacturers (NAM) Cyber Cover program

#### **Get Your Cyber Risk Assessment**

https://www.ahtins.com/nam-cyber-cover-ewi/



### **Exclusive Member Communications**



July 2022

### EWI Adds Tele-gouging to Its Suite of New Tele-manufacturing Innovations

#### Connie LaMorte

Building upon the success of our novel tele-manufacturing prototype systems, EWI has been hard at work on another innovation: *tele-gouging*. A direct outgrowth of tele-welding, tele-gouging is like shielded metal arc welding (SMAW) but with the addition of 80-100 psi of pressure at the torch to blow away molten metal. Due to the high pressure, the gouging process is especially loud and violent which is highly uncomfortable and potentially hazardous for the operator performing it. In addition, gouging can use as much as 1300 amps compared to SMAW which uses 400 amps or less. This creates a bigger and brighter arc, more heat, and more physical risk for the worker.

Gouging is commonly applied in steel and casting foundries. It is useful for removing substantial amounts of material very quickly. However, the standard gouging method is an intense and exhausting process to perform. Some metals have particulates that require the welder to wear a respirator as well as the standard protective welding gear (cotton/leather jacket, welding helmet, and gloves). This gear is heavy and hot, so an operator cannot endure gouging for long. The tele-gouging solution eliminates the problem of physical danger to the operator and lengthens the time that gouging can be performed by providing a system that enables remote gouging from a safer and more physically tolerable environment.

- Members-only newsletters, delivered alternately each month
  - The Inside Story
  - Technical Insights
- Alerts about special seminars, technical advances, and other news
- Post-event access to webinars and trainings



## Poll Question #2





# Ways to Access EWI Member Services





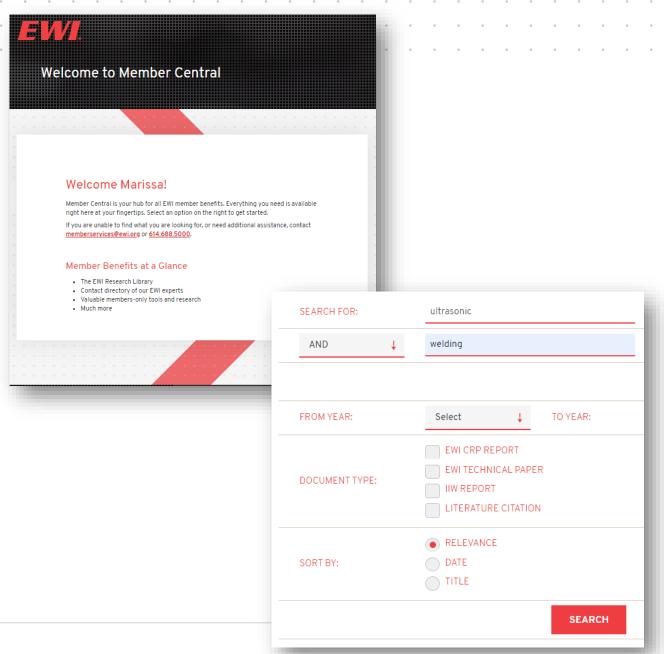
#### Member Central

- 24/7 access to member benefits
- Easily submit requests to EWI experts and library services
- Search and view EWI publications
- Company wide access

https://ewi.org/welcome-member-central/

**Get Your Login Today** 

ewi.org/get-your-login/





## Contact an Industry-specific Business Development Director



James Cruz
Medical Devices and Consumer
Electronics
icruz@ewi.org;
614.285.4394



Matt Dodds
Aerospace & Defense
mdodds@ewi.org;
614.256.9667



Ian Gibbs
Industrial Equipment & Heavy
Manufacturing
igibbs@ewi.org;
614.907.1265



Jon Jennings Energy <u>ijennings@ewi.org</u>; 614.840.6569



Doug Myers
Transportation & Automotive
<a href="mailto:dmyers@ewi.org">dmyers@ewi.org</a>;
614.600.7284



## Another way to access member services

#### **Dale Robinson**

Membership Liaison

drobinson@ewi.org

O: 614.688.5232 M: 614.545.8979

#### **Membership Contact Info**

Member Central Website: <a href="https://ewi.org/welcome-member-central/">https://ewi.org/welcome-member-central/</a>

General member inquiries: <a href="mailto:memberservices@ewi.org">memberservices@ewi.org</a>

Library: <a href="mailto:library@ewi.org">library@ewi.org</a>





## Questions...

#### **Dale Robinson**

Membership Liaison

drobinson@ewi.org

O: 614.688.5232 M: 614.545.8979

#### **Membership Contact Info**

Member Benefit Guide: Guide

Member Central Website: <a href="https://ewi.org/welcome-member-central/">https://ewi.org/welcome-member-central/</a>

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