

# Bulletin

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#### **UPCOMING EVENTS**

NOV. 21: TECHNICAL MEETING DEC. 14: HOLIDAY PARTY

Check out the latest videos published by the American Welding Society on its YouTube page.

AWS Technical Nights are open to everyone! We encourage that members bring students and non-members to learn more about our organization and industry.



# **AWS-Detroit Technical Meeting**

## Thursday, Nov. 21, 2024 Hamlin Pub

48929 Hayes Rd, Shelby Twp, MI 48315 5:30-8:00pm

Please join us for the November Technical Meeting at the Hamlin Pub in Shelby Twp, MI hosted by ARO and featuring a presentation on weld water quality by Ronald Johnston of CHEM-AQUA. The presentation will include a company introduction, a discussion on weld water parameters and limits, water treatment and best practices for closed loop systems. The presentation will also cite case studies and real-world examples of how and why out-of-spec water systems



can impact your welding process. To RSVP, please visit **www.eventsquid.com/event/26157**.



*Hello AWS – Detroit Members and Friends.* HOLY COW, time files when you are having fun! Here we are already thru the month of October, and it was a busy month for AWS. AWS hosted its Fabtech convention in Orlando, Florida. Unfortunately, I was unable to attend but from what I understand it was a great show. Then the 20th Sheet Metal Weld Conference was held at Laurel Manor October 22-24th. This was a fantastic event and I would like to take a minute to thank the team for such an outstanding job. From the material covered in the presentations, to the vender night displays, it was just a great showing for the AWS Detroit Section.

Alright, we have covered the October events now let's look to the future. AWS Detroit will be hosting a technical night on November 21st at the Hamlin Pub in Shelby Township. The guest speaker will be Ron Johnston of Chem-Aqua and he will discuss the effects of weld water on the welding process. It will be an interesting subject. Hope to see you there!

**Don't be late to the party!!!** AWS Holiday Party will be held on **December 14th**. It is a great time to just get together with colleagues and reflect on the years success and look towards the future. Stay tuned to the e-Bulletin for more information.

### A Welding Giant Walks Among Us

Last month at the annual FabTech Expo, our own Blair Carlson was highly honored with the AWS Fellow Award. Blair is a long time research lab manager at GM. At GM he has overseen years of automotive welding R&D, internal to the company and at the university level. He authored at least 72 US patents, mostly in welding and joining. He has served on 26 AWS, Industry,

**Blair Carlson** 

Government, and University committees, including the AWS national committee on Welding Research and Development. Kudos to you, Blair. Keep it coming!

By Michael Karagoulis, AWS Detroit Awards Committee





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(Emails linked where available.)

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# Fabtech 2024 was an unforgettable event!

This year, it took place in Orlando, Florida, at the Orange County Convention Center. AWS was a major partner at Fabtech, highlighted by their impressive booth setups. The week kicked off on Monday, October 14th, marking the start of several AWS conferences and events.

During the opening ceremonies, the newest future leaders were introduced, including Erin Lalinsky, a member of our Detroit Section committee. Over three days, AWS hosted various technical conferences covering topics such as Radiographic Testing, the Role of the CWI, and Building a Prequalified AWS D1.1 Welding Procedure.

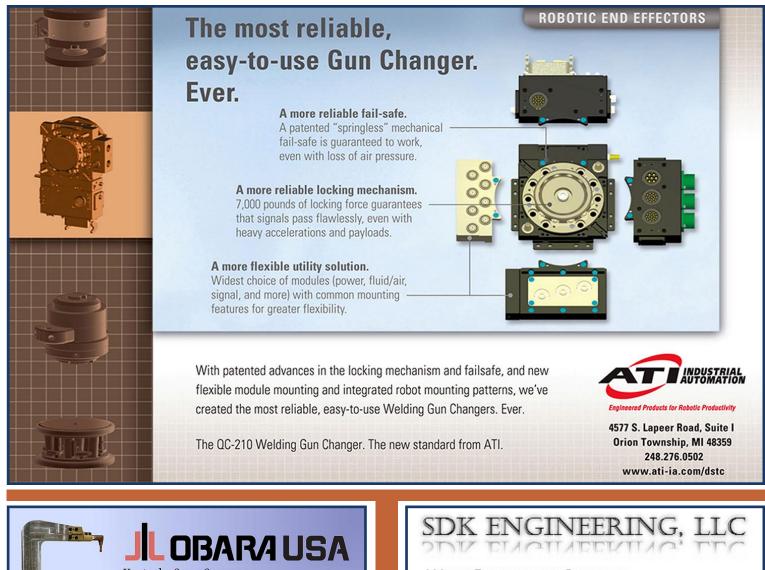
Additionally, social events like the AWS Met Gala and Arcs and Ales enhanced the overall experience. Many giveaways at the AWS bookstore provided attendees with opportunities to win a Code Book. Podcasts and meet-andgreet sessions featuring ARC Stars and CWIs were also part of the daily activities at the booths. FABTECH is highly recommended not only for the knowledge you will gain but also for the personal connections you will make.













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# 2024 SCHOLARSHIP RECIPIENTS



Jaron Baker Economy, IN Ferris State University Welding Engineering Technology Detroit Section Scholarship District 07 - 033-Dayton

Detroit Section Scholarships Commitee,

I would like to start off by saying a huge thank you for selecting me as a recipient of your Scholarship. I greatly appreciate this, and it will ease the stress of paying for my final year college tremendously. Scholarships such as this one have made my college experience so much more enjoyable and stress free. As for a little bit about myself, I am currently interning with John Deere Harvesters Robotic Intergration Group. It has been an amazing experience so far, and I'm excited to see what other opportunities are ahead. Again, thank you so much!

Jaron L Baker



Josh Hamlin Saginaw, MI Ferris State University Welding Technology Detroit Section Scholarship District 11 - 061-Saginaw Valley

To whom it may concern,

Hi! First off I just wanted to say thank you so much for the scholarship that I have been awarded. This scholarship will help me incredibly as I work my way through college and give me the motivation to keep on pushing forward in the welding field that I have chosen. Through AWS alone, I have been given continuous support and opportunities. These range anywhere from the student chapter at Ferris State all the way to the scholarship that I have just been awarded. The AWS is not just some welding society to me as others may see it, but it is a lifestyle and something that I look up to. Since I started my welding journey in high school, I have known that I will go above and beyond to promote the thing that I love doing. Welding has not only given me joy but also friendships that come along with it. Again, I thank you guys so much for this award and I will be using it with great honor towards my continuing education here at Ferris State University.

Thank you again, Joshua Hamlin



#### Jackson Guillery Wixom, MI Ferris State University Welding Engineering Technology Detroit Section Scholarship District 11 - 011-Detroit

Dear Members of the American Welding Society,

I would like to express my excitement and appreciation for selecting me as the recipient of the Detroit Section Scholarship. I am truly honored to receive this recognition and support from such a prestigious organization known to the welding community. Receiving this scholarship means a great deal to me both personally and academically. As a passionate student of welding engineering at Ferris State University, this award will help to allow me to focus more on my studies and professional development. Your generosity will not only help me achieve my educational goals but also inspire me to contribute positively to the AWS community in the future. Once again, thank you for this incredible honor and for believing in my potential. I am committed to working hard and making the most of this opportunity. Please convey my heartfelt appreciation to all the members of the scholarship committee for their support and encouragement.

Thank you, Jackson Guillery



Sophia Gugel Rochester Hills, MI Oakland University Science in Engineering Detroit Section Scholarship District 11 - 011-Detroit

Dear AWS,

I want to thank you for your ongoing support. Thanks to you, I have been able to start my bachelor's degree in mechanical engineering at Oakland University. My plans include pursuing a later degree in welding engineering at The Ohio State University and applying the knowledge and skills I gained through going to Oakland to it. I also plan to take as many math classes as I can fit into my schedule. Thank you once again for your support.

Sincerely, Sophia Gugel









## Ask the Welding Engineer

By Donald F. Maatz, Jr.

• "What options exist for evaluating the quality of a weld nut, other than push-off, and how viable are they?"

A: "There have been several previous ATWE columns on the topic of projection welding (PW). For completeness, we are talking about either a solid or forged/coined fastener, not the hollow embossed variety. And as a review, here are the past columns to date relating in any way to the subject of PW:

- ATWE Dec-22 & Jan-23 looked at the repair or reprocessing of a solid or forged/coined weld nut
- ATWE Mar-23 & Apr-23 took a bit of a deep-dive into one measurable quality element of a weld nut Set Down
- ATWE Sep-23 & Oct-23 discussed the effect of adding preheat to the weld schedule with regard to a solid or forged/coined welded fastener

While all of these have been hitting somewhat around the mark, I suppose it is time to finally bite the bullet and discuss the world of solid or forged/coined fastener PW in a bit more depth. As an aside, we are not nearly as concerned about embossed or hollow projections and how they are welded or evaluated.

The reason? There are entire books dedicated to the subject. With the large volume of material available, I would be adding nothing new to the embossed PW conversation. One glance at just ref-1 or ref-2 reveals just about everything one needs to know on the matter. And I am not kidding; in addition to very excellent schedules, they even have prints on how to make the punches and dies. An absolute ton of great work captured by those before me, and my hat is off to them - well done! But getting back to the matter at hand...

At this point in time, the available documentation with regard to solid or forged/coined PW is scant, at best. There are many reasons for this. They include, but are not limited to:

- Lack of standardization from both the supplier and customer perspective with regard to actual projection size, and geometry, for that matter.
- Substrates (in this case steel) varying in strength by a factor of 10 (200 to 2000 MPa)
- Substrate gauge variances ranging from almost foil up to boiler plate (ok maybe just 6.0 mm, or so)
- Various coating options Think bare, EG, HDG, ZnNi, Galvanneal, various organics The list goes on.
- Lack of an industry consensus with regard to actual PW acceptability
- Lack of standardization with regard to the needed number of projections for an application. In other words, folks not understanding we only need three (3) points to define a plane, and any more are not needed and may actually contribute to create a less than robust welding condition. OK, rant finished...

As one can quickly see, despite tremendous advances all over the resistance welding community, the PW world is really the wild west.

That being said, all of the above has not really started to address the question. We will do that in the coming months. So, what is the goal of this particular series of articles then? Let's start with what the industry is doing with regard to solid or forged/coined weld nut projection welding and take it from there.

That is enough to start the conversation. I very much welcome any additional thoughts and ideas on this important topic."

#### References:

Resistance Welding Manual, revised 4th Edition
AWS C1.1M/C1.1:2019, Recommended Practices for Resistance Welding

If you have more questions about this topic, contact:

DON MAATZ R&E Automated Systems 70701 Powell Road, Bruce Township, MI 48065 Office: (586) 228-1900; Direct: (734) 793-2304 dmaatz@reautomated.com

Donald F. Maatz, Jr. is with R&E Automated Systems and serves in the capacity of Laboratory Manager. He is past-chairman of the AWS-Detroit Section, serves on the D8 and D8.9 Automotive Welding Committees, is chair of the D8D, and an advisor to the C1 Resistance Welding Committee, is an AWS endorsed CWI and an instructor for the RWMA School. He is a graduate of Ohio State with a BS in Welding Engineering.





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# 2024 SCHOLARSHIP RECIPIENTS



Mark Hamilton Shelby Township, MI Wayne State University Welding and Metallurgical Engineering Detroit Section Scholarship District 11 - 011-Detroit

Dear Scholarship Donor,

Thank you for the generous contribution for my schooling through the Detroit Section Scholarship. I'm highly grateful that I could use these funds to enroll into another class in the fall semester of 2024. This donation is much appreciated.

I started my first semester at Wayne State University this summer. I will complete my bachelor's degree in December of 2026. Welding has always been a part of my personal lifestyle and favorite hobby. When I'm looking through the hood, I'm always in my comfort zone. As a student, I've found welding to be on the greatest skill a man can lay hold of. It's highly rewarding.

Thanks again for your selfless contribution to my education and others.

Sincerely, Mark Hamilton Wayne State University



Ryan Konieczny Grosse Pointe Park, MI Ferris State University Welding Engineering Technology Detroit Section Scholarship

District 11 - 011-Detroit

To the AWS Detroit Section,

I am more than honored to have been selected as a recipient of the AWS Detroit Section Scholarship. This overly generous gift I have been awarded will help me by keeping me motivated as well as eliminating some of the financial burdens that are associated with college. I am committed to making the most of this educational opportunity and really look forward to giving back to the AWS in the future. I look forward to finishing up my last year at Ferris State University and moving into a successful career somewhere in the DOD/Aerospace industry. Thank you once again for your assistance and belief in my endeavors.

Sincerely, Ryan Konieczny



#### Nolan Dooley Livonia, MI Schoolcraft College Fabrication Technology Detroit Section Scholarship District 11 - 011-Detroit

Dear American Welding Society Detroit Section,

Thank you for the Detroit Section Scholarship award. This scholarship has significantly improved my ability to pursue education and played a crucial role in shaping my future goals. It enhances my opportunity to study welding at Schoolcraft College, which will facilitate success and help maintain a strong GPA of 3.5.

I am deeply grateful for your support and trust in my abilities. Your kindness and generosity have not gone unnoticed. I am committed to diligently working and making the most of this invaluable opportunity.

Sincerely, Nolan Dooley



Helana Hope Kitchener, ON Conestoga College Manufacturing Engineering Technology: Welding Concentration Detroit Section Scholarship District 11 - 011-Detroit

Dear Detroit Section Scholarship,

My name is Helana Hope and I am the recipient of the 2024 Detroit Section Scholarship. I am writing to express my sincere gratitude for being awarded this scholarship. I am entering the third and final year of the Conestoga College Welding Engineering Technology - Inspection program in September. This scholarship will have a genuinely significant and real impact by assisting me with the purchase of required course material, as well as allowing me to afford the process of challenging the Canadian Welding Bureau Level 1 Visual Welding Inspection exam, which will permit me to begin my formal training as a visual welding inspector. Being selected for your scholarship fills me with pride. Scholarships like this one are truly impactful to a student's life and relieve some of the financial stress we carry. Please accept this thank you letter as an honest token of my appreciation for what you have bestowed upon me.

Sincerely, Helana Hope





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- Student Memberships (evaluated each year);
- Student Chapter (evaluated each year);
- Technical and Educational Opportunities.





# 2024 SCHOLARSHIP RECIPIENTS



Victoria Hay Frankfort, IL Ferris State University Welding Engineering Technology Detroit Section Scholarship District 13 - 090-J.A.K.

Dear Detroit Section Scholarship Committee,

I am writing to sincerely express my gratitude for your generosity. As an academically driven student, I am determined to push myself and vastly expand my knowledge. My passion for the welding industry led me to Ferris State University, where I am pursuing a bachelor's degree in Welding Engineering Technology.

My goal is to make a significant impact in the welding industry by emphasizing productivity, efficiency, and fostering trust and relationships. I am motivated by relentless determination, a quest for knowledge, and a desire to make a meaningful difference. I am enthusiastic for what the future holds, and I am dedicated to having a fulfilling career devoted to elevating the standards of the welding profession.

I am confident that the extensive hands-on experience I have gained through our program will enable me to achieve these goals. Additionally, receiving this scholarship is immensely beneficial. Many students in our country bear the burden of student loans to cover college expenses. Your generosity allows me to focus entirely on my academic pursuits without these financial concerns. It is incredibly liberating to receive such a charitable contribution toward my future.

Thank you for your support, Tori Hay



Jessica King Ypsilanti, MI Wayne State University Welding and Metallurgical Engineering Detroit Section Scholarship District 11 - 101-Central Michigan

Dear AWS Detroit Section Committee Members, Thank you so much for selecting me as the recipient of the Detroit Section Scholarship. I am eternally grateful for the encouragement and support this scholarship provides, and I will strive to make the most of this opportunity. This investment into supporting higher education will allow me to actively contribute back to the welding community and make a positive impact academically and beyond!

With deepest gratitude, Jessica King



#### **Ryan Diestler**

Scandinavia, WI Ferris State University Welding Engineering Detroit Section Scholarship District 12 - 074-Fox Valley

Dear American Welding Society Detroit Section Chapter, I would like to take this opportunity to thank you for you generosity in funding the American Welding Society scholarships. I am very grateful to receive your support which helps reduce my financial burden while studying at college.

I currently live in Wisconsin and will be a senior in the Welding Engineering program at Ferris State University in Michigan this fall. I participated in all of the welding and shop classes all throughout my high school career and am looking forward to my continued learning at Ferris State University. Ferris State offers one of the finest programs in the country and I consider myself fortunate to be able to attend.

I am a member of the American Welding Society and plan on maintaining my membership as a student over the next 2 years of college and then as an official member during my working career. By awarding me the Detroit Section Scholarship, I am able to concentrate on what is important for me which is my education. Your financial generosity has allowed me to be one step closer to helping me learn the skills to reach my career goals and contribute to a better world. I hope one day to be able to help other welding engineering students achieve their goal just as you have helped me.

Sincerely, Ryan Diestler



Jessica Duff White Lake, MI Ferris State University Welding Engineering Technology Detroit Section Scholarship District 11 - 011-Detroit

Dear Detroit Section,

I wanted to express my deepest gratitude for selecting me for this scholarship for the 2024-2025 academic year. I am honored and so appreciative of the support you have provided for me, and grateful for the opportunity this scholarship provides. As you know the burden that the expenses of school create can be significant. This allows me to worry less about the financial stress that comes with school and focus more on the academic side of Ferris State. This money has inspired me to be more generous and gove back to my commuity. Thank you once again for the generous support you have provided for me. Jessica Duff