



American Welding Society®  
DETROIT SECTION



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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.



## Technical Meeting Thursday, March 16, 2023

Location: **FANUC America**  
3900 West Hamlin Road, Rochester Hills, MI

### *“Collaborative Robot Technology for Welding”*

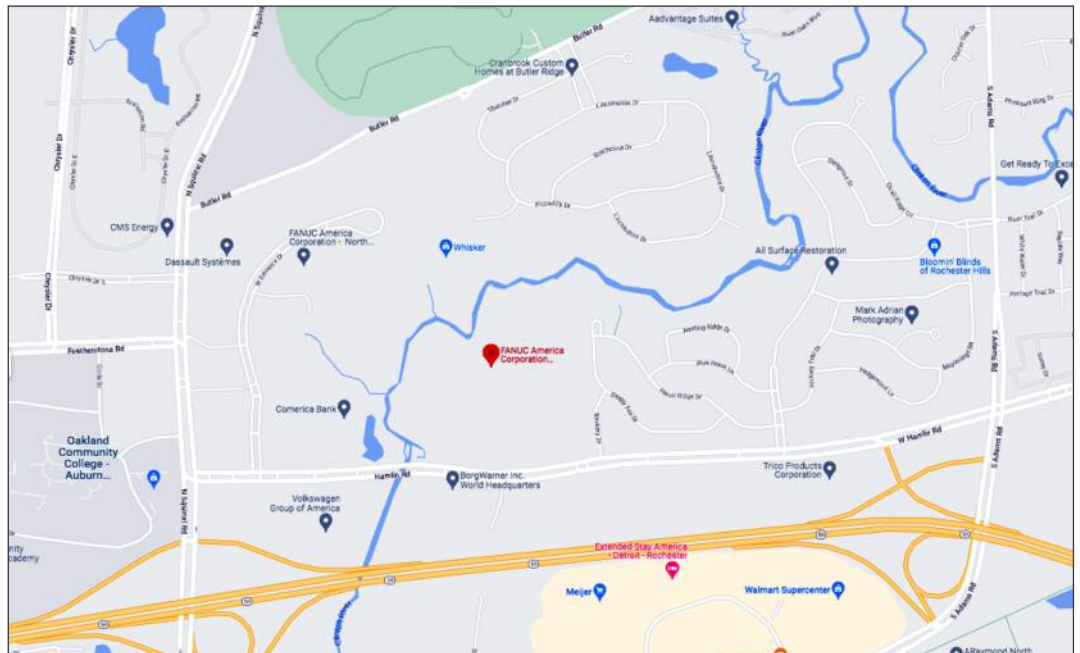
**SPEAKER BRAD RILLEMA**

District Sales Manager at Lincoln Electric, Madison Heights, MI  
This event will also have a Lab Tour with a display of this collaborative technology.



Please RSVP by  
March 13th

**AGENDA**  
5:30 – 8 pm  
**CLOSE @ 9PM**  
Dinner provided  
(No Charge)  
Lab Tour



## Coming Events

**Thursday, March 16, 2023**

**Technical Meeting**

5:30 - 8PM (Close at 9PM) (Dinner Provided)

Cost: No Charge

Location: FANUC America

3900 West Hamlin Road, Rochester Hills, MI

**Saturday, April 1, 2023**

**Ladies' Night Scholarship Fundraiser**

Location: Motor City Casino

6PM - 12AM



**Chairman's Message**  
**Mark D. Gugel**

**February** has been a very busy month. We were very grateful to Warren Peterson for his presentation, Investigation of Techniques used to Minimize LME in a Production Setting. Those of us who work with advanced high strength materials are glad to see practical means by which these advancements the science and application of welding can help us make stronger and lighter products. Later last month, we were glad to visit United Technical a second time for the joint educational seminar at United Technical in Whitmore Lake. The information we learned in the Nondestructive Testing Regional Education Program will be useful to many of us in our daily construction and product evaluations.

This month we look forward to a technical meeting on Thursday, March 16 hosted by Lincoln Electric and Fanuc Robotics in Auburn Hills. Lincoln and Fanuc will expose us to collaborative robotic welding. Please note that the meeting falls on the third Thursday of the month rather than the normal second Thursday of the month. March is also Old Timer's month. We have a few old timers whom we were able to contact to receive their service awards.

Early in April we are looking forward to our annual Ladies' Night Gala. John Pippin and his team have been diligently working to put together another great event. Kristi and I look forward to attending.

**Best Regards/mit freundlichen Grüßen,**  
**Mark D. Gugel, P.E., Ph.D.**  
*Product Development Metallurgical Applications Consultant - Welding, United States Steel, Advanced Applications Technology*  
**mdgugel@uss.com**



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**SAVE THE DATE! APRIL 1, 2023!**

**2023 Ladies Night Scholarship Fundraiser**  
**Detroit Section**

**WHERE:** Motor City Casino  
**WHEN:** Saturday, April 1<sup>st</sup>, 2023



For more information, contact [awsdetregistration@awsdetroit.org](mailto:awsdetregistration@awsdetroit.org)

Cocktails	6:00 pm – 7:00 pm	Soundboard
Dinner and Program	7:00 pm – 9:30 am	Ballroom
Afterglow Dancing	9:30 pm – 12:00 am	Soundboard

**For overnight reservations call 866-782-9622.**  
**Or Online: [booking.motorcitycasino.com/#/](http://booking.motorcitycasino.com/#/)**

# ANNOUNCEMENT FOR ALL SCHOOLS

## Two Separate Grant Opportunities for Your School!

#1 DUE DATE April 1, 2023

### AWS Foundation Welder Workforce Grant

The AWS Foundation is committed to securing the future of the welding industry by positively impacting welding education. The Welder Workforce Grant is the latest effort to ensure a skilled workforce is ready when industry calls. This year, the AWS Foundation will award up to \$300,000 to improve and expand training programs and institutions to increase the number of welding graduates across the country. Please note that starting in 2019 Applicants must be both AWS Educational Institution Member and SENSE Registered to apply for the Welder Workforce Grant.

You must visit this website and follow the instructions for applying: [aws.org/foundation/page/welder-workforce-grant](https://aws.org/foundation/page/welder-workforce-grant)

#2 DUE DATE April 1, 2023

### Detroit Section Welder Workforce Grant

*The AWS Detroit Section Welder Workforce Grant eligible schools reside in our section boundaries which include the Lapeer, Macomb, Oakland, St. Clair, and Wayne counties in the state of Michigan; and Essex, Chatham-Kent, and Sarnia-Lambton counties in the province of Ontario. Schools are also eligible if they reside in Livingston, Monroe or Washtenaw counties in the State of Michigan.*

The AWS Detroit Section Welder Workforce Grant is a \$15,000 grant open to any training program or institution within the boundaries of the Detroit Section. Applicants for the Detroit Section Welder Workforce Grant do not need to meet the requirements of being SENSE Registered and Education Institution Member. Deadline to apply online is April 1, 2023. The AWS Detroit Section in its commitment to local schools and educators established this endowed grant in partnership with the AWS Foundation. The grant is awarded in parallel to the AWS Foundation national funds. Schools in the Detroit section boundaries are eligible for these monies as well as the monies from the Foundation. It is recommended that schools applying contact the AWS Detroit Section Grant committee and request a letter of recommendation. The contact is Wesley Doneth – 810-844-2800 or [doneth.wesley@fronius.com](mailto:doneth.wesley@fronius.com). The grant was made possible thru the AWS Detroit section due to our members and the commitment of supporting companies.

You must visit this website to see the requirements and instructions for applying: [aws.org/foundation/page/detroit-section-grant](https://aws.org/foundation/page/detroit-section-grant)

Grants up to \$25,000 are available for secondary and post-secondary education/training institutions to enhance and improve welding programs resulting in an increase in the number of welding graduates and/or the number of graduates successfully placed in welding or welding-related jobs.

FUNDS MAY BE USED FOR: Welding or metalworking equipment purchases or upgrades; facility improvements; capital items; computers, computer-based training systems.

FUNDS CANNOT BE USED FOR: Any program or area not related to welding education/training; travel expenses; personnel or to expand teaching staff; student tuition or scholarships; textbooks or teaching materials; classroom or lab materials and/or supplies; personal protective equipment; indirect costs.

No grants will be given to individuals.

You must visit both of these websites to apply for ALL GRANTS:  
[aws.org/foundation/page/welder-workforce-grant](https://aws.org/foundation/page/welder-workforce-grant)  
[aws.org/foundation/page/detroit-section-grant](https://aws.org/foundation/page/detroit-section-grant)



## WELDING SCHOLARSHIPS

for Post Secondary Training,  
Associate or Bachelor Degree  
in Welding Engineering,  
Welding Engineering Technology  
or Related Fields  
with Welding Content

For students pursuing Post-secondary training or an Associate/Bachelor Degree in Welding Engineering, Welding Engineering Technology or Related Fields with welding content. These scholarships provide money to be used for the student's tuition, books, or lab fees for one year. To be eligible for these scholarships, you **MUST BE ENROLLED** in a certification-based program or two (2) or four (4) year engineering degree program in Welding, Welding Technology, or a related field. The program supports students who either live in, or are attending schools in the state of Michigan and the following counties in the province of Ontario: Essex, Chatham-Kent, and Sarnia-Lambton.

An on-line application form (with supplemental instructions) is now available on the AWS Detroit Section website, under the 'Scholarships' tab.

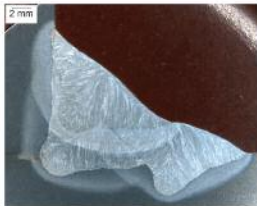
[Click Here.](#)

**Application deadline for the 2023-24 academic year is April 1, 2023.\***



For 2022/23 the section was able to award **40 scholarships totaling \$61,000** to students from **5 different schools.**

\*Please reach out directly if you have a paper application to send in ([dmatz@reautomated.com](mailto:dmatz@reautomated.com))



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# Ask the Welding Engineer

By Donald F. Maatz, Jr.

**Q:** "Is it possible to re-weld a weld nut (in our case a M10 Hex) after it has been welded once?"

**A:** "In an earlier column (ATWE Dec-22), we initiated a discussion about the repair of Projection Welded (PW) weld nuts. From there, the conversation morphed into more or less a thought experiment about PW weld schedules with long weld times, and how this methodology to join weld nuts may not be the best approach to achieve a robust weld (ATWE Jan-23). In fact, this approach could lead to other issues, a few of them potentially grim. For this column, we will take a look at a different aspect of the projection welding inspection process that may be indirectly driving the idea that a long weld time schedule is needed. But oddly, it may be one quality criteria that flies under most folks' radar.

As was eluded to, the main driver for all of these weld schedule strategies was the need to achieve the required destructive push-off force. However, I think there is an important, albeit secondary, element at work here within the PW community further driving the need (or perception thereof) for this type of schedule, and from my perspective, it should be addressed – Weld Nut Set-Down.

Set-Down is the measurable distance between the base metal and part containing the projection after completion of the welding process. And I might be getting just a bit ahead of myself, but it has almost ZERO relation to the strength of the final welded assembly. However, this does not stop folks from getting just a bit hung-up over the concept. More about that later.

To take things a step further, it might be beneficial to understand a bit more about Set-Down, and more importantly, how the industry views this specific acceptance criteria.

As one can imagine, there are many acceptability standards associated with the PW process, and each offers their perspective on what is, and is not, acceptable. And Set-Down falls squarely into this category. For completeness, cross-wire welding is also technically a projection weld. One nuanced difference between cross-wire and either an embossed (hollow) or forged/coined (solid) projection weld is that while the Set-Down of a cross-wire weld is also measured after it has been made, it is in reality a Depth of Penetration (DoP) determination. I say this as, once welded, a cross-wire weld has, by definition, zero gap since the parts are the projections. With this in mind, we will focus on hollow and solid

projection welds (to include a full-ring) for the remainder of this discussion on Set-Down.

When discussing Set-Down, one also needs to acknowledge (I think), the idea of parallelism. Even if welding an assembly with just a single projection, there are part mating surfaces that need to be 'square' to each other. The concept of 'squareness' is always going to be application specific, but I think for purposes of this discussion is good to consider.

Additionally, the measurable criterion known as Set-Down is viewed very differently by those from within the industry. To further amplify, some standards state a specified value (more of a target actually) whereby a PW made in violation of the limits is not discrepant. Other standards specifically state that a lack of adherence to the Set-Down requirements is a discrepancy. It is with a review of this varied, and at times, conflicting requirements where we will begin our next column."

References:

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

If you have more questions about this topic, contact Don Maatz at:


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[dmaatz@reautomated.com](mailto:dmaatz@reautomated.com)

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




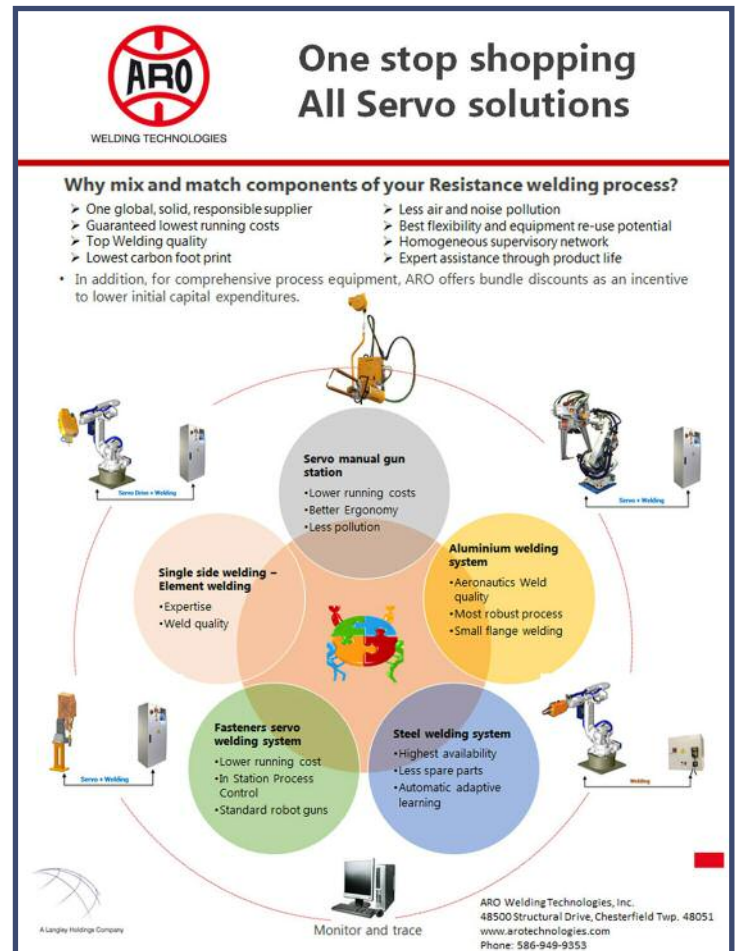
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# March Hotline

## The Inspections Conference: Created by Inspectors for Inspectors

AWS

Meet industry experts, attend expert panel presentations, and make connections that can boost your career and keep your inspections business on the cutting edge by attending the Inspection Expo & Conference (IEC) on November 8-10, 2023. To adjust to critical changes in commonly used codes and standards and gain valuable insights from some of the industry's most respected professionals and code committee members, join us a day earlier, on November 7, for the one-day Updates to the Codes conference. Register for one or both events today.

## Standards Development Publication

### Announcement: AWS A5.28/A5.28M:2022

AWS

AWS A5.28/A5.28M:2022, Specification for Low-Alloy Steel Electrodes and Rods for Gas Shielded Arc Welding, is now available. This specification prescribes the requirements for classification of solid low-alloy steel electrodes and rods, composite stranded low-alloy steel electrodes and rods, and composite metal cored low-alloy steel electrodes and rods for gas shielded welding processes, including gas metal arc welding, gas tungsten arc welding, and plasma arc welding. Learn more and purchase now. [Click here.](#)

## Schools invited to apply for Welding Starter Kit (\$14k value) through AWS Foundation - 'Light a Spark Grant' until March 15, 2023

The American Welding Society (AWS) [AWS Welding Digest](#) Foundation, Bechtel Group Foundation, and Miller Electric Mfg. LLC have partnered to bring the welding experience back to high school with the Light a Spark Grant.

## Novel weld wire could avoid distortion and increase strength in additively manufactured steel parts

Metal AM

The US Departments of Energy's Oak Ridge National Laboratory, Tennessee, and the U.S. Army's Ground Vehicle System Center, Warren, Michigan, have partnered to develop a series of weld wire materials targeted at high-strength steel repair in vehicles, bridges and pipelines. The team believe this novel wire may also prove useful in Additive Manufacturing, where it can be used to avoid distortion and increase strength in steel parts.

## Welding Women Syndicate founder and AWS award winner: Tiffany Orff

The Fabricator

Tiffany Orff joins The Fabricator Podcast to talk about Welding Women Syndicate, Exploratory Academy, and her efforts to empower and train more women to pursue careers as leaders in the welding and metal fabrication industries. Orff also goes into detail how she transitioned from a career in real estate to metal fabrication, which includes working in custom automotive and structural fabrication, owning a suspension shop, teaching as a welding instructor, and creating an organization that celebrates and trains women in the welding industry.

## WEMCO

On behalf of WEMCO and the AWS Foundation, you may now nominate a person or organization for the 2023 Excellence in Welding Awards! You are encouraged to edit an existing nomination with any pertinent updates about the individual or organization you had previously chosen for consideration. Recipients will be honored at FABTECH in Chicago

on September 13th during the annual Excellence in Welding Awards Luncheon and Ceremony. With nine categories from which to choose, you likely know of at least one individual or company deserving of recognition! Remember: WEMCO places a special emphasis on nominees who promote welding to a respective audience, however small or large. Congrats once again to 2022's winners: [Click here](#)

Please spread the word about this year's awards campaign by forwarding this message to your contacts. For more information and for any assistance with the nomination process, please feel free to contact: Adrian Bustillo, 305-443-9353 x295 or [abustillo@aws.org](mailto:abustillo@aws.org) Thanks and we will hope to see you at FABTECH in September!

## Quality assurance vs. quality control

Quality assurance (QA) and quality control [AWS Welding Digest](#) (QC) are often considered the same; however, they are distinctly different, and the inspectors performing these functions usually have different duties and responsibilities.

## Welding educator professional development scholarships

AWS

Scholarships for educators are now open through the AWS Foundation. National Educator Scholarships, worth up to \$5,000, and District Educator Scholarships, ranging from \$500 to \$2,000, help current welding educators improve their knowledge and training skills through continuing education or professional development. The deadline to apply is April 1, 2023.

## How to weld your own stuff

Bob Villa

Welding is an increasingly popular hobby, and for good reason. It can be used to fix a gate or repair a car, saving a bundle in the process. DIY welding projects can also include attractive fire pits or sculptures for the yard. High-quality welding equipment has never been easier to use, and it has become remarkably affordable.

## RoMan Announces a New Hire

Kurt VanDonkelaar is a highly accomplished Weld Engineer who has recently joined RoMan Manufacturing as their newest member of the Resistance Welding team. Kurt's professional journey began in 2011 when he graduated from Ferris State University with a Bachelor of Science in Welding Engineering Technology. Kurt's career began at RoMan Engineering Services, where he worked as a Weld Engineer from 2011 to 2014. He then moved to R&E where he served in the same capacity from 2014 to 2015. During his tenure at both companies, Kurt was part of the Weld CoC group led by Chad Schondelmayer, where he was instrumental in launching new vehicles such as the Dodge Dart, Jeep Cherokee, and Chrysler 200. Afterward, Kurt moved back to the west side of Michigan and started working for Challenge MFG as a plant level Weld Engineer from 2015 to June of 2022. He oversaw the welding processes to produce GM components and assisted in the addition of Tesla and Rivian to the plant's production line. In June 2022, he joined the corporate launch team as Joining Engineer and oversaw any new joining applications being sourced until December of the same year. On January 3, 2023, Kurt was welcomed back to RoMan as an Account Manager for the Automotive segment. In this new role, he will be visiting customers and staying ahead of any issues or questions they have while forecasting future work. Additionally, he will be providing training on the company's products as they relate to welding. With a wealth of experience and knowledge in Weld Engineering, Kurt VanDonkelaar is a valuable asset to the RoMan Manufacturing team. His expertise and dedication will undoubtedly contribute to the continued growth and success of the company.

Continued on page 7

# Thank You

## AMERICAN WELDING SOCIETY



**Riana Carnes**  
Toledo, OH  
Ferris State University  
Welding Engineering Technology  
Detroit Section Scholarship  
District 11 - 011-Detroit

I would like to thank the organization for awarding me this scholarship. Since I'll be attending Ferris for a 5th year, I no longer qualify to receive their provost scholarship which covered a quarter of my tuition per year for 4 years. When I lost the scholarship, I became worried about how I would be able to afford to make up the difference. This award has taken a noticeable amount of weight off my shoulder. What this organization does for the welding industry is immeasurable and greatly appreciated by me and my family.

## March Hotline *continued*

### Welding Engineer Job Opportunity

**Gestamp North American R&D Center**  
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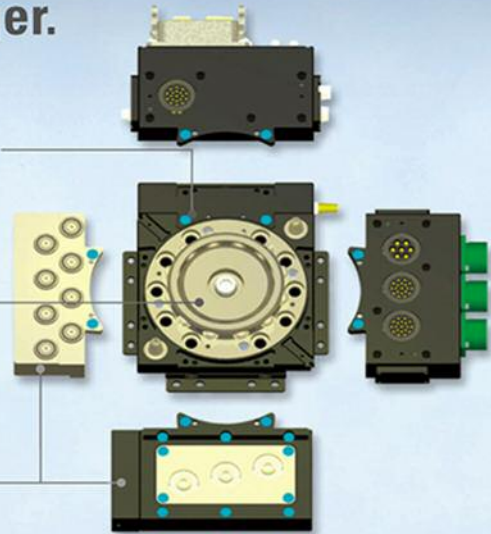


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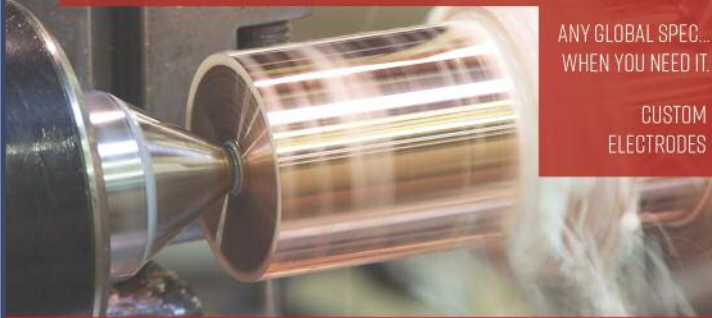
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# Patrons 2022-23

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SDK Engineering

Stephen Gucciardo

The Ohio State University  
Welding Engineering Alumni

United Technical, Inc.

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## Patron's Fund Donations

Thank you for your support! One hundred percent of the Patron's Fund Donations are directed to scholarships for students who are pursuing careers in Welding Engineering and Welding Technology. To become a Patron, contact Steve Gucciardo, AWS Detroit Section-Patron's Committee Chair, 810-623-6508 or email [steve.gucciardo@external.stellantis.com](mailto:steve.gucciardo@external.stellantis.com)

## Social Media Update

If anyone has anything they would like posted to Facebook and/or LinkedIn please send it to Christian Megna: [christian.a.megna@gmail.com](mailto:christian.a.megna@gmail.com)

**LinkedIn** As of 02/14/23, during the past 30 days **LinkedIn** page has had:

- 17 posts - 0% change past 7 days
- 380 post views - 33% change past 7 days
- 2,630 total members
- 59 active members - 16% change past 7 days
- 0 new members

**f** As of 02/14/23, during the past 28 days **Facebook** page has had:

- 15 posts in past 28 days
- 8 new page likes - 22.2% change past 28 days
- 190 page visits - 106.5% change past 28 days
- Posts reached 1,198 people
- 202 people engaged with posts 82.7%
- 7,862 total page likes
- 9,305 page followers - 7% change past 28 days
- NDT Seminar post had highest reach

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# Thank You

## AMERICAN WELDING SOCIETY



**Kenneth Fedor**  
Big Rapids, MI  
Ferris State University  
Welding Engineering Technology  
Detroit Section Scholarship  
District 11 - 011-Detroit

I would like to thank you for choosing me as a recipient for the AWS Detroit Section Scholarship. In the Fall of 2022, I will be beginning my senior year in the Welding Engineering Technology program at Ferris State University. At the moment, my plan is to become a welding engineer in the agriculture or heavy equipment industry, however, I am keeping an open mind to any industry. As I write this letter, I am doing a summer internship with Caterpillar Inc. at their Mossville, IL location as a welding engineer intern. I am excited to see what this summer will bring. I am an active member in the AWS student chapter at Ferris State and plan to be throughout the rest of my time at FSU. I have also volunteered at the local food pantry in the past and plan on continuing to when I have the opportunity. This scholarship will be very helpful by reducing the financial burden for my senior year and ultimately lessening the student debt I will be paying after graduation. I am honored to have been chosen for this scholarship and once again thank you for choosing me.

Sincerely,  
Kenneth Fedor

**Our Mission** is to advance the science, technology and application of welding and allied joining and cutting processes worldwide, including brazing, soldering and thermal spraying. AWS Detroit provides support for the industry in many ways, including:

- Institutional Grants (endowment based);
- Scholarships through Application (endowment based);
- Scholarships through aptitude (HSWC);
- Vocational Support (case by case but budgeted each year),
  - Institution (e.g. supply gas and materials),
  - Local Contest (e.g. travel expense),
  - International Contest (e.g. travel expense);
- Student Memberships (evaluated each year);
- Student Chapter (evaluated each year);
- Technical and Educational Opportunities.



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Questions? Contact: Brad Rillema, Detroit District Sales Manager  
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# Thank You

## AMERICAN WELDING SOCIETY



**Kyle Drouillard**  
South Rockwood, MI  
Ferris State University  
Welding Engineering Technology  
Detroit Section Scholarship  
District 11 - 011-Detroit

Thank you for the generous scholarship! I am very honored to have been selected as a recipient of this scholarship.

I recently received my associate degree in Welding Technology this spring (2022), and I will be entering the bachelorship program for Welding Engineering Technology this fall (2022). This year I learned a lot about fabrication techniques and how to apply critical thinking to turn theoretical blueprints into finished projects. In addition, I was introduced to robotic welding processes at Ferris State University. With this education plan that I have begun at Ferris State, I anticipate graduating in the spring of 2024. With the award of this scholarship, you have reduced my financial burden, which allows me to focus more on my classes and labs. I aim to do my best within the welding program, retaining knowledge and a competitive GPA.

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American Welding Society®  
DETROIT SECTION

# American Welding Society DETROIT SECTION 50th Annual High School Welding Contest

**Friday, May 12, 2023 • 8:00am – 3:00pm**

(CONCLUSION OF CONTEST TIME MAY VARY)

## Washtenaw Community College

4800 East Huron River Drive, Ann Arbor, MI 48105  
O.E. Building (Larry Whitworth Occupational Education Building)

**CONTEST:** Phase 1: Written Exam  
Phase 2: Aluminum Project (GTAW)  
Phase 3: Pressure Vessel-Multi Weld Processes (SMAW/GMAW/FCAW)

**ELIGIBILITY:** High School Seniors enrolled in a vocational welding program.

**REGISTRATION:** Registration form (below) must be emailed to Glenn Kay @ [gkayii@wccnet.edu](mailto:gkayii@wccnet.edu) no later than April 12, 2023 or the application will not be accepted. This deadline is critical to allow time to prepare for the event, projects, etc. Once I receive your registration form, a more detailed schedule will be sent along with finer details regarding weld processes, filler wire diameter and type. No prints will be sent prior to the event this year.

**CAPACITY:** Each school can bring up to **20 high school senior competitors** and up to **20 contest observers**. Final counts will be needed for food, etc.

**AWARDS:**

First Place:	\$2,500.00 Scholarship
Second Place:	\$2,000.00 Scholarship
Third Place:	\$2,000.00 Scholarship
Fourth Place:	\$1,500.00 Scholarship
Fifth Place:	\$1,000.00 Scholarship

**PRIZES:** Scholarships are one-time awards and will be paid to the award winner's college of choice to cover tuition, fees, books and supplies when pursuing a certificate or degree in welding in the 2023/2024 academic year. **Final scholarships requests must take place no later April 1st, 2024.** All contestants and observers will receive an AWS tee shirt. Educational and professional welding equipment will also be distributed to the top 5 finalists as donations permit. Typical prizes distributed include welding machines, torch outfits, welding helmets, jackets, gloves, safety glasses, cutting shields, angle grinders, etc. Last year's giveaways were estimated to be over \$15k and all who attended went home with something!

**FOOD:** Breakfast and lunch will be provided. Bagels, donuts and juice will be served upon arrival as well as pizza/subs and drinks for lunch-all compliments of the AWS Detroit Section!

**CONTEST PROJECTS:** The welding contest is divided into **three (3) phases**. All three phases listed below will be part of the student's final score and used to determine the top 5 finalists. The top 10 finalists pressure vessel will be hydrostatically pressure

tested to 1000psi with the Instructor and Competitor witnessing the pressure test.

### PHASE 1: WRITTEN EXAM

Each contestant will be given a written exam to test their basic knowledge in the following areas: OFW (Oxy-Fuel Welding), OFC (Oxy-Fuel Cutting), Brazing, SMAW (Shielded Metal Arc Welding), GMAW (Gas Metal Arc Welding), FCAW (Flux Core Arc Welding) and GTAW (Gas Tungsten Arc Welding) processes. These questions will be multiple choice, conducted in a computer lab and the test score will be included in the contestants overall final score of the competition and projects.

### PHASE 2: ALUMINUM PROJECT (GTAW)

This project will include fillet and groove welds on aluminum base material in various positions. Base material, filler metal, prints and project instructions will be provided during the day of the competition.

### PHASE 3: PRESSURE VESSEL (SMAW/GMAW/FCAW)

This project will include fillet and groove welds on 3/8" carbon steel base material using SMAW, GMAW and FCAW process in all positions. Base material, filler metal, prints and project instructions will be provided during the day of the competition.

**REQUIRED PPE & TOOLS:** Each student is required to bring the Personal Protective Equipment (PPE) and Tools listed below. PPE items will not be supplied and failure to bring PPE or Tools will result in the student being unable to compete. No power tools will be permitted for use on any of the contest projects.

#### PPE:

1. All leather gauntlet style welding gloves
2. Welding helmet
3. Welding jacket
4. Z87 rated safety glasses
5. All leather above the ankle work boots
6. All cotton or denim clothing and under garments

#### Tools:

1. Bucket or tool box to hold tools
2. File
3. Tape Measure
4. Combination Square
5. Chisel
6. Soapstone/Scribe
7. Ball Peen Hammer
8. Wire Brush
9. Chipping Hammer
10. Pliers/Wire Cutters

**INSTRUCTOR/ADVISOR PARTICIPATION:** Each school attending will need to have an instructor/advisor competent in the area of welding as they will be tasked with conducting the judging/scoring for the student projects. This way, we can involve the Instructors in the competition process and to allow them to see first-hand how students perform during a completion. All student projects will be taken home with them at the end of the competition.



# 50th Annual High School Welding Contest

## REGISTRATION FORM

Once completed, email the Registration Form (2 pages) to Glenn Kay at [gkayii@wccnet.edu](mailto:gkayii@wccnet.edu) by the submission deadline which is: **April 12, 2023**. Please complete all fields below or your form will not be accepted. Once Glenn receives your registration form, a more detailed agenda will be emailed out. If you do not send Glenn this form by the listed deadline with all fields filled out, you will not receive any further details regarding the contest and you will not be permitted to compete during the event. Should you have any questions about this form or the contest itself, please feel free to reach out to Glenn Kay via email for assistance.

### INSTRUCTOR INFORMATION (REQUIRED)

SCHOOL NAME & ADDRESS: \_\_\_\_\_

INSTRUCTOR'S NAME: \_\_\_\_\_

EMAIL: \_\_\_\_\_ PHONE: \_\_\_\_\_

### COMPETITOR INFORMATION (REQUIRED)

- 1) FIRST NAME \_\_\_\_\_ LAST NAME \_\_\_\_\_ T-SHIRT SIZE \_\_\_\_\_  
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**COMPETITOR INFORMATION (REQUIRED)**

18) FIRST NAME \_\_\_\_\_ LAST NAME \_\_\_\_\_ T-SHIRT SIZE \_\_\_\_\_  
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19) FIRST NAME \_\_\_\_\_ LAST NAME \_\_\_\_\_ T-SHIRT SIZE \_\_\_\_\_  
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20) FIRST NAME \_\_\_\_\_ LAST NAME \_\_\_\_\_ T-SHIRT SIZE \_\_\_\_\_  
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**OBSERVER INFORMATION (REQUIRED)**

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