Annual Scholarship Night

Thursday, September 13, 2018

Location: Oakland Community College – Auburn Hills

ABC Building – Room G240

2900 Featherstone Rd, Auburn Hills, MI 48326

Enter at south doors at south-west corner of the ABC Buildings

Click here for Google Maps

The AWS Detroit Section promotes the welding industry by investing in students who are attending various universities, community colleges, and trade schools. This year, AWS Detroit Section was able to award scholarships over $60,000.00 to help students succeed and promote tomorrow’s welding industry. Student Night is a celebration honoring students, parents and teachers. We are very proud of these students. (See page 3)

Come out and celebrate Scholarship Night with us. We hope to see as many students as possible. Make note that we are at a new venue this year: the OCC Auburn Hills campus.

It will be a great event and we are expecting a sold out crowd. So please RSVP as soon as possible!

For Advertising Opportunities
Contact Brian Peterson
810-844-2800
peterson.brian@fronius.com

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

AGENDA

5:30 - 6:00 pm
Welcome Reception & Networking

6:00 - 7:00 pm
Dinner

7:00 - 9:00 pm
Awarding of Scholarships

9:00 pm
Adjourn

Please RSVP by Sept. 10
with Amanda Davis
amanda.davis@fcagroup.com

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AWS Technical Nights are open to everyone! We encourage that members bring students and non-members to learn more about our organization and industry.
The summer of 2018 is coming to its end. Even though many of us are focused on squeezing in one last vacation, the new work year is at our doorstep. We have a full year planned – including technical meetings, our world-class Sheet Metal Welding Conference, welding educational series events, and the high school welding competition.

I would be remiss if I didn’t acknowledge all the volunteer hours that were generously given by the members of our committees. Donnie Crist and his golf outing committee prepared a very successful event a few weeks ago. Although a few golfers may have lost track of a stroke or two, we didn’t let it stand in our way from having a great outing. John Pippin, Jr. prepared a list of subjects and venues for our upcoming technical meetings. Warren Peterson and his entire Sheet Metal Welding Conference committee worked endless hours to prepare for this October’s conference. With so many great technical talks available, I will personally find it difficult choosing among the presentations. The list of behind the scenes volunteer hours needed to keep our section vibrant goes on and on – whether it be preparations for the Christmas Party, scheduling welding educational series speakers, preparing budgets, balancing the books, preparing for the ladies night gala, working on SENSE and with schools, preparing the bulletin, reviewing scholarship and endowment applications, etc. – it takes a busy team to pull it all together. Thank you to my entire committee for starting your work in June (and sooner for some of you).

We officially start the year off on September 13 with our Student Night at Oakland Community College – Auburn Hills. The scholarship program is one of our proudest achievements. The investment in the matching funds program has yielded a program that will allow us to contribute over $60,000 towards students each year. Together with our new grant program, the scholarship program helps us reach out to students, schools, and fabricators, to help ensure the steady supply of skilled trades and engineers that are needed to support our country’s needs. All this helps us achieve our mission of advancing the science, technology and application of welding and allied processes including joining, brazing, soldering, cutting and thermal spray.

Finally, I would like to acknowledge the support from all our patrons and employers who support us financially as well as allowing their employees to spend time volunteering in our society. Without all your support, we could not serve the welding industry and arts as effectively as we do. Thank you!

If you wish to be personally involved with the AWS-Detroit Section, please don’t hesitate to contact me at (810) 602-9735 or mark.gugel@gm.com.
American Welding Society

June 26, 2018

Congratulations to the Detroit Section 2018 – 2019 Scholarship Winners:

This year the AWS Detroit Section has awarded 30 welding scholarships totaling $60,000. These scholarships are made available to Michigan residents and/or students enrolled in a welding or welding related programs at a college or university in the State of Michigan, and the following counties in the province of Ontario; Essex, Chatham-Kent, and Sarnia-Lambton. The candidates all submitted an application, including transcripts of their academic achievement, a brief letter about their background, their goals and ambitions, and any additional factors that would help the Section Scholarship Committee determine eligibility for an award.

The 30 recipients of the 2018 – 2019 Scholarships will be attending:

- Ferris State University
- Lansing Community College
- LeTourneau University
- Oakland Community College
- Ohio State University
- Pennsylvania College of Technology
- Schoolcraft Community College
- Washtenaw Community College

The scholarship recipients are all invited to attend our September Technical Meeting as a guest of the Detroit Section so that they may receive recognition of these awards (an RSVP is requested).

2018 - 2019 American Welding Society-Detroit Section Scholarship Winners

AWS Detroit Section, District 11 Fred Ellicot Scholarship for Arc Welding
Leah Clifton – LeTourneau University – Materials Joining

AWS Detroit Section, District 11 Dietrich Roth Scholarship for Resistance Welding
Cody Lee Turrell – Ferris State University – Welding Engineering Technology

The Amos and Marilyn Winsand Scholarship, funded by the AWS Foundation, was awarded to Cody Lee Turrell, Ferris State University.

The Robert L. Wilcox Scholarship was awarded to Christian Megan, Ferris State University.

The James W. Mitchell Scholarship was awarded to Emily Fink, Oakland Community College.

Troy Bearden - Ferris State University
Joel Becham - LeTourneau University
Nicholas Bercher - Ferris State University
John Campbell - Ferris State University
Maria Cantin - Pennsylvania College of Technology
Matthew Clark - Ferris State University
Leah Clifton - LeTourneau University
Jacob Cobb - Ferris State University
Jessica Constine - Schoolcraft Community College
Keagan Cotick - Ferris State University
Alex Drahaim - Ferris State University
Tylah Fontson - Ohio State University
Joel Haak - Ferris State University
Michael Kreutzer - Ferris State University
Brennan Lindemann - Schoolcraft Community College
Garrett Lindgren - Ferris State University
Michael Morehead - Schoolcraft Community College
Nolan Nowak - Ferris State University
Lindsay Nye - Pennsylvania College of Technology
Jesse Pagalalan - Ferris State University
August Schmiedekamp - Ferris State University
Matthew Strike - Schoolcraft Community College
Justin Suchan - Schoolcraft Community College
Marc Tallieu - Ferris State University
Sean Walcowski - Ferris State University
Jared Walker - Lansing Community College
Robert Watson - Ferris State University
Alexander White - Washtenaw Community College
Lori Woods - Ferris State University

The scholarship process for the 2019-2020 school year will begin in December 2018.

Donald F. Mautz, Jr.
Section Scholarship Chairman
New Products!
Fronius USA

The newest member of the new Fronius TIG generation is here! Smart TIG welding with the new MagicWave 230i. It is connectible with other devices via Bluetooth, Wireless LAN and NFC such as welding helmets, remote controls and also mobile phones. For details visit the Fronius website at www.fronius.us or by using this link http://bit.ly/2LHmUw3

Weld Mold Company

New WMC SafetyRobot with Safety Validation Provides Totally Remote Floodwelding

With the new WMC SafetyRobot™ telerobotic welding system, operators can perform remote flood welding in a temperature-controlled environment, maintaining total control using long established best welding procedures. Operators are protected from heat, smoke, fumes, and radiation, as well as many health issues that often result. There is also a complete system package available that comes complete in a 20-foot container. Everything is preinstalled and interconnected, ready to connect to primary electrical and shop air.

The complete WMC SafetyRobot system package includes robot and controls with proprietary software; welding power source with associated equipment for running .035”-3/16” diameter wires; an operator station and office complete with AC and heat and lighting; dual monitors, PC, cameras and video capabilities; all interconnecting cables; safety caging, and much more. Weld Mold also offers two weeks of on-site training. The WMC SafetyRobot welding process is patent pending.

It’s important to note that the WMC SafetyRobot recently passed an extensive safety validation process.

Awards

ASM International Recognizes Weld Mold in Historical Landmark Award Presentation

Brighton, Michigan... On Thursday May 17th, ASM International presented Weld Mold Company its prestigious ASM Historical Landmark Award for 2017. Attending the event were ASM International dignitaries, distinguished representatives from the city of Brighton and state of Michigan, members of the press, Weld Mold officials and employees, and other invited guests. Weld Mold Company was recognized for developing and innovating the flood welding process for weld die repair. Matt Kiilunen (1905-1990), Weld Mold Company founder (1945), was personally responsible for innovating the process, which took die repair to the next level—increasing die life while reducing customer costs. From the Iron Bridge to the Statue of Liberty in Paris, the ASM Historical Landmarks Designation recognizes sites and events that have played a prominent role in the discovery, development and growth of metals, metalworking and all engineered metals. Familiar company recipients have included AT&T, Republic Steel and General Motors. ASM International is the preeminent manufacturer that delivers high-quality custom solutions for general welding applications and forge welding. That includes Electrodes, cored wire and solid wire product solutions for welding and flood welding, with specially designed machinery to facilitate the flood welding process. Weld Mold has offices in Brighton, Michigan, as well as in China and Korea.

Assistant Needed:

ATTENTION RESISTANCE WELDING COMPANIES AND EXPERTS: The AWS and RWMA are in the final stages of launching the new CRWT (Certified Resistance Welding Technician) certification. They are in need of people to take the beta CRWT test to help them sort out questions and make sure all is good to launch the official certification process by end of 2018.

Below is a link to help anyone willing to take the test sign up. This CRWT certification on resistance welding is well overdue for our industry and it will help educate and also allow people working in the resistance welding field to add a world recognized credential to their resume showing their ability to operate in the resistance welding field with the highest level of competency.

It will also allow companies seeking individual with RW experience to hire someone with the CRWT credential knowing they have passed an excellent technically based RW exam and achieved CRWT status.

Please sign up and take the beta test. There is no charge for this, the test will be given locally and you will receive free resistance welding publications for volunteering your time. https://www.aws.org/library/doclib/BETA-CRW T-20180710-2.pdf

Please contact Don DeCorte or Donnie Crist at Roman Mfg. if you have any questions or issues signing up. 1-616-530-8641
This year marked the 45th year the AWS Detroit Section held its annual High School Welding Competition which over 30 high school seniors competed to showcase their welding skills and knowledge for a chance to win some really amazing welding equipment and scholarship funding. If you’re not familiar with the HSWC, the competition is specifically designed for high school welding program seniors in an attempt to help prepare them for wherever their journey takes them beyond high school; higher learning and the beginning of a successful career in the welding industry! The competition is an all-day event where students are pushed to use the skills and knowledge they learned in class and apply it to a series of timed welding projects and a fundamentals written test. The welded projects consist of an aluminum and a carbon steel project where the students must make the projects conform to a set of blueprints where safety work practices, dimensional tolerances, weld size, weld process and weld location are specified and scored. They are also scored on overall craftsmanship of their work and the judges use a very rigorous scoring rubric to place these projects.

Continued on page 16
I discussed in a previous article (March 2018) how important it is to have a mentor, especially when you're a brand-new CWI. I also discussed the importance of building a solid support network. And, as important as those things are, you don't forever want to be the CWI that is always asking everyone else for their opinion. Especially when you can never provide a direct answer to questions that are asked of you. It's important to understand when your research is bringing you to the right conclusions and feel confident about them, but still there are times when you need to reach out for help from your support network. At some point in time you need to be able to recognize these situations and react accordingly. That can be a bit scary, but rest assured there are resources that can help you make some of the critical decisions you might face as an inspector. Here are some questions you may be asking yourself from time to time. Am I using the right tool for the type of inspection that I'm doing? Is this even the right inspection method? What other options are there? Am I looking for the right things to make my determination on acceptability? These can be tough questions to answer but AWS publishes several guides for this very purpose. The order in which I present these resources does not represent the order of importance. How you use these guides, and the importance placed on them, will be something you establish during your use and understanding of them.

The first guide that I would recommend is the Guide for the Visual Examination of Welds, AWS B1.11M/B1.11. As the title implies, this guide provides you with an introduction to visual examination of weldments. It breaks the examination process down into three categories, (1) prior to welding, (2) during welding and (3) after welding. It offers insight into what things you should be looking for before the welding begins, such as review of contract documents and standards. What to look for once welding has begun, such as review of welder qualifications, verification of properly functioning equipment, verification of proper consumables, etc. Also, what to look for after welding is completed, including weld surface quality and conditions, besides the code requirements. There are illustrations and photos showing various discontinuities that you would commonly find in welding. Some of these can help you to determine where certain types of discontinuities are more likely to be present. There is also a section dedicated to examination...
I need help...please! continued from page 6

equipment. In this section you will find descriptions and methods for the use of temperature measuring devices, weld gauges, ferrite gauges, borescopes, electrical meters, etc. Below is a link to the AWS Bookstore for information on this guide. https://pubs.aws.org/p/1547/b111mb1112015-guide-for-the-visual-examination-of-welds

Second is the Guide for the Nondestructive Examination of Welds, AWS B1.10M/B1.10. As the title for this guide implies, its purpose is to give you an overview of some of the more common examination methods. It is not intended to give detailed, in depth instruction into each method, rather general information that may help you decide what the best method for a given welding project may be. Topics covered in this guide include, Visual (VT), Liquid Penetrant (PT), Magnetic Particle (MT), Radiographic (RT), Ultrasonic (UT), Electromagnetic (Eddy Current or ET) and Leak (LT). This guide will familiarize you with common terms and definitions, various discontinuities and an informative selection guide for the various methods. Below is a link to the AWS Bookstore for information on this guide. https://pubs.aws.org/p/1680/b110mb1102016-guide-for-the-nondestructive-examination-of-welds

Finally, the last publication I’ll discuss here is the AWS Welding Inspection Handbook (WIH). The WIH covers topics that include testing and examination methods, and the general duties and responsibilities of welding inspectors. Subjects such as communication of design welding intent with the proper use of welding symbols, welding inspection operations, quality assurance, welding metallurgy, preheating and postweld heat treating, weld and weld related discontinuities, qualification of welding procedures, welders and welding operators, destructive weld tests, proof tests, and more can be found in the WIH. This handbook is a must have for the new and experienced CWI and welding inspection personnel alike. Not only can this handbook provide you with valuable information on where and how to start your review of materials, drawings and specifications before you even begin welding, but it can also help walk you through the entire inspection process including preparation of your final reports. Below is a link to the AWS Bookstore for information on this handbook. https://pubs.aws.org/p/1542/wi2015-welding-inspection-handbook

There are many other resources to consider when researching information. When making a determination related to welding and welding inspection, I have found that these guides and handbook are vital. These, along with a solid network of people that you trust and have proven themselves reliable are absolutely critical in making decisions on your weldment project.

If you’re not already an AWS CWI and the idea of becoming a CWI is a career that you would like to pursue, the AWS-Detroit Section is hosting another AWS CWI Seminar/Exam this year. The seminar/exam date and location are as follows:

CWI Seminar: September 30-October 5, 2018
Exam: October 6, 2018

Washtenaw Community College
4800 E. Huron River Dr.
Ann Arbor, MI, 48105-4800

Check the AWS-Detroit e-Bulletin often for other helpful information, at www.awsdetroit.org. For more information on how to become properly trained and certified by the American Welding Society and to register, you can visit www.aws.org/certification.

By Eric Lichtfusz
eric.lichtfusz@roush.com
AWS/CWI 09070281

Keep on Welding!
Robin
Q: “My company is in the process of quoting several new assemblies that require resistance spot welding and I am concerned that the specified widths of the flanges are too small for the required electrodes. Are there sources for flange width design recommendations that I can reference so as to determine whether or not the proposed concept is capable of supporting the required resistance spot weld?”

A: “As discussed in our previous column (May-18 ATWE), the subject of a required minimum flange width is a source of continual debate within the resistance welding community. We also reviewed some of the dimensional tolerances that must be considered as part of any analysis. With that as background, this column will illustrate the dimensional tolerances that affect the placement of a resistance spot weld (RSW) on a flange.

The representation in Figure-1 details a generic electrode cap/welding flange interface and the identified elements that can affect the required minimum width. These elements are further discussed below. A note of clarification; the assumption we are making for this column is that we are dealing with a single side of a weld flange, as shown in Figure-1. If one assumes we add an identical mating flange (mirror image, etc.) the analysis still holds true, unless one flange shifts along the mating surface of the other. Some designers say that this shifting means the parts are no longer ‘line-to-line.’ Also, we are not accounting for the effects of either the wall angle or bend radius. However, both are important considerations with regards to the selection of the electrode adapter and cap geometry.

**Maximum Electrode Face Diameter (MFD):** It is a given that the electrodes associated with RSW will wear over time. This phenomenon, also known as mushrooming, results in an increase of the electrode contact face diameter. The exact amount of wear per weld is very difficult to predict as there are many factors that can affect the rate of degradation. Nevertheless, this wear must be accounted for by determining the maximum acceptable face diameter that the process can tolerate. Also, the degree that electrode face growth has on the location of the weld will vary with the process and the electrode maintenance philosophy. As an example, the effect of electrode maintenance on altering the amount of wear can be tied directly to the periodicity of electrode redressing/changing. Also, the amount of variability associated with MFD, as a percentage of the total variability, tends to increase as the ratio of body diameter / contact face diameter decreases.

**Assembly Positional Tolerance (APT):** The definition for APT is the variation of the assembly from its desired location, with respect to an established reference point. This variation may also be the result of manual positioning, hard automation, or a robot. To further understand this source of variability two different aspects must be considered. These are the physical condition of the tooling that is locating the electrode (ie. the robot itself) and the process utilized to actually position the electrode (ie. the robot program). As in all mechanical systems, APT will be at its lowest value when the tooling is in its most mechanically robust condition. Please note that one must be careful not to assume that new tooling is at its most robust condition and therefore contributing its lowest value for APT. Why? This assumption would discount any potential improvements made by the hard working folks on the plant floor as they continuously strive to improve the assembly and welding process. It almost goes without saying that the process utilized to position the electrode caps has an effect on the APT. One only needs to visualize how unrepeatable a person is pounding in a nail, let alone attempting to position a manual welding gun. It should be noted that some modern assembly lines employ separate robots to independently position both the assembly to be welded and the welding gun simultaneously, with the resultant potential for significantly increase overall variation as both EPT and APT come into play.

**Expulsion Dam (ED):** The act of creating a proper resistance spot weld is, by its very nature, a quick and violent physical transformation. To help constrain this process, a certain amount of unaffected base material must be present to surround the newly forming weld nugget. For our purposes, this required base material is called the Expulsion Dam (ED). The minimum required amount of material needed to act as an effective ED can vary by material, stack-up (total, ratio, 2T, 3T, etc.) and electrode cap configuration. Figure-2 illustrates a generic stack-up/electrode cap combination and serves to illustrate how weld nugget growth can relate to the contact area of the electrode facing surface. From a design perspective, values for ED of approximately 1.5 x Governing Metal Thickness (GMT) should be sufficient.

**Cut Flange Tolerance (GMT):** This element of variability is perhaps the easiest for anyone associated with manufacturing to grasp, most likely due to the fact that ‘short metal’ is the initial default answer for almost any edge welding condition, whether the flange is actually dimensionally within specification or not. That being said, even if the plant welding engineer is fortunate enough to have parts designed with sufficient flange width, vigilance is still needed. The steady accumulation of hits will take their toll on the stamping dies, and despite the best efforts of the maintenance staff, dimensions will subtly change due to wear. This wear will often manifest itself in many ways, with a common issue being flange bend radii ‘wash out’, or an increase in radii diameter. If it is assumed the overall dimension of the stamped part blank hasn’t changed, an increase in the bend radius has the effect of reducing the width of the flange’s weldable flat area, with the resultant complications associated therein and if, because of the apparent length increase, the blank is trimmed to
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Recap of Educational PDH Night

The Detroit Section’s [2nd of 2 yearly] Educational PDH Night was held on April 19th and attended by some twenty energetic and full-of-questions welding folks. The Tool & Die welding exposition consisted of Eureka Welding Alloys’ three presenters: Tom Web, Bob Addington, and Chris Kerchkof. Their combined 95 years of experience with Eureka went hand-in-hand with the company’s rich and pioneered 92-year-old niche history. Tool & Die past vs. present, applications and processes, and finally automation solutions for today were explained.

For more information on the event and Eureka Welding Alloys, please visit: awsdetroit.org/events.
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2019-2020 Patron’s Fund Donations

Our goal at the AWS Detroit Section is “to advance the science, technology and application of welding.” We accomplish this by promoting education and Section participation.

It is time again this year to ask you for your generosity in contributing to the Patron’s Fund. We will, as always, contribute 100% of these funds directly towards scholarships for students who are pursuing careers in Welding Engineering and Welding Technology. Each year the American Welding Society Detroit Section sponsors many students with these funds, and because this is such an important part of giving back to the industry that supports us, we hope you can help us by being a proud supporter in this effort. I have included the announcement letter which shows the many 2018-19 scholarship recipients that were helped in part by contributions from our Patrons in past years.

To be a Patron, simply send a check made out to the American Welding Society Detroit Section for a minimum of $100 or visit our website at www.awsdetroit.org, click on “Scholarships” in the blue banner then scroll down to the “Pay Now” button. I encourage you to please consider a contribution of more than the $100.00 minimum, and here’s why.

This year my plea for your support is with more intensity than ever before. The last four years were remarkable years for Patron contributions. Through you, our Patrons, we were able to raise $9000 last year. Over the last four years the Patrons have helped us raise nearly $40,000. This year again my goal is $15,000. That may sound ambitious, but I’m sure that many, if not all of you, have had an opportunity to interview applicants for welding related positions within your company. If so, you’ve probably noticed that although the ambition may be there with these potential new hires, the skill sets may not. That’s where the funding comes in. The cost of education is high, and with your help we can provide students that are seeking careers in welding related positions with financial assistance to improve those skills. This creates a stronger, better educated, workforce and a more efficient and profitable company for you. Additionally, you’ll be recognized in the industry for your contributions. Patrons are made known to the membership in the monthly technical bulletin, to the industry on the AWS website, and are further acknowledged with a listing in the annual Ladies Night Program.

If you are a Patron, we thank you for your support, and ask you to please consider increasing your contribution. Whether a longtime Patron or a first-time Patron, your help will assist us to bring about an educated future workforce.

I thank you in advance for your contribution, and await your rapid response for the 2019/2020 season.

Please make contributions payable to AWS – DETROIT SECTION and mail to:

Steve Gucciardo
FCA US LLC
CIMS: 481-00-35
800 Chrysler Dr.
Auburn Hills, MI 48326

Warmest regards,
Steve Gucciardo, Chair
AWS Detroit Section-Patron’s Committee
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Engineering Resistance Welding Value
 compensate, there will be a too-short flange condition when the die is repaired and returns the bend radius to design intent.

All of the above elements are present each and every time a weld is made. But, as stated above, the effect that each has on the total variability of weld location on a given flange is very difficult to quantify. There is an argument put forth by some engineering groups that maintains it is statistically unusual for all of the tolerances to stack up in a purely additive manner and therefore do not advocate the use of a worst case, linear condition sum of the tolerances. Instead, the square-root of all squared and summed tolerances is used as a more reasonable approach for determining the required minimum flange width. This is called an RMS tolerance and is used as a more realistic approach to make tolerance calculations more reasonable.

While the above items focused on welding there can be other considerations that directly affect the required minimum flange that may have nothing to do with welding at all. Examples of this include the addition of sealer and adhesives into the weld joint. These essential items require sufficient surface contact area in the joint to be fully effective and sometimes mandate the selection of a welding flange that is wider than would be the case without their presence. Also, the higher strength materials much more common in today’s designs may drive the need for a wider flange as they present a challenge to the stamping facilities that are asked to form them. These are but two quick examples that come to mind and I am sure there are others.

The above points, taken as a whole, attempt to illustrate a few of the many considerations that must be taken into account when designing just the welding flange of a part to be spot welded. However, the maturity of the RSW process has resulted in product designs, and designers, that have a great deal of intrinsic inertia associated with them, resulting in many very weldable joints. This maturity can be both a blessing, and a curse, as it is possible for those tied to the product design and review process to become complacent. The addition of newer materials to the system that do not conform with ‘the norm’ and/or product designers attempts to reduce flange widths too much because they were never taught why they were that wide to begin with, are but two examples of why the design standards were created and need to be adhered to, lest a less than robust process be given to the manufacturing facility. In other words, just because you have a voice activated dialing system in your car; it does not relieve you of memorizing your home phone number as you might find yourself in the situation where you must perform the task of dialing manually.”

Acknowledgement: I would like to thank Tom Morissett, former AWS D8 chairman, for his invaluable perspective on minimum flange width requirements.

Figure-1: Representation of a generic electrode cap/weld flange interface and possible location dimensional variables.

Figure-2: Metallographic representation of a generic stack-up/electrode cap combination

References:
2) AWS C1.1M/C1.1:2012, Recommended Practices for Resistance Welding

If you have more questions about this topic contact Don Maatz at:
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2018 AWS Detroit Section Golf Outing

The American Welding Society - Detroit Section Annual Golf Outing was held on Thursday, July 19th, 2018 at Cherry Creek Golf Course. The outing was a success as 104 golfers turned out for a day of golf on a beautifully conditioned golf course. The weather cooperated as we had an extremely comfortable outing with a breeze and temperatures in upper 70’s. As one of our sections fund raising events this year’s outing raised over $8000.00 with all the proceeds contributing to grants and scholarships.

As with many of our events our sponsors play a huge role in the success of the event. The AWS Detroit Section would like to extend a huge thank you to our sponsors, participants and to the many volunteers that make the outing possible.

Thank you sponsors!

- RAM Solutions
- SDK Engineering
- Fronius
- Centerline
- Dengesha America
- Obara
- Milco Manufacturing
- Parker
- ARO Welding Technologies
- T.J. Snow Co.
- Changer & Dresser Corp
- RoMan Manufacturing
- Tarpon Automation
- Applied Robotics
- Rain Soft of Northern Michigan
- ATI Industrial Automation
- Gugel Photography

2018 American Welding Society-Detroit Section Outing Winners from Left to Right Chris Walker, Ron Mersman, Jeff Buterakos, and Rob Adamek
Please welcome me in congratulating the following contest winners and their respective school for all their hard work!

1st place: Kurtis Blumenauer (South and West Washtenaw Consortium)
2nd place: Jacob Hausch (William D. Ford Career Technical Center)
3rd place: Jacob Towle (Flat Rock Community High School)
4th place: Tim Benninger (Oakland Technical Campus Northeast)
5th place: Cameron Harnden (Oakland Technical Campus Southeast)

The success of the High School Welding Competition is only made possible by the support we receive from our welding suppliers, our colleagues, patrons, section members, etc. To those that have contributed this year and in years past, this competition supports the very lifeblood of our community and serves as an inspiration to our young welders to further their education, develop one’s skills and continue to pursue a career in the welding industry. Your support has been truly invaluable.

Best regards, Glenn Kay, AWS HSWC Chair