American Welding Society Detroit Section Commitment to Education

The American Welding Society (AWS) was founded in 1919, as a nonprofit organization with a global mission to advance the science, technology and application of welding and allied joining and cutting processes, including brazing, soldering and thermal spraying. AWS strives to move the industry forward in both thought and action, as well as inspire new generations to see the exciting career opportunities available today.

On February 3, 1925 the Detroit Section was officially chartered and is one of the oldest and largest sections of the American Welding Society. The commitment to our mission shows in the volunteers, supporting companies and community outreach for our last 93 years.

In 1974 the formation of the scholarship program took shape and in 1981 we officially adopted the Robert L. Wilcox and James W. Mitchell named scholarships. Since those early beginnings the program has expanded over the years and grown in size due to the generosity and commitment of companies, individuals and volunteers. The scholarships were funded each year from our treasury.

2001 was a groundbreaking year when Amos and Marilyn Winsand raised the bar by investing $50,000 to create an endowment which would guarantee yearly awards and was administered by the Foundation thru our selection process. The leadership of the Winsands created a path forward to build the scholarship program.

In 2012 the AWS Foundation developed a “Matching Funds Campaign” and Detroit led the way by making a significant investment to lock in the scholarship program for students forever. The wisdom and leadership of the Executive Committee of the Detroit Section has made it possible for us to pay out over $60,000 a year in perpetuity for students seeking an education in our industry.

Over the last few years we have been looking for a new way to promote our mission. Many members of the committee petitioned for a Grant program where we could have a positive impact on the institutions where students get training. Scholarships help the student directly but we saw a need for local schools to get assistance purchasing equipment, supplies and training for their instructors. Meetings and discussions took shape and we formulated an idea of how we wanted to do it but the framework for making it a reality was missing.

In the Spring of 2017 the AWS Foundation (National) created the “AWS Foundation Welder Workforce Grant” a program designed to directly assist education institutions with the costs associated with training our next generation or re-training those looking to fill employment opportunities in our industry. The new program was framed just as we had been discussing. As a section we were encouraged, this would be a great opportunity to support our local educators. One aspect was still missing in that we wanted to make a local contribution much like the Scholarship program today. We had made budgeting decisions to do our own local contribution but hoped we could make a long term commitment.

In September 2017 the AWS Foundation notified us of a “Matching Funds Campaign” for the “AWS Foundation Welder Workforce Grant.” This program allows local sections
February 2018
This Issue of the Bulletin can be viewed on the web at awsdetroit.org

Chairman
WESLEY DONETH
First Vice Chair
MARK GUGEL
Second Vice Chair
JOHN SUTTER
Secretary
DAVID BENETEAU
Treasurer
ANDRE YOUNG
Bulletin Editor
ROBIN MICHON
Webmaster
RODNEY BEREZNICKI
Hotline Coordinator:
BRIAN PETERSON
Meeting Reservations:
AMANDA DAVIS
Advertising
DONNIE CRIST
Assistants to Chairman:
JOHN PIPPIN, JR.
ERIC LICHTFUSZ
NATHAN MILLER

February 14th is Valentine’s day – there, I did my part to keep you out of trouble with your significant other. We had a great presentation in January on the advances of quality control for Laser welding along with some information about where additive manufacturing is headed. I would like to thank Plasmo for hosting.

My message is a little shorter this month because the core of what I would like to discuss is included later in the bulletin. The AWS Detroit Section made history again in 2017 and it is a topic we as a section should be extremely proud of. Please see my article about the “Grant Program.”

We were not able to come up with a speaker or host for the February Tech Meeting, so we will be recognizing our Patrons at a future tech meeting. Please stay tuned.

Have a great month! – presents for Valentine’s day are rarely found at the outdoor/hunting supply store.

Wes

2018 AWS - Detroit Section

Ladies’ Night Gala

MotorCity Casino Hotel
Saturday, April 14, 2018
To register: Click LN2018
For More Information Contact:
Mark Gugel - (810) 602-9735
mark.gugel@gm.com
Proceeds support our Scholarship, Education, and Endowment Programs

Join the Fun!
2018 AWS - Detroit Section
Ladies’ Night Gala

A Block of hotel rooms is reserved for Saturday, April 14, 2018 at the MotorCity Casino Hotel under: AWS - Detroit Section Ladies Night. The rate is just $149 + taxes. For booking, contact (866) 782-9622. Contact the conference chair Mark Gugel at mark.gugel@gm.com if the block of rooms is sold out.
What’s Wrong with MIG and TIG?
By Eric Lichtfusz, AWS/CWI 09070281

In the January e-Bulletin I discussed what an AWS CWI is and why they’re needed, and for that reason, I’ll assume you already know what a CWI is. In this article, I’m going to discuss why CWI’s, not all, use terms and acronyms that may not seem “common” to what a lot of people are used to hearing. But first, I want to make it clear that what I say in these articles are my own opinion and may not necessarily be the same opinion held by the American Welding Society (AWS) or the AWS-Detroit Section.

Let’s start with the two acronym MIG and TIG. For many folks acronyms are names and the individual letters are irrelevant. They may not even realize that MIG and TIG are acronyms. They look at MIG or TIG as just a name for a particular type of welding process, and who cares that it’s an acronym with each letter representing a word. Well, both, in fact, are acronyms, but let’s start with MIG. Surprisingly, a Google search for “what is MIG welding” will net you various websites that tell you all about the MIG welding process. Almost everything you’d want to know, except what the letters actually mean. You’ll need to dig a bit to find that most sources willing to give a definition will tell you the letters mean Metal Inert Gas. Well, there you go, mystery solved. Or is it? My question would be, what type of metal are you welding with this process where you’re using an inert gas? In some instances, this may be appropriate, but, if you’re welding ferrous metals (metals that contain iron) and using some kind of Argon/Carbon Dioxide (CO2) gas blend for shielding, the gas in NOT classified as inert, it’s an active gas. So, what’s that mean? Well, in this article, I’m not going to take a deep dive to explain what the differences are between an inert gas and an active gas, but trust me when I tell you, they are different, which means the acronym is wrong, or at the very least technically inaccurate.

So, as an AWS CWI why do I care? I care because I’ve been certified by the AWS and presumably trained to know what I’m talking about and apply terminology accurately. The AWS defines MIG welding as “a

Continued on page 6

Editor’s Notes
Welcome to mid-winter! We’ve had some very frigid and snowy days in the last month, and we are just about in the middle of the season. Hopefully, that doesn’t stop you from coming out to join us at one of our monthly technical meetings! It’s a great opportunity to network with others in the welding community as well as escape an evening of cabin fever.

We are always looking for companies to host our monthly technical meetings, maybe your company would be interested? It’s great way to introduce your company and its products and services to others who may not already deal with your company directly. And, it’s a great way to get your employees and/or co-workers involved with the American Welding Society Detroit Section.

Some of you may have noticed that we are missing our “Meet our Members” section in the last couple of e-bulletins. Unfortunately for the section, the person who was heading this up has moved out of state and on to bigger and better opportunities. So, that leaves a big opening for someone to fill. Maybe you’d be interested? If you are, please contact Wesley Doneth for more information.

Until next month,
Keep on Welding!
Robin
Our Commitment to Education
continued from page 1

Dengensha Welcomes New Employees

Dengensha America recently added Doug Becker to fill a new sales engineering position from its Bedford headquarters. As Senior Sales Engineer, Becker is specially tasked to assist customers for welder, weld control, and gun products, especially with some of today’s most engaging resistance welding applications, including high-strength steel, hot stamp, and aluminum applications for automotive and non-automotive industries. Along with his industrial background, Becker also served in the US military for six years and is a Gulf War veteran. During his service in the Navy, Becker’s primary focus was on nuclear power plant operation and maintenance. Doug Becker has a BS in Mechanical Engineering from the University Akron and currently resides in Medina, Ohio.

Dengensha Adds New Mid-West Sales Engineer

Dengensha America recently added Jim Pfeil to the position of Sales Engineer. Pfeil will be taking over responsibilities for the sales and support of resistance welding equipment in Dengensha America’s growing mid-west region. He will be working out of the Bedford headquarters. Jim Pfeil has an Associates Degree of Applied Business from Lakeland Community College and currently resides in Painesville, OH.

For more information about Doug Becker or Jim Pfeil, contact Steve Andrassy at Dengensha America Corp/ 7647 First Place Drive, Bedford, Ohio 44146/ Phone: 1-440-439-8081/ Fax: 1-440-439-8217/ Email: sandrassy@dengensha.com/ Visit us: dengensha.com

Career Opportunities

Sales/Service Representative OBARA Corp.
USA, is seeking a Sales/Service support person to work out of our Sales office in Novi, Michigan. The successful candidate will be responsible for supporting established customers in Michigan, Ohio, Indiana and Illinois. This support would include interaction with Maintenance, Engineering, Purchasing and other related departments. Daily interactions would include review of equipment functionality, spare parts recommendation, quoting, and equipment health assessment, liaison with our design and Quality Departments. Training will be conducted at manufacturing facility in Northern, KY. Weekly travel will be required. Please contact Dan Wellman at dan.wellman@obarausa.com

AWS Detroit Section

Secretary needed!

The Leadership Committee is seeking a Detroit Section member who would entertain appointment to the role of Detroit Section Secretary. David Beneteau assumed the role of Recording Secretary upon election to the Executive Committee in 1999. He was appointed to the role of Secretary in 2011, after having served the Section as Chair in 2007/2008.

With an increasing number of industry, business, and personal demands for his time, he has decided it is necessary to step back from the Secretary role. David provided a considerable amount of time for an orderly transition, which has provided us with the opportunity to reach out to the entire Section membership.

While most Executive Committee positions are filled by election of the membership in April of each year. The roles of Secretary and Treasurer are appointments without term limits to ensure continuity of Section operations. A principal responsibility of both roles is to maintain the records of the Section. In the case of the Secretary, this includes minutes of the monthly Executive Committee meeting, rosters, election records, and compilation of an Annual report to AWS. None of these activities is onerous and, for the most part, there is flexibility on when they are performed.

We are seeking an individual willing to accept the challenge and responsibility. Experience is not necessary. A basic aptitude for writing and organization is desirable. If you would be interested to explore this further, please contact Chair Doneth or Secretary Beneteau.
Obara USA has established itself as a premier supplier of high quality welding equipment and services. With our worldwide resources for equipment, research and development, and manufacturing, Obara USA can meet any project requirements, regardless of size or scope.

www.obarausa.com

SDK ENGINEERING, LLC

WELD PROCESSING SUPPORT
- Joining Consultants
- Long Term Onsite Engineering
  Support Includes
  - RSW/LSER/GMMAW(CWI)
  - Alt Joining Processes
    - Self Piercing Rivets
    - FDS
  - Ultrasonic Inspection
    - Tensionics Setup/Training
  - Destruct Services
- MEXICAN AFFILIATE COMPANY
  NIESA GROUP S DE RL DE CV

All Facets of Project Management, Weld Processing, Robot Programming, Equipment Integration, Field Service, & Troubleshooting.

www.sdkeng.com

COR-MET®

SPECIALTY CORED WIRE
COATED WELDING ELECTRODES
TOOL STEEL MIG & TIG

Tel: 810-227-3251
Fax: 810-227-3208
12500 Grand River Road
Brighton, MI 48116 U.S.A.
www.cor-met.com

WELD MOLD COMPANY

YOUR ONE-STOP JOB SHOP FOR SPECIALTY WELDING ALLOYS

2147 East Ten Mile Phone: (586) 755-7320
Warren, Michigan 48091 Fax: (586) 755-7442
www.milcomfg.com

Tipaloy

Quality Welding Equipment
and Products for Over 50 Years

1435 East Milwaukee Ave., Suite 326
Cedar Rapids, Iowa 52401
PHONE: (319) 365-6100
FAX: (319) 365-6101
E-MAIL: Tipaloy@sat.com

RWMA MEMBER

430 Fielder Ave., Suite 326
Windsor, Ontario N9A 4X8
PHONE: (519) 687-2058
FAX: (519) 687-2560
E-MAIL: Tipaloy@sat.com
nonstandard term for Flux Cored Arc Welding or Gas Metal Arc Welding.” Did you catch that? Nonstandard to the AWS means the AWS does not accept this acronym and I shouldn’t either. Well then what about TIG? If you look around a bit on the internet again, you’ll discover that most who offer a definition for TIG will say it means Tungsten Inert Gas. Admittedly, this definition is more accurate than the one for MIG, however, the AWS defines TIG as “a nonstandard term for Gas Tungsten Arc Welding.” Again, nonstandard.

So now maybe you’re starting to see some commonalities forming here. With the AWS, these arc welding processes take on the form of four letter acronyms like GMAW, FCAW and GTAW. Another example is SMAW for Shielded Metal Arc Welding. SMAW is known to many as “stick welding” or “stick electrode welding,” and both are also considered nonstandard terms by the AWS. I’ve always thought that those were odd sounding names anyway. What kind of “stick” do you use with this process and what do you do with this “stick”? But again, who cares right, it’s just a name? And again, I care because as someone certified by the AWS, I should understand, recognize and use the accepted terminology from that organization, never mind the fact that that some of these nonstandard terms are simply wrong. Also, it’s important to mention here that each of the AWS acronyms is technically accurate in its description of the process.

There are so many other terms that may be “common” to many that are considered nonstandard to the AWS, but instead of a short article, I would need to write a book to get into all of them. Coincidentally, the AWS has already done that. The book is actually a standard called AWS A3.0M/A3.0, Standard Welding Terms and Definitions and is available for purchase through the AWS bookstore at pubs.aws.org.

If this sort of thing interests you and the idea of becoming a CWI is a career that you would like to pursue, the AWS-Detroit Section typically hosts two AWS CWI Seminars/Exams yearly, one in spring and the other in fall. Check the AWS-Detroit e-Bulletin for dates and locations, at awsdetroit.org. For more information on how to become properly trained and certified by the American Welding Society, you can visit aws.org/certification.
2018 is off and running and everyone is back to full throttle in jobs and life with their families. February is a critical month for AWS activities also. Plans are being finalized for an April 10-15 visit of AWS President, Dale Flood. More on his itinerary will be provided next month.

ATTENTION ALL STUDENTS - the March deadline for AWS National and District Scholarships is rapidly approaching. For students applying for a scholarship please note:

- COMPLETE ALL SECTIONS OF EACH APPLICATION, INCLUDING SIGNATURES,
- ATTACH THE NECESSARY SUPPORTING DOCUMENTATION.

A large number of applications are not fully completed, may be missing a signature, or are missing required documentation so the application cannot be considered.

National and District Scholarship applications and information is available at: aws.org/foundation/page/scholarships

Also available for Michigan students are scholarships from the Detroit Section. These Scholarships are different so visit the Detroit Section Website for deadlines and application forms: awsdetroit.org

It is time also for Welding Training Scholarship Applications to be submitted. Information and applications are available at the AWS web site shown above. These are available for students who will attend a trade school or community college but are not pursuing a degree. The applications are simple but the 2018 requirements are modified from 2017. Applications are to be submitted per the directions provided with the application and are available all year until the $10,000 per District is awarded.

Three other key items for interested Members:
- Leadership Symposium – Adult Representative: We have the opportunity to select a candidate for the Symposium in July.
- Leadership Symposium – Student Representative: Students may apply to attend the symposium; selection is made by the Membership Committee with input from each District Director. In 2017 District 11 was able to have one of our students selected, Erin Lalinsky from Ferris State was one of 5 selected from all nationwide applicants.

Information for both of these is located at: aws.org/events/detail/leadership-symposium.

- AWS Welding Instructor Institute: Applications should be submitted from all instructors who wish to be considered to attend the week long institute. This is an exceptional opportunity providing topnotch instruction from leading industry experts in welder training and welding processes. Information and application forms are located at: www.aws.org/events/detail/instructors-institute.

I am asking each Section and Student Section to notify me of meetings and events (including welding competitions, golf outings, and other section activities) as far in advance as possible. I would like to visit each Section and Student Section. I can speak on several different subjects if that is of interest to your Section. If you do not have specific dates please provide an approximate time that I can insert as a calendar place holder. Please email or call if you have any questions, Cell: 734-546-4298. I look forward to hearing from you and attending your events.

Phil Temple,
District 11 Director
January Tech Night Recap

The Detroit Section hosted a Technical Night in January 18, 2018 in the Ukrainian Cultural Center (26601 Ryan Rd, Warren, MI 48091). Mr. Brian Zaborny and Mr. Gerald Oritzerberger from the Plasmoo USA LLC gave a tech-profound presentation regarding the state-of-the-art of the process control and quality assurance for pulse welding and laser welding. After giving a brief introduction of Plasmoo, Brian presented the structured laser light seam tracking technology, as well as it is the applications in the process control of welding. Further, he also detailed the various quality control systems for laser welding, consisting of subsystems for seam tracking, real-time monitoring, and post-weld seam profile evaluation. The quality control technology for laser welding has become increasingly critical, as the more and more laser welding processes are being employed in automotive industry. Brian also covered both real-time quality control systems and off-line weld quality evaluation devices. There were around 25 people in the audience.

2017/18 Patrons

- ATI Industrial Automation
- Aro Welding Technologies
- Dengensha America
- Luvata
- RoMan Manufacturing
- Matheson
- Centerline Windsor
- Leoni
- Obara
- Staubli
- Genesis Systems
- Grossel Tool
- United Technologies
- Airgas
- Fusion Welding
- Fronius
- ICR
- Ashley Jones
- Matuschek
- Ohio State University Welding Alumni
RAM SOLUTIONS, INC.
6620 COBB DRIVE
STERLING HEIGHTS, MI 48312
(248) 299-0525
www.ramsolutions.net sales@ram solutions.net

EXPERTS IN AUTOMATION & WELDING SOLUTIONS

- Experienced sales staff and engineering solutions
- Expert customer service
- Experienced technical support
- Customized training available

UNIFIED TECHNICAL
WELDING TECHNOLOGY

Welding Engineering Technology

- Consulting - Welding engineering, metallurgical
- Process Development
- Welding Laboratory - Multi-variables - processes
- Welder Certification Test Services
- Welding Academy and Training Facility
- On-Site Consulting, Program Support - Short & long term projects
- Weld Evaluations - Full metallurgical laboratory, ISO accredited services
- Destruct Services / Vehicle Teardown - ISO accredited

Non-Destructive Testing (NDT) - ASNT Certified Inspectors

- ASNT ACCP Level II Certified Inspectors
- Large volume, production capabilities
- Ultrasonic and Ultrasonic Phase Array Services
- Dye Penetrant (PT), Magnetic Particle (MT)
- Helium Leak Testing, Pressure Testing

ISO Accredited Laboratory Testing

- Full Metallurgical Laboratory
- Tensile, Impact (CVN), Fatigue, Hardness
- Scanning Electron Microscope (SEM / EDS)
- Macro Cross-Sectional Evaluations
- Failure Analysis
- Chemical Analysis

United Technical, Inc.
1081 E. North Territorial Road
Whitmore Lake, MI 48189
Office: (248) 667-9185
www.unitedtechnicalinc.com
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 their 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: “The subject of a required minimum flange width, also referred to by many design guidelines or standards as flange overlap, is a source of continual debate within the resistance welding community and from my perspective (for reasons I’ll detail as we progress in the discussion) the issue appears to becoming more controversial as time progresses. For clarification this discussion will not be focusing on the minimum accessibility requirements of a resistance spot welding gun. Minimum accessibility is an important topic but very much separated from the various aspects related to flange width requirements. Instead this column will look at the actual portion of the part that is welded in an attempt to help clarify this one of many important issues facing the resistance spot welding industry today.

As is common in the creation of any product there are often multiple factors or design considerations involved that must first be acknowledged, then understood and eventually addressed as the design process moves forward. As a result of the differing and sometimes competing motivations of the individuals responsible for addressing the various design considerations, the iterative process that eventually leads to a final design is subject to the changing priorities of the organization or even the personalities of those involved. The following summarizes just a few of the many potential interests that can impact the final design of a welding flange:

• **Purchasing** – The driving force here is no secret as every industry seeks to reduce costs by minimizing the use of raw materials. The fact that the reduction in material, most likely by way of a reduced size blank driven in part by narrowing the flange, may drive up cost in another area, sometimes actually increasing the total expenditure of producing the final assembly to the point of negating the material savings, is often overlooked.

• **Product** – The goal of almost any new design is to improve on what is already available. One common metric where these improvements can be measured and tracked is the reduction of mass in the final product and the width of the welding flanges definitely falls into this area.

• **Marketing** – The driving force behind marketing’s need for a new design may vary but can include a shift in market forces or the desire/need to show continual improvement and provide something new for the customer.

• **Manufacturing** – While the majority of folks in manufacturing are not insensitive to the aforementioned items, their major concern is simply to have a robust design that is tolerant to the inherent build variations of the assembly process. Unfortunately, this is not always the case for the design they are asked to assemble. Another potential driver for a new design would be a change in the manufacturing process. The above should shed a bit more light on the design process and help bring into focus the challenges facing the product designer. Also, it should now be a bit clearer as to why the subject of something as seemingly innocuous as the welding flange’s width can be an important consideration and source of debate from concept to final execution in any welded assembly. One past event reveals the level of the behind scenes back and forth that can occur. While attending a review meeting it was made known by the design team that all of their target weight and cost savings could be achieved if they could eliminate the welding flanges on every part that constituted the assembly. They were curious what impact this would have on manufacturability and if we could employ any other joining processes to make this new design possible. After a brief discussion it was decided that the weld flanges would stay basically as they were and that the design team would need to focus on other aspects of the assembly to achieve their targets.

In our next column we will continue the conversation, to include a comparison of actual minimum flange width values from various design standards.”
EISELE LIQUIDLINE – INCREASE WATER FLOW AND REDUCE DELTA P ON WELD-GUN WATER COOLING SYSTEMS

- Standard fittings engineered to deliver 10%+ flow optimization
- Wide-sweep fittings improve flow rates 50%+
- Made from dezincification resistant brass alloy
- Anti-spatter release sleeve
- Swivel designs available
- Threads available in BSPP (G), BSPT (R), Metric & NPT
- Custom sizes and solutions available

When paired with Eisele ProWeld* flame-retardant tubing, you can count on years of leak-free performance.

Contact us today, we will be glad to provide a solution for your application!

Available in metric and inch in a variety of colors.

Eisele Connectors Inc.
99 Monroe Ave NW #200,
Grand Rapids, MI 49503

Michael Jones
566-612-0510
michael.jones@eisele-connectors.com

WWW.EISELE-CONNECTORS.COM
The most reliable, easy-to-use Gun Changer. Ever.

A more reliable fail-safe.
A patented "springless" mechanical fail-safe is guaranteed to work, even with loss of air pressure.

A more reliable locking mechanism.
7,000 pounds of locking force guarantees that signals pass flawlessly, even with heavy accelerations and payloads.

A more flexible utility solution.
Widest choice of modules (power, fluid/air, signal, and more) with common mounting features for greater flexibility.

With patented advances in the locking mechanism and failsafe, and new flexible module mounting and integrated robot mounting patterns, we’ve created the most reliable, easy-to-use Welding Gun Changers. Ever.

The GC-210 Welding Gun Changer. The new standard from ATI.

Introducing
Reversing MFDC and Fast Rise Time MFDC

Today’s Automotive Café standards are challenging the industry to take weight out of vehicles. To meet these new standards the auto industry is using more Aluminum, Exotic Metals and new High Strength Steel Alloys to replace traditional steel parts. With the development of the Reversing MFDC and the Fast Rise Time MFDC, RoMan is able to offer the auto industry a solution to effectively Resistance Weld light weight materials.

For more information on
Reversing MFDC and Fast Rise Time MFDC Power Supplies
Please visit our website at: www.romanmfg.com

RoMan
MANUFACTURING

The World’s Most Trusted Source for
Resistance Welding Transformers and Power Supplies

Your Single Source For Resistance Welding Value & Support

Dengensha America offers you the most complete line of resistance welding product equipment in the world—including single point projection and spot weld machines, weld guns, automatic nut and bolt feeders, weld controls, transformers, consumables, and spare parts. Training and field service add to our single source support.

Simplicity, reliability and ease of use are only part of our value.

Call: 440-439-8881
Ask for Steve Andressy
Web: www.dengensha.com

Dengensha
AMERICA
Engineering Resistance Welding Value®
AMERICAN WELDING SOCIETY
DETROIT SECTION
www.awsdetroit.org

CALL FOR PAPERS

SHEET METAL WELDING CONFERENCE XVIII
Welding Solutions for Lightweight Vehicle Production

October 17th & 18th, 2018 | Laurel Manor, Livonia, Michigan

The Sheet Metal Welding Conference (SMWC) is the premier technical conference dedicated to bringing experts together to discuss state of the art welding and joining technologies for the automotive, transportation, and light manufacturing industries. SMWC also provides important opportunities for engineers and researchers from manufacturers, suppliers, universities and research institutes to network and meet experts in the field of welding. SMWC XVIII will emphasize recent developments in welding and joining solutions that enable lightweight vehicle design and construction. You are invited to submit technical papers for presentation at this conference. Topics of interest include, but are not limited to:

- Resistance Welding
- Fusion Welding and Brazing (Arc, Laser and others)
- Solid State Joining
- Mechanical Fastening
- Hybrid Joining Methods
- Weld Inspection and Repair
- Vehicle Performance Simulation and Assessment
- Joining of Advanced Steels
- Joining of Dissimilar Materials
- Materials and Weldability
- Welding Process Monitoring & Control
- Non-Sheet Metal Automotive Joining

Please complete the Author Application Form and submit it along with a 100 - 300 word paper abstract to be submitted by March 30, 2018. If you have any questions related to submission, please contact:

Jerry Gould, Technical Chair, Edison Welding Institute, jgould@ewi.org
Menachem Kimchi, Technical Chair, Ohio State University, kimchi4@osu.edu

The Author Application for SMWC and Abstract Submission is available by clicking here.
A single complimentary admission to the conference is available for each presented paper.

IMPORTANT DEADLINE DATES

Note: The conference will be preceded by a one-day workshop on October 16th, 2018

Abstract Submission: By March 30th, 2018
Notification of Acceptance: By April 27th, 2018
Full Paper Submission: By August 1st, 2018

In Partnership With:

EWI
ALAW

Conference Chair
Warren Peterson
United Technical Solutions

Co-Technical Chairs
Jerry Gould, EWI
Menachem Kimchi,
OSU Material Sciences and Engineering

Publicity
Donald Crist
RoMan Manufacturing