Annual Christmas Party
Saturday, December 10, 2016
6 to 11 pm
Western Golf & Country Club
14600 Kinloch, Redford, MI 48239
Valet parking available

RSVP by December 5 to John Sutter:
JohnSutter@abicorusa.com or (248) 915-8659

See Registration form on page 3.
December 2016
This Issue of the Bulletin
can be viewed on the web at
awsdetroit.org

Inside This Issue
1 HOLIDAY GREETING
1 ANNUAL CHRISTMAS PARTY INVITATION
2 COMMITTEE CHAIRS
2 CHAIRMAN’S MESSAGE
3 CHRISTMAS PARTY SPONSORSHIP FORM
5 EDUCATION SERIES RE-CAP
6 ASK THE WELDING ENGINEER
8 DECEMBER HOTLINE
11 LADIES’ NIGHT–SAVE THE DATE
11 EDITOR’S NOTE
12 LADIES’ NIGHT HISTORY

Chairman: TYLER ALEXANDER
First Vice Chair: WESLEY DONETH
Second Vice Chair: MARK GUGEL
Secretary: DAVID BENETEAU
Treasurer: ANDRE YOUNG
Bulletin Editor: ROBIN MICHON
Webmaster: RODNEY BERZ Nicki
Hotline Coordinator: AMANDA SCHERZER
Meeting Reservations: SUSAN MORSFINO
Advertising: DONNIE CRIST
Assistants to Chairman:
JOHN SUTTER
ASHLEY WEBEL
TBD

For Advertising Opportunities
Contact Donnie Crist
810-217-9897

Affiliated With

Tyler Alexander
Chairman’s Message

The holiday season is upon us and with that comes the Annual AWS Detroit Section Holiday Party. While a major part of what we do as a committee is intended to be educational, we also like to mix in some purely fun networking events, and the Holiday Party is one of those events. The format and venue have changed several times over the years, but the purpose remains the same; this is an opportunity for everyone to get together, celebrate the holiday season, network, and reward employees, customers and family for their involvement in another great year. After the success of last year, the party will again be held at the Western Golf and Country Club in Redford Michigan, Saturday, December 10, 2016. I realize that the holidays are a busy time of the year for everyone, but if you can find time in your schedule, I certainly recommend taking the opportunity to attend.

The mere mention of the holiday season also brings to light the fact that 2016 is very quickly coming to a close, but not to worry, the Detroit Section has a full calendar of events in 2017 to look forward to. Please remember to reserve the second Thursday of each month for our Technical Nights and Education Series. Our new website www.awsdetroit.org has a full and detailed list of upcoming events, which include:

- January 12, 2017 – Technical Meeting – Lincoln Electric
- March 9, 2017 – Technical Meeting & Old Timers Night – Paslin Group
- March 25, 2017 – Detroit Section Ladies Night – Royal Park Hotel
- April 13, 2017 – Welding Education Series

In the New Year we will begin our search for new candidates for our Executive Committee. If you are at all curious about what is involved, please contact me and I’ll be happy to outline the duties associated with participation on the committee. I joined the committee back in 2009 knowing very little about it and few people in the welding community of which I am a part. Today I am proud to have gotten to know some key decision makers at the OEM’s, the individuals that create the specifications that I work to daily and supplier contacts from all the different facets of the industry. Considering myself a part of the lesser experienced members of our industry and one with a strong grasp of new technology, I joined the Detroit Section Executive Committee under the impression that the internet was quickly eliminating the need to network. Today I have a very different opinion of the value of networking and face to face interaction and I owe this to my involvement with the AWS Detroit Section. I encourage you participate in our events, volunteer some of your time and in the spirit of the holiday season, give a little back to the industry that has given so much to you.

Have a safe and happy holiday,
Tyler Alexander

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

Western Golf & Country Club  
14600 Kinloch, Redford MI 48239

Saturday, December 10, 2016  
6:00 PM – 11 PM

Attendance Includes

• Appetizers
• Served Meal
• Dessert
• Drinks
• Piano Entertainment
• Raffle & Door Prizes

Event Sponsorship

• Logo recognition at registration
• Recognition on Program

Prize Donations

• Recognition at presentation
• If received before Dec 5th, recognition on Program

Registration/ Payment Type

☐ Credit Card via PayPal at www.awsdetroit.org

☐ Credit Card (complete form e-mail or post mail)  
Contact information at the bottom of the page

☐ Check (complete form e-mail or post mail)  
Contact information at the bottom of the page

<table>
<thead>
<tr>
<th></th>
<th>Qty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of 8</td>
<td></td>
<td>$600</td>
</tr>
<tr>
<td>Couple</td>
<td></td>
<td>$150</td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td>$75</td>
</tr>
<tr>
<td>Event Sponsorship</td>
<td></td>
<td>$200</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name _____________________________________________
E-mail ____________________________________________
Phone ____________________________________________
Credit Card # ________________________________
Exp Date _______ Zip Code ________ CVV Code _______

Contact John Sutter: 248-915-8659 | JSutter@abicorusa.com
The Detroit Section continued its Welding Education Series by hosting a session on “Weld Process Efficiency Analysis” November 10, 2016 at the VisTaTech Center at Schoolcraft College in Livonia, Michigan. The presenters included welding specialists from both Airgas and Miller Electric. The session was attended by over 30 welders, engineers, managers and students and consisted of four lectures lasting a total of 2 ½ hours.

The AWS-Detroit Section would like to extend our thanks to Airgas and Miller Electric for taking the time to share their time and talent with us to further our understanding of welding efficiency.
“We have a current meter that is not displaying correctly. It is reading 9.3–9.4 kA when we think it should be displaying 10.0–10.1 kA. Are we in need of calibration, or perhaps a repair? It is not due for calibration for 6 months.”

“I like this question as it brings to light several aspects of a technical field that are not related to welding at all. Specifically, how do I measure something in an accurate and repeatable manner, and what degree of confidence do I have in the process that I am using to accomplish this? While at first blush this may seem fairly straightforward to measure something - we use measuring devices all the time (the odometer and speedometer in your car are quick examples that come to mind). However, it quickly becomes apparent that once you take even a slightly deeper look into ANY element you are trying to measure that any number of factors can quickly be identified that could have a very large effect on the actual result.

Just two of many systems that attempt to address this issue are Geometric Dimensioning and Tolerancing (also called GD&T) and Analysis of Variance gauge, Repeatability and Reproducibility (ANoVA Gauge R&R). It does not take much internet searching to see that there has been a tremendous amount of work done in this area, and that it is a subject that has been vexing those in the measurement and statistical community for a very long time.

But more to the actual matter at hand. When it comes to a particular current meter, the error readings one can experience will differ from one user to another based on many factors. These could include, but are not limited to, variation between their current loop dimensions, placement of their current sensing coil (CSC) within the current loop, the type of transformer and weld control used, and other differences in user equipment. But, if a few basic questions are asked we can begin to narrow down the possible causes. The following are just a few of the questions one should consider when you have a current meter that is reading differently than expected:

- Is there damage to the CSC – perhaps it was dropped or pinched?
- Is it the same CSC that the meter was calibrated with?
- Do other meters read the expected value, and the meter in question is the odd-one out?
- Does the value of the meter in question change with the position of the CSC? This variability can be many percentage points, depending on the circumstance. As an example, is the CSC hanging on a secondary conductor so that it has edge contact, or is it more centered around the conductor that is passing the current?
- What is the confidence that the expected value (in this case 10.0 kA) is actually being achieved? For context the typical weld control (if running in constant current) determines its output value based on a calculation of the Turns Ratio (TR) to the measured primary current. This primary current sensing coil (located inside of the weld control) is often only set-up one time–either during manufacture or installation. Of course, your facility may have a common welding condition that they test all meters against making this point irrelevant.
- Is the meter in question off by about the same amount at other current values – say higher or lower (14.0 kA or 7.0 kA), or does it appear to be more accurate (or worse) at those other values.

All of the above can be used to help zero in on what might actually be causing the issue with the meter in questions. In next month’s column we will discuss one possible method of calibrating a current meter and what actually was done to help solve this issue.

A special thanks to Eric Pakalnins, calibration coordinator for R&E Engineering Services.

If you have more questions about this topic, Don can be reached at:

R&E Engineering Services
A subsidiary of R&E Automated Systems, LLC
17500 23 Mile Road – Suite B, Macomb, MI 48044
(586) 228-1900 – Office
(734) 793-2304 – Direct
dmaatz@reautomated.com

References:
Kellogg Community College...

is looking for qualified welders to teach classes for various companies in Calhoun County in Marshall and Hillsdale County in Litchfield. This would be the perfect position for a retired person or part time teacher. Please contact Brenda Howard at howardb@kellogg.edu or by phone at (269) 565-2806, at your earliest convenience if you have anyone who would be interested in filling either of the positions. Check out our AWS Detroit.

Dengensha Opens Newest Customer Service And Support Center In Cincinnati

BEDFORD, OH. Dengensha America recently opened its newest customer service and support branch office in Cincinnati, Ohio. Primarily opened as a sales and service support center to provide even more timely response for resistance welding customers in the southern territory, Dengensha’s newest center will also be used to support Dengensha’s rapidly growing customer base throughout the entire country.

The new Dengensha America sales and service branch office is located in 300 E. Business Way, Suite 200, Office 230, Summit Woods Corporate Center in Cincinnati, Ohio 45241. The recently opened office branch is being staffed with a sales manager and a service engineer.

For more information about Dengensha America as well as more information about the new Dengensha sales and service office branch, contact Maiko Robison at Dengensha America/ 7647 First Place Drive, Bedford, Ohio 44146/ Phone: 1-440-439-8081/ Fax: 1-440-439-8217/ Email: mrobison@dengensha.com/ Or visit us: www.dengensha.com

Fronius Offers Used Demo Equipment For Sale

Get a great deal at up to 50% off of list price

Just in time for Christmas, Fronius is clearing out its demo equipment and offering it to our customers. You can get your hands on some great quality machines at a fraction of the price. All equipment is cleaned, tested and comes with a warranty. All packages or individual pieces are limited and are available as first come, first served. If you have wanted to get more equipment or simply have wanted to try Fronius brand, now is the time to do so. Get the deals before they are gone!

For more information, please contact your local area sales manager or our used equipment sales manager:

Fronius USA LLC, Mrs. Melissa Parker, 10421 Citation Drive, Ste 1100, Brighton, MI 48113 Tel: +1 (810) 844-2757 or Cell: +1 (219) 628 1924 E-Mail: parker.melissa@fronius.com

AWS Detroit Section Library Notes

The Detroit Section has ordered and will have in possession shortly the following publications:

- B4.0:16, Standard methods for Mechanical Testing of Welds
- C2.20:16, Specification for Thermal Spraying Zinc Anodes on Steel Reinforced Concrete
- C3.4:16, Specification for Torch Brazing
- C3.5:16, Specification for Induction Brazing
- C3.6:16, Specification for Furnace Brazing
- C7.3:16, Specification for Friction Stir Welding of Autumn Alloys for Aerospace Applications
- G1.10:16, Guide for the Evaluation of Thermoplastic Welds

The AWS Detroit Section library is being housed by Oakland Community College.

Any questions regarding the location, availability or items in the library should be directed to Mike Gase via email: mgase@midweststeel.com

If you’d like to be featured in a future edition of the e-bulletin, please contact Dan Galiher via email at danielgaliher@gmail.com

Meet our Members will be back next month – January 2017
THE CONNECTING MASTERPIECE

Eiselle LIQUIDLINE – The most comprehensive line of push-in fittings and threaded connections for cooling water circuits.
Combined with flame-retardant and robust ProWeld tubes
LIQUIDLINE is your ideal solution for welding applications.
- release sleeve for anti-weld spatter build-up
- de-zincification resistant brass
- 10% improved through flow
- wide sweep elbows with increased through flow 50+ %
- swiveling elbows for weld guns
- robust – Long Service Life
- flame retardant ProWeld tubing

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 signal passes 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 DC-210 Welding Gun Changer. The new standard from ATI.

Introducing the Next Generation of Ultralight Power Supplies

RoMan Manufacturing’s Ultralight Power Supplies have thermoswitch protection, a secondary pick-up coil and are fully encapsulated to ensure long life.

TDC-7367
- Weight: 15.5 Kilograms (33 lbs)
- 500 Volt, 1000 Hz
- 90 KVA @ 50% duty cycle
- Secondary no load DC voltage of 71V Volts
- Water-cooled, 7.5 LPM minimum
- @ 30°C maximum inlet temperature

TDC-7220
- Weight: 15 Kilograms (33 lbs)
- 600 Volt, 1000 Hz
- 85 KVA @ 50% duty cycle
- Secondary no load DC voltage of 10.8 Volts
- Water-cooled, 6 LPM minimum
- @ 30°C maximum inlet temperature

Reduce Cycle Times

With Upper Electrode Feeding

With Dengensha’s Upper Electrode Weld Nut Feeding, reduced weld cycle times and faster feed rates are just the beginning. A patented new linkage design with fewer moving parts provides performance that is more reliable. Only one feed action is now required to deliver and place the nut. Plus, now you can take advantage of deep-draw and channel welding. There are numerous other features & benefits:

Call: 440-439-9081 • Ask for Steve Andressy • web: dengensha.com

RoMan MANUFACTURING
861 475-9627
616-530-8641 | www.romannmf.com

4577 S. Lapeer Road, Suite 1
Orion Township, MI 48359
248-276-0502
www.ati-ia.com/6stc
Editor’s Note:

During this time of the year, when you find yourself running and frazzled from all the various Holiday hype, take a moment to breathe. Stop and look around. Take in the beauty and awe of the world around you...The winter moon on a cool, dark night, fresh fallen snow that shimmers as the sun comes up on a new morning, or the people around you, your family, friends and co-workers. The smile of a child, the cool wet nose of a puppy, or just the miracle of waking each morning!

As editor of the AWS Detroit Section’s e-bulletin, I would like to wish you and yours a very Happy Holiday to all our members and their families. This time of year there are so many different holidays that are celebrated, from Hanukkah to Kwanzaa to Christmas and finally, everyone ringing in the New Year.

My wish for you is to find peace, beauty and satisfaction in the world around you.

My challenge for you is to find a way to pass that on or pay it forward...not just during this season, but throughout the coming New Year!

And... ‘til next month,

Keep On Welding...

Robin
AWS Detroit Section Ladies’ Night (Brief History)

The Detroit Section’s Ladies’ Night is an annual affair dating back to May of 1941. Since that auspicious beginning, Ladies’ Night has been held every year. There were however a few years during World War II that there was no dancing at the function. Over the years the event has evolved from an end of year get together to introduce the Past Chairman and the newly elected officers of the section (now occurs on Spouses Night) to its present day role as a social event to promote networking on a couples basis and as a scholarship fundraiser.

The 2017 Ladies’ Night Dinner Dance to be held Saturday, March 25, 2017 will be the 77th consecutive event. The location for this event will be the Royal Park Hotel in Rochester, Michigan. Please see the Events Page on the Detroit Section website for additional details: www.awsdetroit.org/events.html