January Technical Night

Thursday, January 12, 2017

“Advantages of Islands of Automation”

Presented by

Easom Automation
A Lincoln Electric Company

Flexible / Modular Arc Welding Cell Innovations
32471 Industrial Drive, Madison Heights, MI 48071

Map/Directions

Flexible islands of automation are targeted to meet manufacturers needs in batch manufacturing, and smaller production volume requirements of market. Standardization of equipment operation to minimize the need for high skilled work force to maintain and apply technology to the factory floor, subjects include, simplified capital and tooling solutions, quick deployment of equipment, re-deploying capital assets and reconfiguration of automation, re-application of process in manufacturing and reducing needs for high skilled engineering and technician support. What is the true cost of ownership, and gained production efficiencies?

Mark Schnee bio: Mark joined the Lincoln Electric team in 2015. He brings more than 30 years’ experience in technology, business, leadership and product development. In addition to developing and delivering solutions to add value and expand markets, he is adept in identifying talent and mentoring teams. Mark’s background and experience encompasses the full cycle beginning with Machine Tools, Robotics, Welding Application Processes, Assembly, Material Handling to Operations/Sales Management.

AGENDA

5:30 - 6:00pm Welcome Reception & Networking
6:00 - 7:00pm Light Dinner
7:00 - 9:00pm Presentation by Lincoln Electric & Easom Automation Systems
9:00pm Adjourn

RSVP

Amanda Davis
(248) 512-1803 or email amanda.davis@fcagroup.com

See map on page 2 or click here https://goo.gl/maps/6YkvE3sn5o52

AWS Technical Nights are open to everyone! We encourage that members bring students and non-members to learn more about our organization and industry.
January 2017
This Issue of the Bulletin can be viewed on the web at awsdetroit.org

On behalf of the entire Detroit Section Executive Committee, I’d like to start by wishing you and yours a happy and prosperous New Year. In this, our first bulletin of 2017, we have included a hotline article calling for applicants and nominees to the Detroit Section Executive Committee. The committee is seeking individuals that are willing to assist in providing section events and activities that are relevant to our membership. The 2017/2018 ballot has to be finalized within the next couple of months, so if you are interested or know of some good candidates, now is the time to contact us.

With a new year comes new District Level leadership for the American Welding Society. This month, we welcome Phil Temple, a longtime member of the Detroit Section Executive Committee, as our new District 11 Director. Phil replaces former District 11 Director, Robert (Bob) Wilcox. Make sure that the next time you see Phil you congratulate him on this honor and if you see Bob, be sure to thank him for all his hard work and dedication over the years.

Although we are starting a new calendar year, in terms of the Detroit Section activities, we are roughly half way through our year of scheduled events. As mentioned in my Chair’s comments from December, we have a full calendar of events to look forward to. For those that may have been too preoccupied by the holidays and missed that information, 2017 holds the following:

- **January 12, 2017** – Technical Meeting - Lincoln Electric
- **February 9, 2017** – Technical Meeting & Patrons Night – RoMan Manufacturing / R&E
- **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
- **May 11, 2017** – Technical Meeting & Awards Night

Make sure that you take time now to update your calendar with these dates so that you can plan to attend – we truly need your attendance, participation and feedback to help the Detroit Section continue to thrive in 2017 and the many years that follow.

Respectfully,
Tyler Alexander
As we start this new year we will be facing a new blank slate where we can write a new story or continue a story from 2016. Either way, we have the opportunity to start anew, refreshed, and ready for the challenges that lie ahead. In many instances these will be new endeavors with new challenges with new experiences that can mold us into better individuals. These provide opportunities to shape our character, our skill sets, new professional contacts, and through these, new sources of technical information. It also opens the door for each of us to just get to know each other and become good friends.

As the incoming District 11 Director, I look forward to meeting with you and learning from you. Please feel free to contact me and let’s explore how we can first become good friends, then how can we help each other to make our local sections, AWS, our communities, companies, and nation a better place.

One last point, we all owe a THANK YOU to Bob Wilcox for his commitment and many hundreds of hours as the outgoing District 11 Director. He leaves a big set of shoes to fill.

I look forward to meeting you throughout 2017. Make this the best year yet!
Phil Temple, AWS District 11 Director

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2017 Ladies Night Venue

The 2017 AWS Detroit Section’s Ladies Night venue is the Royal Park Hotel located in Rochester, Michigan. For those not familiar with this facility, located approximately 30 miles north of Detroit, it’s one of only 15 hotels in Michigan to earn the AAA Four-Diamond Rating. The Royal Park has earned this prestigious rating every year since 2006. In addition the boutique hotel has also been recognized the last two years by Worldhotels for the Best “Experience Creator.”

The Royal Grand Ballroom, where the 2017 Ladies Night dinner/dance will be held, is a setting complementing the hotel’s English Manor inspired interior, with 15-foot ceilings, Italian marble flooring and Murano glass chandeliers. Event attendees will be provided complimentary valet service, and upon entering the Gallery, the ladies will each receive a gift. Cocktails and hors d’oeuvres will be served before an elegant dinner prepared by the award winning catering staff of the Royal Park Hotel.

The Ladies Night Committee has arranged for a discount room rate for those wishing to spend the night. Guests need to call the Royal Park Hotel at (800) 339-2761 and identify the event (AWS Ladies Night) to reserve rooms at the block rate.

For more information, visit www.royalparkhotel.net.
The AWS-Detroit section hosted its annual Holiday Party at the Western Golf & Country Club in Redford, Michigan. John Sutter, present AWS-Detroit section Social chair and Key Accounts Manager for Lasers at Abicor Binzel US/Canada acted as host for this year’s get together.

The 125 attendees enjoyed Richard Wolf at the piano spinning off Christmas favorites. The raffle was a hit with over 30 prizes given away. The gifts ranged from gift baskets to laptops, with some really nice jewelry for the ladies. A big thank you to all of the company sponsors who permitted the section to put on an excellent event. Also, a big thank you to the organizing committee of Susann Morfino, John Sutter, Andre Young, Tim Cesarz, Dan Wellman, and Mark & Kristi Gugel.

**Christmas/Holiday Party Recap**

**January 8-22, 2017**
North American International Auto Show
Cobo Hall, Detroit, Michigan

**January 12, 2017**
AWS Detroit Tech Meeting
Presented by AWS Detroit / Lincoln Electric / Easom Automation
Location: Easom Automation, 32471 Industrial Drive, Madison Heights, MI 48071

**January 20, 2017**
2017 API/AGA Joint Committee on Pipeline Welding Practices
Presented by Enargy, API
Location: J.W. Marriott, Austin, TX

**February 9, 2017**
AWS Detroit, Tech Meeting/Patrons Night
Presented by AWS Detroit / RoMan Mfg / R&E Automated
Location: R&E Automated, 17500 23 Mile Rd, Macomb, MI 48044

**Jan/Feb Coming Events Calendar**
Ask the Welding Engineer

By Donald F. Maatz, Jr.

Q: “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.”

A: “Once it is determined that any measuring instrument is not reading in an accurate manner (how that is determined is a completely different topic that we will not deal with in this column), one of several possible courses of action can be taken. These include, but are not limited to:

• Discard and Replace the Instrument: If the issue is that your steel 6” pocket scale is bent, then tossing it into the scrap bin and replacing it makes a great deal of sense when you consider the time and effort it would take to accurately straighten it. If, on the other hand, you think your secondary current meter that cost thousands of dollars is not reading correctly, then this might not be the best course of action.

• Live with the Bias: If you feel that the instrument is tracking ok and might be just a bit off, but in a relatively consistent manner, then you possibly can live with the information it is providing. This might be the case for a resistance spot welding (RSW) process in your shop (see last month’s article for description of why this might occur). As in our example above, what if the weld control is set at 10.0 kA but the secondary current meter reads 9.3 kA - Which value is correct? If you are making an acceptable resistance spot weld, does it really matter which secondary current value is correct as both are reasonable values for a typical steel automotive RSW application. This is actually not an insignificant question since many manufacturing environments exist in a world where they are paid to not only make a product that meets engineering intent, but the exact style (think documentation) may be regulated. What can work in favor of the manufacturing facility is that the documentation (ISO, QS, etc.) detailing the allowable parameters typically asks for the tooling set points (in this case 10.0 kA) and not the actual output value (measured at 9.3 kA). That being said, if you are following some sort of quality program you will also be getting your measuring instrumentation calibrated on a periodic basis so it might be necessary to go a step or two further if you are still not certain of your results.

• Repair and/or Calibrate: If the instrument in question is not reading correctly, and it is not possible to live with the error in the output it is providing, but is too expensive to just discard, you are now forced to consider either repairing and/or calibrating it. While each case can be unique, a typical rule-of-thumb is that if the repair cost exceeds 60% of the replacement it is time to buy new. A note of caution, this rule can often be of little value if you have an older, but still very good, instrument that is no longer available, or is very unique. In other words, you will pay what you must to ensure the accuracy of the instrument. One final point that very much applies to welding secondary current meters is that entities can view calibration and repair in very different ways. Specifically, some view the act of calibration to be something that simply tells you how your meter reads against a standard. They then leave any adjustment (if needed) up to you. Of course, the meter has to be recalibrated after your adjustment to ensure you know how it is reading against the standard. Others will perform the same function, and in so much as possible, attempt to adjust the output so as to ensure your meter agrees with the standard. The former group would consider such an adjustment a repair, and out of the scope of calibration. The latter group views the ‘tweaking’ necessary to be just a normal part of the calibration.

• Replace the Instrument: Finally, it may be decided that even if the instrument in question can be repaired you might discover that the cost if too great, or it cannot be repaired at all. We make this decision all the time in our lives with regards to any number of items associated with our home (i.e. a broken microwave oven or toaster that would cost more to repair than replace), and our own vehicles (think rebuilding the transmission on a 12-year-old vehicle). All of the above can be used to help you determine what course of action is needed with regard to your measuring instruments. In next month’s column we will discuss one possible method of calibrating a secondary current meter and what actually was done to help solve the issue asked in our question.

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

If you have 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:

This article is a continuation of the Dec-2016 ‘Ask the Welding Engineer.’

Co-op Welding Students, Summer Interns and Part-time Welders

Contact Pat Bell: patricia.bell@detroitk12.org
or (313) 282-8171 in Detroit

By Donald F. Maatz, Jr.

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dmaatz@reautomated.com

References:
Calling all Candidates for the 2017/2018 Executive Committee Election!

Each winter the AWS Detroit Section Nominating Committee assembles a list of Candidates to prepare a ballot for an election that occurs in early April. To prepare for the election, the Nominating committee is charged with assembling a roster listing a minimum of 8 candidates who represent the various segments of the welding industry.

Why is this Process Important? Quality Nominees are essential to the continued success of AWS-Detroit, which was chartered on February 3, 1925. With more than 1,000 members, AWS-Detroit continues to thrive and host several nationally recognized activities, including Ladies Night and the Sheet Metal Welding Conference. The objectives of the AWS-Detroit Section include:
- The advancement of the science, technology and application of welding and allied joining and cutting processes, including brazing, soldering and thermal spraying;
- Support for, and provision of, educational opportunities related to welding and allied joining and cutting processes;
- Encouragement of the interaction of the local community of welding professionals, students, and users; and,
- Advancement of the image of welding.

For more information contact Tyler Alexander (519) 734-8868 (x4476) or tyler.alexander@ctnline.com. This is your opportunity to advance your involvement in one of the oldest and largest sections in the USA.

January Hotline
Career Opening – T.J. Snow

Service Tech / Pilot: “Take this job and love it.”

T. J. Snow Company, a 95-employee Chattanooga, Tennessee manufacturer of resistance welding machinery for 50+ years, needs another Service Tech / Pilot to handle its expanding welder and control service and installation business.

For further information, contact Tom Snow, CEO
T. J. Snow Company, Inc.
120 Nowlin Lane
Chattanooga, TN, 37421
423-308-3165
tomsnow@tjsnow.com

This Opening has also been posted on the AWS Detroit Facebook Page!

Study on Reversing DC Is Now Available

RoMan Manufacturing recently published the results of a study conducted by the company on the merits of reversing polarity when welding aluminum. According to Don Crist, RoMan’s Account Manager/Welding Engineer, the study was initiated because the need to produce lighter weight vehicles is prompting a switch from conventional steel applications to aluminum in the automotive industry. “The aluminum applications have been primarily centered in closures,” said Crist. “However, the auto industry is looking to expand the usage of aluminum into the Body in White (BIW). There will be a predicted increase from 4% of BIW as complete aluminum to 18% by 2025. And, while Resistance Spot Welding (RSW) of aluminum is nothing new to the auto industry, until now, it has been used in lower production rate vehicles or batch build closure applications.”

Crist added that to meet the demand of CAFÉ standards, there is need to use it on high production lines. “This need will, right or wrong, amplify the areas of concern that have plagued aluminum RSW in past applications. And while the ability to reverse polarity with special AC systems (frequency conversion) is used in many aerospace aluminum spot welding applications today, the type of system used in aerospace applications is too large for robotic and automated type equipment and therefore, not conducive to high production processes.”

According to Crist, prior studies have proven that having the ability to change polarity when using DC to weld aluminum is helpful in increasing electrode life and in obtaining proper weld nugget growth when challenged with dissimilar alloys, and multiple 3T and even 4T thicknesses. “However,” said Crist, “with robotic welding applications in high rate production, it is unrealistic to expect that robot programs/tooling can be modified to insure proper polarity for each spot weld to resolve the RSW aluminum difficulties—robotic weld gun geometry and the assembly process present a big challenge.”

Crist concluded by saying that the solution to this problem is provided when the welding transformer switches polarities by a simple signal from the weld controller. “The signal system functions within the transformer and can be easily incorporated into existing welding controllers.”

To download the In-depth Study, please visit https://www.romanmfg.com/blog/
AWS LIBRARY LOCATION UPDATE

Oakland Community College, Auburn Hills Campus has generously agreed to host the AWS Technical Library. The AWS technical library is comprised of over 150 technical standards including the D1 Structural Welding Codes and the D8 Codes for Automotive related welding. The library can be accessed during regular school hours at the address below. While the library is free to browse, none of the codes can be taken out of the library.

Oakland Community College  
Auburn Hills Campus  
D Building Second Floor  
2900 Featherstone Rd.  
Auburn Hills, MI 48326  

Cameron Berrier  
Welding Faculty  
cberrie@oaklandcc.edu

The Welding Journal  
Corporate Membership  
December 2016 Issue

In the December issue of the Welding Journal, four companies from our district were mentioned for their corporate member milestones article. The Welding Journal launched the article in appreciation of the membership and support from their Corporate Members. FCA US LLC of Auburn Hills, MI and DTE Energy of Detroit, MI are listed as Gold Members with 50 years as sustaining members. Two companies mentioned as Sapphire Members, celebrating 10 years were Metro Technologies, LTD of Troy, MI as an affiliate member and Milco – Weldform Electrodes, Inc of Warren, MI as a supporting member.

THE CONNECTING MASTERPIECE

Eisele 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
United Technical Solutions LLC is pleased to announce and welcome Warren Peterson, formerly of EWI, to the engineering team as Welding Manager and Technical Specialist. Warren will be working out of our offices in Whitmore Lake. Warren is a Subject Matter Expert in the areas of resistance welding, customer product applications, applied research, and statistical experimental design. In this role, Warren will use his prior experience to develop new applications that use resistance spot, projection, and seam welding, high frequency resistance welding of tubes, and flash-butt welding. He also has extensive experience in industrial training in these areas and brings a wealth of consulting expertise on welding application.

“Having Warren join our team expands our knowledge base on our engineering and development projects. His previous experience with materials and welding processes in several different industries makes him a significant and valuable addition to our team.” – Rick Slade – Technical Director at United Technical in Whitmore Lake

The next Welding Course starts January 24, 2017. Contact United Technical for more information. (see last page in this bulletin).
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.

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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.

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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: 13.5 Kilograms (30 lbs)
- 500 Volt, 2000 Hz
- 90 KVA @ 50% duty cycle
- Secondary no load DC voltage of 117 Volts
- Water-cooled, 15 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 10.5 Volts
- Water-cooled, 6 LPM minimum
- @ 30°C maximum inlet temperature

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www.ati-ia.com/6stc
Welcome to a new year and a new face in our Meet Our Members column.

Hello, Stephen, thank you for being our first interview of the new year.

Why don’t you tell us a little bit about yourself?
Hello, my name is Stephen Hasselbach, CWI/CWE.
I am a Full-Time Welding Instructor at Monroe County Community College, (MCCC) in Monroe, Michigan.

That’s great, Stephen, can you tell us a little bit about what you like or dislike about your position?
I really like seeing students build on their skills. When they take a genuine interest and go off to be successful applying their trade. I like but also dislike when they are so young and making so much money! I have had several students who surpassed my income level only 1-3 years out of school. It’s great that they are making it! At MCCC, I look forward to rebuilding the curriculum and adding new content, such as fabricating and robotics. I think what I dislike the most is paperwork. The amount of time I have to spend completing paperwork instead of welding or fabricating with the students.

Why did you join AWS?
For the powerful network and because I think it is something everyone involved in the welding trade should do.

We like to ask everyone this question, what’s your favorite AWS event?
FabTech and the Detroit Section Scholarship Awards night. It’s so great to see students putting forth the effort and pursuing an education in welding.

What do you like to do outside of work?
Defensive firearms training, be a dad & husband, pull antique tractors, cook, and hunt.

What is your funniest moment/or story – on the job or off – or in school/training?
I had a student one year who was TIG welding. He had a leaking torch and thought nothing of it. Meanwhile his gloves became saturated with coolant and a puddle began to form in the booth. He would get zapped every time he would strike an arc and just couldn’t figure it out. I guess he had finally had enough jolts to come to me and complain about it. When I went to his booth to investigate, I found his now soaked gloves and the puddle of coolant on the floor. It was a fun teaching moment and fortunate that it didn’t end up worse. He was used as an example of what can happen if we don’t address faulty equipment and why visual inspection of equipment and maintenance are so important.

What do you consider your most memorable moment?
Taking students to SkillsUSA National Welding competitions in both Kansas City and Louisville. Great team building experience.

Anything that’s near/dear to your heart – My Daughter, Gentry and Wife, Allison.
Have you ever been a mentor, or is there someone who has mentored you?
Bob Hughes was my mentor when I did my student teaching. He was a welding teacher at Oakland Schools Tech Campus Southwest. He was always so positive and enjoyed working with students and impacted so many of their lives. It was always amazing to see former students come back and thank him or provide something for the class as a way to give back for helping make them successful in their lives.

How did you get your start in welding?
I took a metals class in high school because woodshop was not offered. I guess it kind of stuck from there. I was allowed to play with fire and not get in trouble for it in school.

What do you see as the biggest challenge for the welding community in the future?
Maintaining quality standards as our veteran welders retire. With them, goes a wealth of knowledge that cannot be easily replaced. Keeping up with trends and technology in training.

What would you tell someone who may be “on the fence” about getting into welding as a career?
There are tons of great opportunities for someone who is willing to work hard, but in return receive high rewards.

Would you encourage more schools (both high school and junior high) to encourage more young people to look into technical schools and jobs and not just degreed positions?
Absolutely. There has to be a balance.

Finally, if you weren’t involved in the welding industry, what would be your dream job?
A park ranger or something similar out west in the mountains or perhaps a private pilot. Other than that, I would like to serve our country in the military.

Thank you Stephen for taking time out of your schedule to share some of your welding experiences with us.
**AMERICAN WELDING SOCIETY**
**DETROIT SECTION**

*Ladies Night Dinner Dance*
Royal Park Hotel - Rochester, MI*
Saturday March 25, 2017
6:00pm - Midnight

Discounted rooms at the Royal Park Hotel can be reserved at (800) 339-2761, ref. "AWS Ladies Night"

**As the AWS is a public charity, your contributions are deductible.**
**This event supports our AWS Scholarship & Educational programs**

### REGISTRATION

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ARE YOU INTERESTED IN DONATING A MAJOR RAFFLE PRIZE? **

(CHECK IF YES)

Discounted rooms at the Royal Park Hotel can be reserved at (800) 339-2761, ref. "AWS Ladies Night"

**As the AWS is a public charity, your contributions are deductible.**
**This event supports our AWS Scholarship & Educational programs**

### REGISTRATION / PAYMENT TYPE

- **CREDIT CARD** direct via www.awsdetroit.org
- **CREDIT CARD** (complete form and mail or e-mail)
  See Contact Information below
- **CHECK** (complete form and mail or e-mail)
  See Contact Information below

**REGISTRATION / PAYMENT TYPE**

Name ____________________________
Company ____________________________
Address ____________________________
City ___________________ State / Prov. ______ Zip / Postal ________
Phone ____________________________
E-mail ____________________________
Card # ____________________________ Card Type ______________
Card Holder ________________________
Expiry ____________________________ C.V.V. Code ____________

Contact John Bohr: (734) 751-7226 | john.c.bohr@gmail.com
AWS Detroit - Ladies Night, 34209 Grove Dr., Livonia, MI. 48154
Editor’s Note

Welcome back to a New Year! 2017 is here and we get the opportunity to start anew!

My goal, as your editor in 2017, is to provide you with an e-bulletin that you enjoy, learn from and perhaps even share with your colleagues and friends. With that being said, I encourage you to get involved, contact some of our column authors, and make suggestions! Become one of our featured members in our “Meet our Members” column. Have a bit of expertise on a welding/weld related subject? Contact our “Ask the Welding Engineer” columnist, to share an idea or questions that you get from other welders, machinists, engineers in the industry. If you’re a student, high school, tech school or college, why not volunteer for a column on what going through the weld program is like through your eyes? I’m really looking forward to engaging you, our readers, into becoming a real integral part of this e-bulletin. After all, this is YOUR e-bulletin.

I’d like to invite you all to come out to one of our technical meetings. You don’t have to be an AWS member, and the majority of our technical events are free. The tech meetings are a great place to make connections. Who knows, you may just be having dinner there with a future boss, employee, friend, or supplier?

Finally, I wanted to give “Kudos” to John C. Bohr who is chairing our Ladies Night Committee this year. He’s come up with some really great posters for the event that you’ll be seeing here in the bulletin this month, and in the next couple months leading up to our annual Ladies Night. It’s going to be an elegantly, enjoyable evening! Ladies, start thinking about those cocktail dresses and evening gowns, and gentlemen, you might want to get that registration done soon!

Have a great month and…

Keep On Welding!

Robin M. Michon
e-bulletin editor
TRAINING – WELDING TECHNOLOGY

Corporate Training Certificate Programs Weld Inspection
Welder Certification and Qualification Robotics

United Technical, Inc. is an AWS Educational Institution Member providing state of the art training facilities and certified welding instructors.

Our training philosophy is to create “Welding Professionals” that can apply welding and the process effectively. The certified instructors at United Technical focus on the essential process variables, motivating students to understand how to set-up, operate and inspect their own equipment and welding process.

Students that attend the United Technical Welding Academy actually LEARN HOW TO WELD and they gain a real-world understanding of the process; thus being able to apply their knowledge in the corporate industrial marketplace, effectively.


Weld UT-218 Certificate Program – Corporate Training for Skilled Trades Personnel
Section: Weld UT-218-2016
Schedule: Tuesday, Wednesday & Thursday - twelve (12) sessions
Four (4) weeks, three (3) days a week
4:30 PM – 7:45 PM, three (3) hours per session
Note: Please see course syllabus for specific training details; attached.

American Welding Society
Educational Institution Member

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