Technical Event – Education Series

Thursday, January 22, 2015

“Fundamentals of Resistance Welding”
Ukrainian Cultural Center
26601 Ryan Road • Warren, MI 48091

The 2015 January Technical event is a continuation of the AWS Detroit Section Education Series started by last year’s section chair, Tom Sparschu. Randy Darby, service technician with T.J. Snow will be presenting a 2-1/2 hour, one evening training session meant to cover the fundamentals of resistance welding. The session will cover the basics of resistance welding, welding terminology, force delivery systems, transformer operation and welder set up.

T.J. Snow: Situated in a 52,000 square foot facility on more than 12 acres adjacent to the Chattanooga, Tennessee, Lovell Field airport, T.J. Snow provides resistance welding parts and supplies, three standard machine designs and custom designed complex multi-gun welders and turnkey robotic systems. In addition, they completely remanufacture all types of resistance welders and do resistance welding transformer rewinds. In business for more than 50 years, they are recognized as a full-service leader in the resistance welding industry.

AGENDA

4:45pm   Doors open
4:45-5:30pm  Registration & Buffet Dinner
5:30-8:00pm  Speaker: Randy Darby of T.J. Snow;  “Fundamentals of Resistance Welding”
8:00pm  Closing remarks and adjourn

CHARGE  Free but attendees must register in advance – attendance is limited to 40.

RSVP required by January 19, 2015 at the latest. Please contact Dan Wellman for reservations:
Email: dan.wellman@obarausa.com
Phone: (586) 291-6446

Disclaimer: AWS Technical nights are open to everyone! We encourage that members bring students and non-members to learn more about our organization and industry.
One definition of Education: When knowledge, skills, values, beliefs and habits of a group of people are transferred from one generation to the next through storytelling, discussion, teaching, training, and or research.

This sounds a lot like what we do at the AWS-Detroit Section. Please join us for our Educational Series, January 22nd “Fundamentals of Spot-welding” featuring TJ Snow. You’ll enjoy an evening of education on the subject of spot-welding and food provided by the Detroit Section. This is a great class for introduction and review of resistance welding. Make sure you sign up early as we only have 40 seats available for this must attend event.

When I think of the New Year, several words come to mind: Resolution, renewal and reflection.

Resolution: “Set a goal to learn something new every day,” a good friend, Dan Galiher from Tower, once told me that every day he tries to learn something new, either from journals, technical papers, or with colleagues. I have always thought this was good advice.

Renewal: New beginnings, as we watch the rebirth of Detroit, we trust that the new custodians will return her to be the great city we know and love.

Reflection: A time to look back at milestones of the passing year, births, deaths, and accomplishments.

As Pete Seeger wrote, “Turn! Turn! Turn! There is a season.” This is the season to learn.

Happy New Year!!!
2014 Holiday/Christmas Party

Holiday ties, shades of reds and greens, sparkling and smiling faces were present at the AWS Detroit Section’s 2014 Holiday/Christmas Party.

The lovely Western Golf and Country Club in Redford was a new venue for this event! Old and new faces alike were seen mingling and enjoying the evening from the pre-dinner appetizers, to the singing of Christmas carols at the baby grand piano after dinner. A fun night for all! Some of the many raffle gifts included a Toshiba laptop, ipad/tablet holders made from reconditioned/rescued wood from Detroit houses as part of the Renew Detroit initiative, a Keurig coffee maker, a digital camera, an ipad, a coach purse, many wonderful gift baskets and gift cards galore.

Thank you to the AWS Detroit Section Holiday/Christmas Party committee, our sponsors and donors for making this an enjoyable evening and promoting the advancement of education and future welders in our area. And, thank YOU for making this a memorable event!

Just a sampling of photos from the party are here in the e-bulletin. To view the entire album, check out our photo gallery on the events tab on the www.aws-detroit.org website!
Patron’s Fund
As the Patron's Committee Chair, I would like to thank those generous companies and individuals who have contributed so far to the fund.

2014 Current Patrons
AET Integration Inc.
ARO Welding Technologies, Inc.
ATI Industrial Automation Centerline (Windsor) Limited
Dengensha America Corp.
Fronius USA, LLC
FUSION Welding Solutions
Genesis Systems Group
GROSSEL TOOL Co.
Industrial Control Repair (ICR)
KUKA Robotics
LEONI Engineering Products and Services, Inc.
LUVATA
Matuschek
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Obara Corp. USA
RoMan Manufacturing, Inc.
The Ohio State University Welding Engineering Alumni
Vulcanmasters Welding Company, Inc.
Multi-Contact
Robert F. Cahill Memorial Fund
Prof. Hongyan Zhang Royalties

AWS Patrons collectively provide annual funding for scholarships toward an Associate Certificate in Welding Technology or a Bachelor of Science degree in Welding Engineering or Manufacturing Technology. For more information please contact AWS-Patron’s Committee Chair Eric Lichtfusz.

New CEO at KUKA Robotics Corporation US
Shelby Township, MI – October 27, 2014 – KUKA Robotics Corporation (kukarobotics.com), a leading manufacturer of industrial robots, announced today the appointment of Joseph A. Gemma Jr., as President and CEO of KUKA Robotics Corporation US. Mr. Gemma brings over 29 years of relevant industry experience to his new role at KUKA Robotics Corporation.

Mr. Gemma’s appointment is part of an ongoing reorganization process within KUKA’s Robotics group. Stuart Shepherd hands over his responsibility as a president and CEO of KUKA Robotics Corp. to Mr. Gemma, but continues to be involved with the company in his role as Vice President Sales – Americas as announced in March 2014.

“Leading the KUKA Robotics Corporation US organization has been a highlight in my career,” said Mr. Shepherd. “We are delighted that Joe will join our management team and believe he will further enhance our regional capabilities to support KUKA Robotics’ continued sales and earnings growth.”

Mr. Gemma most recently held the role of CEO Stäubli Group – North & Central America. During his nearly three years in this role, the company significantly improved its market position and performance. He joined Stäubli in 1997 as a Sales Engineer, after successful roles in project coordination, applications and sales, with prestigious companies as Advanced Technology Systems, Inc., Crellin Technologies, Inc., and Corner & Lada, Inc.

Mr. Gemma has been very active and is also the 1st Vice Chair in the Robotic Industries Association (“RIA”), and is the RIA representative to the International Federation of Robotics.

“I’m pleased to take up my new role as President and CEO at KUKA Robotics, says Gemma. I look forward to working with the dedicated employees to further the company’s market leadership and growth by bringing new levels of innovation, customer experience and value to the marketplace.”

Fiat Chrysler Automobiles Looking for Welding Engineer-Arc Welding & Brazing
Location: Auburn Hills, MI. The Welding Engineer-Arc Welding and Brazing is responsible for the support of Chrysler light weighting initiatives by developing methods for joining new grades of higher strength steels, aluminum and magnesium. The Welding Engineer will develop and understand the impact of multiple welding processes on lightweight materials like aluminum, magnesium and steel; develop and maintain Chrysler arc welding and brazing standards; develop common standards between Chrysler and Fiat groups; and investigate and develop new joining methods for new grades steel, aluminum and magnesium as well as dissimilar materials. They will also support the material approval process for new products pertaining to welding; provide welding technical direction and consultation to Engineering, Purchasing, Manufacturing and corporate suppliers; provide assistance to evaluate and investigate deficiencies of prototype and production parts and assist in the initiation of corrective actions; and conduct research both internal and external through technical consortia activities.

Basic Qualifications: Minimum of a Bachelor of Science degree in Welding Engineering, Metallurgical Engineering or will also consider other Engineering degree (Welding Engineering Technology) from an ABET accredited university with relevant welding experience.

Preferred Qualifications: Master of Science degree in Welding Engineering from an ABET accredited university; Practical Experience; The Ohio State University Welding Engineering Alumni

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manufacturing welding engineering experience; Experience and technical expertise in arc welding and brazing; Excellent communication, organizational and presentation skills; Strong leadership abilities, multitasking ability and problem solving skills; Ability to meet deadlines and have a “whatever it takes” attitude to complete assignments. Please apply on-line at: [http://find.chryslercareers.com/s/Job-Details/Welding-Engineer-Arc-Welding-Brazing-Job/Auburn-Hills-MI/xjdp-cl289866-jf410-ct100244-jid38700334-coUS](http://find.chryslercareers.com/s/Job-Details/Welding-Engineer-Arc-Welding-Brazing-Job/Auburn-Hills-MI/xjdp-cl289866-jf410-ct100244-jid38700334-coUS)

**AWS Scholarships**
Scholarship time is coming. The announcement and application form for the 2015/16 school year scholarships is now on the AWS-Detroit website [awsdetroit.org](http://awsdetroit.org). If you know students who may be interested, please refer them to the site. Last season, AWS-Detroit gave out 32 scholarships valued at $42,000. Refer questions to Viji Kuruvilla at (248) 377-1788.

**Certified Resistance Welding Technician (CRWT) Certifications**
**AWS Needs More Candidates!**
To date, the AWS has offered 5 beta exams for the CRWT Program. The exam was reviewed and revised by the exam bank and CCRW members in 2014. In order to make the determination on public release, AWS needs at least 24 more candidates. There are two opportunities for additional beta participants as follows: 1) The exam is offered free of charge during regularly scheduled CWI exam locations and dates; 2) An AWS volunteer committee member may collect at least 15 applications and request AWS to schedule an exam at the site and date of their choosing. For questions and an application, contact Vanessa Gonzalez, PhD, Manager, Professional Certification Programs. American Welding Society; P: 305-443-9353 x471; E: vgonzalez@aws.org.

**T.J. Snow Personnel Certified as Resistance Welding Technicians**
Five service techs at **T.J. Snow Company**, plus CEO Tom Snow, recently became among the first in the U.S. to receive the Certified Resistance Welding Technician (CRWT) designation offered by the American Welding Society. A 100-question exam tests applicants’ knowledge of all aspects of the resistance welding process and T. J. Snow Company plans to offer training classes to help prepare applicants with the specialized knowledge needed to pass.

**2015 Resistance Welding Seminar Schedule**
**T.J. Snow Company** is putting on one day Regional Resistance Welding Seminars at various locations throughout the U.S during 2015. The ones closest to the Detroit area will be in Cleveland, OH, April 22; Grand Rapids, MI, May 20; and Columbus, OH, October 14. For more information, go to: [tjsnow.com/service/offsite_seminar_index.htm](http://tjsnow.com/service/offsite_seminar_index.htm)

**Two Job Opportunities:**
* #1: **Resistance Welder Service Tech/Pilot.** Due to continued growth, **T.J. Snow Company** is looking to add another service tech/pilot who can fly to customer locations and repair resistance welding machinery. Based in Chattanooga, TN, the job requires broad resistance welding and electro-mechanical troubleshooting expertise. Flying skills are secondary in importance, but we require an instrument rating and 500 hours in high performance, retractable gear aircraft. We
I have been hearing more about Arc Flash in the industry. Can you help better understand this issue?

To help answer this question, I have reached out to past AWS-Detroit Section Executive Board member Bruce Kelly, President, Kelly Welding Solutions PC.

“Arc Flash was added to NFPA-70E (Standard for Electrical Safety in the Workplace) with the 1995 Edition as an Electrical Hazard. Prior to that time it was not listed as a hazard and so no specific precautions were mandated, although protection from shock, etc. was still required.

Arc Flash occurs when something causes a short between conductors, or a conductor and ground, on a system that can deliver high current into a short circuit. The temperature at the terminal of the arc can reach 35,000 F, or about four times as hot as the surface of the sun. At those temperatures every known material will be vaporized. This process also produces a rapidly expanding cloud of conductive gas, or plasma. If this plasma cloud touches a person, electrocution is likely in addition to burns. Arc flash can also result in the release of shrapnel, including molten copper, at a rate of over 700 ft/sec.

It should come as no real surprise that resistance welding equipment poses a greater hazard than most other industrial processes because the power supply to the welder is larger and can provide a larger current to the fault. A careful study of your system against the requirements of the NFPA-70E is a necessary first step in order put in place the needed controls and procedures to protect both your personnel and equipment from this hazard.

A final thought on the requirements associated with Arc Flash. The wording of the standard can be confusing, so if you are going to buy the NFPA-70E, I highly recommend that you spend the extra money and get the “Handbook” edition.

If you have more questions about this topic, Bruce can be reached at:
  
  Bruce G. Kelly PE  
  Kelly Welding Solutions PC  
  517 819 2582  
  brucegkelly99@aol.com

References:
1) NFPA 70E®: Standard for Electrical Safety in the Workplace®  
2) RWMA Bulletin #14, Maintenance Manual for Resistance Welding Machines
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Currently fly a Beechcraft A36 Bonanza and a Mooney Ovation. For further details, contact Tom Snow at 423-308-3165, or send your resume in confidence to tomsnow@tjsnow.com.

#2: Bosal Industries is seeking welders for its Ypsilanti, Michigan Plant to aid in the manufacture of stainless-steel tubing products. Applicants can apply to Human Resources: kgawronski@bosalusa.com.

Job Requirements: •Mig welding is required; Tig welding is preferred. •Welding certifications are a plus. •Employee will be required to pass a mig welding test during his/her probationary period. Welders required for all regularly scheduled shifts: •1st Shift: 7am-3pm •2nd Shift: 3pm-11pm •3rd Shift: 11pm-7am. Rate Schedule for Probationary Employees (180 days then increase in wages): •1st Shift: $14.00 per hour •2nd Shift: $14.00 per hour, plus $0.60 shift premium •3rd Shift: $14.00 per hour, plus $0.75 shift premium.

2014 FABTECH Expo Review
By Alex Pazkowski

This year at the FABTECH expo held in Atlanta Georgia, six of the nation’s top young welders, accompanied by three international guests from China, the UK and Belarus competed at the 2014 US invitational weld trials. This competition serves as a qualifying round in a series of competitions that take place to select the Team USA welder who will represent the United States at the World Skills Competition in Sao Paulo Brazil in 2015.

The World Skills Competition takes place over the course of five days where the competitors are given a total of 22 hours to complete a series of projects using the GTAW, SMAW, FCAW, and GMAW processes. These projects include a pressure vessel, two plate welds, a pipe weld test, two fillet weld samples, and to end the competition, all competitors must also complete two additional weldments utilizing the GTAW process to weld stainless steel and aluminum.

Over the course of two years, competitors are selected out of a pool of the top scoring welding competitors under the age of 23 at the Skills USA national welding competition held every year in Kansas City, Missouri. The top scoring students are invited to submit projects given to them upon selection. Of the 48 eligible competitors, six are selected to compete at the FABTECH expo. After the grueling week of competition, three of these competitors were selected to continue on where they will compete in February for an AWS sponsored $40,000 scholarship and the privilege of representing the United States at the World Skills competition in Sao Paulo Brazil in 2015. Of the original six, Cody Fojtik, representing Washtenaw Community College in Michigan, Drew Swafford, Georgia and Isaiah Gaspar, from Arizona did not qualify to continue on. Thanks to the AWS, all competitors left Atlanta with a $1,000 scholarship along with several prizes provided by Lincoln Electric, Miller Electric and Bessy.

As Metro Detroiter, we all should be proud of the welding talent that is in our area. We have had students from our section competing in the US invitation weld trials for the past 20 years. So, not only are we supporting the future of our industry with scholarships, but we have some of the best schools educating the future of the welding industry in our area as well. Well done Detroit!

Save the Date: July 27, 2015
Click Here to be notified of when details are available