August 29, 30
The Woodlands Resort
The Woodlands, TX
# 2019 Welding Summit

## General Information
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  - Opening Keynote: Welding Economy
  - Keynote Luncheon
  - State of Industry Keynote
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  - Registration, Setup, Refreshment Breaks,
    Networking and Happy Hours

## Event Hours
- **Wednesday, August 28**
  - 1:00 PM – 6:00 PM
- **Thursday, August 29**
  - 7:30 AM – 5:00 PM
- **Friday, August 30**
  - 7:30 AM – 11:30 PM

## On-Site Registration
- **Grand Ballroom Foyer**
  - **Wednesday, August 28**
    - 1:00 PM – 6:00 PM
  - **Thursday, August 29**
    - 7:30 AM
  - **Friday, August 30**
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## Exhibitor List

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2019 WELDING SUMMIT

Exhibitor Floor Plan

Grand Ballroom I & II
EDUCATION PROGRAM

2019 WELDING SUMMIT

WEDNESDAY, AUGUST 28

1:00 PM – 5:00 PM  Spanish/Republic Room

Workshop: Unlocking the Hidden Costs of Welding

Presenter: Robert Tessier, National Director Advanced Fabrication Technologies; International Senior Expert, Airgas, an Air Liquide Company

The workshop is designed to help those who are responsible for welding identify and quantify how welding efficiencies can predict your quality outputs. You will learn the questions to ask and what to look for using Ratios that point you to root cause for Fabrication issues.

HONORING THE PAST
EMBRACING THE FUTURE

100 years ago, the American Welding Society emerged at the behest of President Woodrow Wilson to help serve a national need and “Advance the Science and Art of Welding.” This year, as we celebrate our Centennial anniversary, we acknowledge and thank all the men and women who have been instrumental to the welding industry and the technologies that it represents. We look forward to serving our industry and welding communities for many more years to come!

AWS started in Philadelphia with just 286 members. Today, over 70,000 welding community insiders use AWS membership to advance their careers, connect to our deep technical knowledge base and save on products and services, including AWS certifications, educational programming, technical standards, publications and more.
Labor shortages, escalating costs and volatile market trends have caused many welding operations to make tough decisions based on what they believe fundamental project success looks like, what activities are necessary to their projects and what their proper chronological order should be to meet business and financial goals. This thought-provoking presentation digs deeper into the Welding Economy, detailing safe and economical steps in the execution, allied process and nondestructive examination of welded construction and fabrication, and how these lead to better welding cost and schedule performance.
Value Chain Approach to Welding Management: How Leveraging New Technology Can Add to Your Bottom Line

Presenter: Ricky Ludeman, Welding Technical Services Manager, Kiewit

Greater competition, slimmer margins, increasing project complexity and a scarcity of skilled labor all combine to make the current market extremely tough for businesses to be successful. To stay competitive, we must look for new tools and methods – especially where technology has been leveraged – to do more with less. Within the welding industry, adopting processes such as modified short-circuit and advanced waveform pulsing GMAW, and utilizing inspection techniques such as PAUT are components of that technological edge. Coupling these with a new take on welding operations planning is providing an advantage in this tough market.

High Deposition Metal Transfer Technology, A Case Study: Meeting Quality and Performance Expectations


Anyone considering HDMT to self-perform or supplement welding work scopes using subcontract HDMT should attend. This presentation will provide exposure to the physics of welding, including: how a welding TIG arc is produced and how adding filler metal changes the arc energy; step-by-step examination of how adding Hot Wire and automated Pulsating Wire Feed increases deposition rates and improves weld quality while mitigating the degradation of arc energy; and first-hand welder training and equipment maintenance experiences. A case study of a large project using HDMT technology will be presented for discussion.

Morning Session Panel Discussion – Attendee Q&A
THURSDAY, AUGUST 29

12:15 PM – 1:15 PM  Emerald Ballroom

KEYNOTE LUNCHEON
Presenter: Marcus Luttrell, Team Never Quit

1:30 PM – 2:00 PM  Grand Ballroom III

Industrial Gas Supply Mode Efficiencies
Presenter: Fred Schweighardt, National Project Manager and International Expert, Air Gas an Air Liquide Company

This presentation will cover the true cost of industrial gas supply modes and some of the ways to reduce that cost, focusing on handling, rental, and molecule costs, with a strong emphasis on safety. We will show methods to calculate the TCO (total cost of ownership) of the various supply systems, including compressed cylinders (both single and packs), liquid cylinders, and bulk liquid supply.

2:00 PM – 2:30 PM  Grand Ballroom III

Improving Pressure Piping Fabrication Productivity, Safety and Quality Through Implementing Modern Processes
Presenter: Lulian Radu, Welding Engineer, PCL Industrial Management Inc.

The investment in building and upgrading oil extraction and processing facilities is significant and it is estimated that will continue to grow substantially over the next decade. Productivity improvements, enhanced fabrication technology and creative solutions are necessary to keep pace with the accelerated development of oil extraction, recovery and processing needs.

The presentation focuses on increasing productivity, without compromising quality, of shop fabricated pressure equipment built to ASME pressure piping Code and numerous owner requirements. Several methods and initiatives used to increase productivity, and by extension safety and quality, are presented and discussed; including lean manufacturing, electronic welding data management, increasing shop work flow and the use of high productivity welding processes.
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<td>2:30 PM – 3:00 PM</td>
<td>Grand Ballroom III</td>
<td>Recruitment Strategies for Welding Professionals and Craft</td>
<td>Darrin Vander Toorn, President, Dutch Resources, Inc.</td>
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<td>This presentation will cover the following: It’s a Welder’s Job Market: Understanding the Target Market for the Work You Have</td>
<td>• Attracting the Skills, You Need to Keep Schedule and Budget • Identifying What Skilled Crafts You Need and How to Get Them on Your Job • Recruiting the Right Welders and Achieving Industry Leading Pass Rates in the Test Booths • Assessing Your Process and Your Recruiters’ Strengths and Weaknesses • Continuity: Establishing a Program to Keep Your Welders Certified and Ready</td>
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<td>3:30 PM – 4:00 PM</td>
<td>Topic: Modular Projects Are Like Puzzles</td>
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<td>Modular projects are like puzzles with many pieces of different sizes and shapes that need to come together in a timely manner and fit into place to make a perfect picture. Flexibility and a clear understanding that some pieces will be out of order or not the correct size are essential. Using as a case study the oversight and installation of an extension on a multilayer 6-inch thick shell urea reactor, this presentation will look into how the modular/puzzle parts – including foreign companies, international and customer regulations, and application development of a new ultrasonic phased array technique on a multilayer vessel – were planned, coordinated and executed.</td>
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<td>4:00 PM – 4:30 PM</td>
<td>Estimated Welding Costs for Improvement Opportunities</td>
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<td>Materials, labor and overhead are the cost elements of any product. At SNC Lavalin’s Sealy manufacturing facility, first two are being analyzed using production schedule performance by welding process (GTAW, SMAW, GMAW, FCAW, SAW) then performing comparative studies to establish a welding cost baseline. This presentation will review how data derived from the cost estimate will: lead to the adoption and execution of the most efficient methods; reinforce the selling price of products for quotation purposes; determine tender viability and profitability considering existing methods and competition; determine whether parts and subassemblies should be fabricated in-house or purchased from a vendor; and examine investment costs of new equipment to judge overall economics demonstrating savings.</td>
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THURSDAY, AUGUST 29

4:30 PM – 5:00 PM  Grand Ballroom III

Weld Metal Procurement – The Market is Changing
Presenter: Bill Newell, Vice President-Engineering, Euroweld

Historically, piping, plate, fittings, valves and long lead equipment (LLE) are specified and orders placed well in advance of site or plant mobilization. Weld metal is typically not ordered until after mobilization and delivery of materials and LLE but should actually be explored as soon as possible upon job award. A multitude of factors, including rapidly changing market conditions, tariffs, general reductions in inventory, minimum order requirements and more are now impacting the availability and delivery of both commodity and specialty alloys, and waiting for weld metal procurement may artificially introduce risk and critical schedule dilemmas. This presentation offers an update on the status of weld metal procurement and is intended to inform all entities including subcontractors and fabricators on ways to avoid the risk associated with not having the right weld metal at the job when you need it.

AWS WeldingDigest.com

- Trending Topics and Technical Advances
- Career Insights, In-Shop Tips and Videos
- Special Interest Articles and Artwork

Your premier news source brought to you by the American Welding Society
Oil & gas producing markets continue to position themselves to the prospect of a better global economic outlook, whilst having to acclimatize to the emergence of alternative supply-side dynamics, environmental mandates coupled with shifting energy consumer needs, all against a backdrop of volatile energy pricing. This has led to a reshaping of the type and focus of capital investments going forward. We at Industrial Info Resources are tracking more than $2.9 trillion worth of currently active Oil & Gas and Refining projects globally with $700 billion of this in the U.S. and Canada alone.

Today’s increasingly interconnected energy markets has created greater levels of oil & gas supply optionality for buyers which in turn is driving a change in capital investments being planned. Producing markets are recalibrating their investment plans to capture demand growth for the most sought-after products, whilst their buyers look to make their own investments to get the balance between greater levels of energy self-sufficiency and the need to acquire energy from the broader market to support their economic growth. Industrial Info Resources has been tracking oil & gas investment trends globally for almost 30 years and we find that spending patterns between the crude and natural gas markets are somewhat diverging - the focus on building greater levels of crude production performance through the increase of smaller in-plant capital process optimization projects, revamps and modernizations will continue but the huge scale of over $100 billion worth of natural gas upstream and midstream processing and LNG greenfield build out, both on the supply-side and the buyside will also be a key feature well into late 2020.
FRIDAY, AUGUST 30

10:00 AM – 10:30 AM  Grand Ballroom III

**Creep Strength Enhanced Ferritic P91 Welding**
*Presenter: Stephen Gillman, Co-Owner and Chief Operating Officer, United Services Group*

Discussion of best practice welding activities of creep strength enhanced ferritic Grade P91 steels will range from joint preparation to hardness testing after post-weld heat treatment, with the focus on cost savings of first-time quality performance.

10:30 AM – 11:00 AM  Grand Ballroom III

**Purgeless Pipe TIG Welding**
*Presenter: Aaron Kiilunen, Application Engineer, Cor-Met*

Corr-Met located in Brighton, MI manufactures coated and cored TIG wires for root pass pipe welding. These QWP coated and cored wires eliminate the need for backing, paste, or gas purging on the ID of the joint and prevent oxidation or sugaring on the root pass. The one step process saves time and money while delivering X-Ray quality weld root pass. This presentation will highlight the variety of coated and cored wire grades available and the process by which pipes to be joined are fixtured with a gap, tack welded together, then welded with standard TIG equipment.

11:00 AM – 11:30 AM  Grand Ballroom III

**Why Robotics: How to Ensure Your Project Makes Economic Sense**
*Presenter: Dan Allford, President and Owner, Arc Specialties*

When correctly applied, robots save money and improve quality. When misapplied the robot becomes an expensive dust collector. Using case histories, this session will present how to determine when and if a project is economical to automate. Topics include initial robot cost, programming costs, filler material savings, safety, part accuracy, joint configuration, production volumes and technological competency necessary to succeed.

11:30 AM  Grand Ballroom III

**Closing Remarks**
EXHIBITOR INFORMATION

2019 WELDING SUMMIT

★ WEDNESDAY, AUGUST 28

1:00 PM – 6:00 PM  Grand Ballroom Foyer
Registration and Exhibition Set Up

★ THURSDAY, AUGUST 29

7:30 AM – 9:00 AM  AWS Exhibit Hall
Coffee and Exhibitor Networking

10:30 AM – 11:00 AM  AWS Exhibit Hall
Refreshment Break and Exhibitor Networking

3:00 PM – 3:30 PM  AWS Exhibit Hall
Refreshment Break and Exhibitor Networking

5:00 PM – 6:30 PM  AWS Exhibit Hall
Exhibitor Happy Hour

★ FRIDAY, AUGUST 30

7:30 AM – 9:00 AM  Grand Ballroom I & II
Coffee and Exhibitor Networking

9:00 AM – 11:00 AM  Grand Ballroom I & II
Exhibitor Break Down
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