

# 2019 NCPWB Technical Conference Schedule of Events

April 28 – 30, 2019



**Longboat Key Club & Resort  
Longboat Key, Florida**

We are pleased to announce that registration for the NCPWB Technical Conference is now open. This is a don't-miss event for those interested in topics related to the pipe welding industry, not to mention networking with friends, colleagues and new acquaintances.

Topics covered at this conference will include Carbon Steel Pipe; Fittings and Flanges, New Brittle Fracture susceptibility; Fabrication Measurement and Predictive Management; Mechanizing the Welding Industry; Value Chain Approach to Welding Management; Maximizing Automated Welding Stations for typical spool shops; UA's efforts in addressing the shortage of welders; Demonstration of the National Welder Database, and more.

# Conference Program

**Date:** Monday, April 29, 8:30 a.m. - 9:30 a.m.

**Speaker:** Justin Morse, District Welding Manager, Kiewit Power Constructors, Co.



## Bio

Justin Morse is the District Welding Manager for Kiewit Power Constructors Co. District based in Lenexa, Kansas. Justin graduated from McGill University in Montreal, QC with a degree in Mechanical Engineering in 2008. He went on to begin his professional career with Ganotec Inc. (a division of Kiewit) in Montreal filling roles such as QC manager and craft superintendent across various projects until eventually transferring to Kiewit Power Constructors Co. in 2013 to manage welding operations specifically for power plant construction. Currently Justin splits his time supporting not only the power generation segment but also oil & gas and infrastructure work throughout the company in addition to managing Kiewit's specialty welder division.

## Topic

*Value Chain Approach to Welding Management: How Leveraging New Technology Can Add to Your Bottom Line*

## Abstract

Greater competition, slimmer margins, increasing project complexity and a scarcity of skilled labor all combine to make the current market a very tough one for businesses to be successful. In order to stay on top, we must look for new tools and methods to stay competitive- whether it is for a new low-emissions natural gas burning combined cycle power plant designed to power half a million homes or a terminal to export the natural gas that the American shale gas boom has produced. Looking to the manufacturing industry one can find inspiration where technology has been leveraged to do more with less, turning around productivity shortfalls in the face of a labor gap. Within the welding industry, adopting processes such as modified short-circuit and advanced waveform pulsing GMAW as well as 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.



**Date:** Monday April 29, 9:40 a.m. - 10:40 a.m.

**Speaker:** Christian Trudel, Senior Service Technician & Welding Expert, Tecnar Automation LTD.

## Bio

Christian joined Tecnar 27 years ago, when the company was only a promising, 3-year old start-up. During his career, he occupied various positions, ranging from machining & assembly to customer service as well as on site commissioning. Indeed, he personally commissioned more than 50 of Tecnar Rotoweld pipe welding workstations in several countries around the world, including Canada, USA, Russia, Ireland, Germany, Australia, and more. Christian now cumulates 27 years of welding & spooling experience, and as such he had a significant impact on the design of Tecnar's flagship product: the Rotoweld 3.0.

## Topic

*Maximizing the performances, a Rotoweld 3.0 Automated Welding Station for the Typical Spool Shop*

## Abstract

These days, economics of North American spool shops are going through important changes. The principal drivers of change are an aging labour force, increasing international competition, new trade policies and more lately a strong economical growth in America. Another driver of change, which can be seen as a consequence of the first four, is the rise of automation in the production environment. In this field, Tecnar has been offering the Rotoweld since 1989 and is still actively innovating in the field of pipe spool prefabrication. This presentation gives a summary of the product's third generation, the Rotoweld 3.0, and it focuses on how the most efficient users operate their machines on a daily basis. Moreover, the presentation will explain how welding parameters are developed and optimized. Finally, Christian will share some insight on the near future of the product line.

**Date:** Monday April 29, 10:50 a.m. - 11:50 a.m.

**Speaker:** Dale A. Flood, Project Manager, TRI Tool Inc.



## Bio

Dale started as a Pipefitter/welder, worked as a weld superintendent at several nuclear facilities supervising manual and mechanized welding operations. Currently working as a Welding Project Manager, R & D, he has numerous patents for welding automation. As President of the American Welding Society (AWS) he serves on the Board of Directors, a member of the D10 Committee on Piping and Tubing, the D10U Sub-committee on Orbital Pipe Welding, is on the Sacramento Section Executive Committee, and numerous other professional development committees. He previously served as the AWS District 22 Director covering northern California and Nevada, an AWS Director-at-Large nationally and as an AWS Certified Welding Inspector exam supervisor.

## Topic

*Mechanizing the Welding Industry*

## Abstract

The US automotive industry has installed a new record of approximately 17,500 industrial robots in 2016. In the last seven years, the operational stock increased by about 52,000 units.<sup>1</sup> The International Federation of Robotics says 2.6 million industrial robots will be installed worldwide by 2019.<sup>2</sup> The American Welding Society estimates we are going to need more than 370,000 welders in the next 10 years.<sup>3</sup> U.S. Bureau of Labor Statistics, fewer than five percent of the nation's welders are women.<sup>4</sup> Do you think these statistics will not affect you? What is a person supposed to do when robots start taking over an industry? It started with automotive, moved to heavy industrial equipment, then to all sorts of sheet metal components and what is next? Pipe? Structural components? Do you ever think, "They might be able to do this in a factory but they cannot do it in a fab-shop and especially not on a jobsite. Think again! It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change."<sup>5</sup> Do you have a game plan? We do!

## Notes:

1. International Federation of Robotics Chicago Apr 25, 2017
2. Machine Design Aug 4, 2017
3. AWS's This Week in Welding ([aws@multibriefs.com](mailto:aws@multibriefs.com)) Aug 5, 2017
4. U.S. Bureau of Labor Statistics
5. Charles Darwin



**Date:** Tuesday, April 30, 8:00 a.m. - 9:00 a.m.

**Speaker:** Kenny Ruggles, International Representative, United Association

## Bio

Initiated into Plumbers and Pipefitters Local 577 Portsmouth, Ohio March 1983. Completed Apprenticeship September 1986. Became Welding Instructor for Local 577 Apprenticeship from 1989-2001. Welded in the industry from 1984-2001. Elected Business Manager of Local 577 October 2001. Served as Business Manager until August 2007. Appointed Special Representative for the United Association September 2007 and assigned to the Energy Department. Elected as International

Representative at the UA Convention, August 2011, continuing working in the UA Energy Department until 2016 when elected International Representative at UA Convention and assigned the states of Ohio and West Virginia where responsibilities remain today.

## Topic

*How the UA is Addressing the Shortage of Welders*

## Talking Point

- Shortage of Welders
- Increase in number of large industrial projects (UA's use of the Industrial Info website)
- UA's emphasis on organizing non-union workers
- UA Welder training program in Portsmouth, Aurora, and soon to be Connecticut
- How the new process for implementing the training programs works
- How successful the programs have been
- Looking for support from attending contractors and locals

**Date:** Tuesday, April 30, 9:10 a.m. - 10:10 a.m.

**Speaker:** Barry Messer P.E, Technical Director for Metallurgy and Welding, Fluor Corp and Messer Engineer Ltd



## Bio

Barry Messer is a Technical Director for Metallurgy and Welding with Fluor Corp and Messer Engineer Ltd in Calgary, Canada, and is also a Director with the Canadian Welding Bureau (CWB). Barry is a Professional Engineer and has over 35 years experience in metallurgy, welding, materials selection and NDE development. He is regularly involved in the analysis and mitigation of fabrication and in-service failures for the chemical, petroleum, power, pipeline and mining industries.

## Topic

*New Brittle Fracture Susceptibility in Carbon Steel Pipe, Fittings and Flanges that meet ASME Code*

## Abstract

Severe reductions of toughness properties of new fabrication carbon steel piping components have created a new brittle fracture risk in the last few years. The issue is becoming widespread globally, affecting up to 30 percent of materials tested with a smaller percentage exhibiting cast iron like properties. This phenomenon contradicts the ASME Code which assumes, based on historical material properties, that these materials behave in a ductile manner where instead they behave in a brittle fashion at temperatures between -29°C (-20°F) to +15°C (+59°F). Facilities that operate at and below room temperature are at increased risk for this “break before leak” brittle phenomenon. ASTM and ASME exempts testing to mitigate risk of brittle fracture for these materials at these temperatures and wall thicknesses.

This presentation discusses the historical literature, recent metallurgical investigations, findings, and factors that contribute to susceptibility to brittle fracture. Also provided is guidance on how to avoid low toughness and mitigate risks of in-service brittle fracture to ensure that operating facilities are suitable for service.

**Date:** Tuesday, April 30, 10:20 a.m. - 11:20 a.m.

**Speaker:** Britton Langdon, President of FabPro

## Bio

Britton Langdon is President of FabPro, a construction software company located in Cedar Rapids, Iowa. FabPro has developed an unmatched software solution aimed at better tracking the productivity and status of the construction processes. Prior to FabPro, Mr. Langdon served as the Director of Support Operations & Business Development



at Modern Piping where he directed their design and fabrication processes and subsequently sold those services to the industry.

## Topic

*Fabrication Measurement and Predictive Management*

## Abstract:

With increasing scope of projects going through fabrication facilities, it is imperative that contractors and shop foreman have a real-time understanding of how the shop is performing, how long the work in front of them will take, and whether or not the shop will meet the delivery dates that have been set. With accurate shop tracking and predictive analytics, shop foreman today can better manage their work with far less effort than ever before.

**Date:** Monday, April 30, 11:30 a.m. - 12:30 p.m.

**Speaker:** Chris Freeman, CAE, GBA, TMP, Chief Operation Officer, NCPWB of Detroit and Chairman of Welder Database Task Force.

## Bio

Chris is the Chief Operations Officer for the Mechanical Contractors Association of Detroit. He graduated from Kettering University (previously known as GMI Engineering & Management Institute) with a Bachelor's Degree in Engineering and has worked for MCA Detroit since 1998. The American Society of Association Executives recognizes him as a Certified Association Executive (CAE).



Currently Chris serves as a Trustee on all 14 of the UA Local 98 and 636 Trust Funds and since he believes firmly in continual education has earned the Group Benefits Associate (GBA) and the Trustee Master Program (TMP) certifications from the International Foundation of Employee Benefit Plans (IFEFP) and is working towards earning his CEBS certification.

## Topic

*National Welder Database: The Next Generation*

## Abstract

Have you seen the new database? Are you intimidated by it? New shouldn't be scary. MCAA invested in the new database as a service to NCPWB members and the Task Force which worked on the database redesign, as well as the Beta Testers who tested it, consisted of individuals who regularly utilize the database and wanted it to be as simple to use as possible. If you haven't used the database; come learn how easy it is to do the tasks which are most common. If you have used the database; come learn a few tricks to make your life better. Feel free to ask questions during the presentation.



# 2019 NCPWB Technical Conference

The Resort at Longboat Key Club ■ Longboat Key, FL  
April 28 – 30, 2019



## Attendee Information

Attendee Name \_\_\_\_\_ Badge Name \_\_\_\_\_  
 Spouse/Guest Name \_\_\_\_\_ Badge Name \_\_\_\_\_  
 Company Name \_\_\_\_\_ Title \_\_\_\_\_  
 Street Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 \*Registrant's E-mail \_\_\_\_\_ Cell Phone \_\_\_\_\_

\*Please note: E-mail address is required. All agendas and minutes will be sent electronically only.

Registration Type	Quantity	Fees
Primary Registrant	<input type="checkbox"/>	\$ 795
Spouse/Guest (18 years of age and older)		\$ 160
Child (17 years of age and younger)		\$ 60
<b>Total Due</b>		<b>\$</b>

## MCAA Cancellation & Refund Policy

If it becomes necessary to cancel your participation in the conference, please send **written** notification to MCAA as soon as possible. Please note the following refund information:

- Substitutions are always accepted.
- You will receive a full registration refund if you cancel by **April 5, 2019**. Cancellations after this date will be handled on a case-by-case basis.

Check (payable to MCAA)                       AMEX                       MC                       VISA

Account Number \_\_\_\_\_ Expiration \_\_\_\_\_  
 Cardholder Name \_\_\_\_\_ Billing Zip Code \_\_\_\_\_  
 Signature \_\_\_\_\_

## Golf Information

Golf will be played on the Links on Longboat Golf Course golf courses on Monday, April 29<sup>th</sup> and Harbourside Blue/Red on Tuesday, April 30<sup>th</sup> at the rate of \$77/player. **Fees will be charged to the credit card provided for your meeting registration.** If you must cancel golf, you need to do so through MCAA by **April 5, 2019, or you will be charged the fee.**

Please check the appropriate boxes below. Rates include greens fees, a round of 18 holes, shared cart rental and bag storage. Specific course assignment subject to change based on conditions and maintenance schedules.

**Monday Golf**                       I will be playing                       My spouse/guest will be playing                       Lefty                       Righty  
**Tuesday Golf**                       I will be playing                       My spouse/guest will be playing                       Lefty                       Righty

I would like my foursome to include: \_\_\_\_\_

## Hotel Registration

Room Type	Room Rate	Room Type	Room Rate
Standard Beach View Guest Room	<input type="checkbox"/> \$259	Beach View Junior Suite	<input type="checkbox"/> \$279
Lagoon View and Golf View Junior Suite	<input type="checkbox"/> \$259		

\* The Guest Room Rates are quoted exclusive of applicable state and local taxes (which are currently 12%). Guests will incur a \$20 resort fee per room per day. Fee is subject to 12% tax.

Arrival Date \_\_\_\_\_ Departure Date \_\_\_\_\_

Sharing Room With \_\_\_\_\_

Do you have any special hotel requirements? \_\_\_\_\_

⚠ Please contact MCAA Meetings Department at (301) 990-2217 if you require special accommodations to fully participate in this event.

## Rooms at the Group Rate Are Subject to Availability

Reservations are made on a first come, first served, space available basis upon payment of meeting registration fee. Cancellations within **10 days of arrival** may result in forfeiture of deposit. MCAA does not guarantee a room at The Resort at Longboat Key Club or at the group rate for registrations received after April 5, 2019. Check-in is 4:00 p.m. and check-out is 11:00 a.m.

Same card as above                       Check (payable to The Resort at Longboat Key Club)                       AMEX                       MC                       VISA

Account Number \_\_\_\_\_ Expiration \_\_\_\_\_  
 Cardholder Name \_\_\_\_\_ Billing Zip Code \_\_\_\_\_  
 Signature \_\_\_\_\_

Please return this form by FAX to 1(240) 238-2699 or by mail to MCAA Meeting Dept., 1385 Piccard Dr., Rockville, MD 20850

- If you have any questions please contact MCAA Meetings Department at (301) 990-2217 or email [eventregistration@mcaa.org](mailto:eventregistration@mcaa.org).
- Our business hours are 9:00 a.m. – 5:00 p.m. Eastern Time, Monday through Friday.