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Pigging Industry News

the newsletter of the Pigging Products & Services Association

THE PRESIDENT'S LETTER

By Jessica Nichols, Inline Services, USA

It is an honor to be the first female President of the PPSA. My predecessors have left some incredibly big shoes to fill. A huge thank you to Michael Rapp for the hand off. I welcome our new Directors, Brett McNabb of Apache Pipeline Products, Canada and Felix Schmidt of 3P Services GMBH & Co KG | Lwould also like to thank Chuck Harris and Mark Olson for their time as directors as they are stepping down this year. Two of PPSA's most esteemed advocates, John Tiratsoo and Peter Fretwell, received honorary PPSA memberships at the Annual General Meeting. Their contributions are an integral part of the associations' evolution and continued growth.

Thank you to the Golf Sponsors and players for taking part in the annual golf tournament held on Monday, February 18. The event was a huge success with 83 participants that made up 21 teams. Money raised goes towards supporting young people in the industry. To further PPSA's support of the next generation of

pipeliners, we are pleased to have sponsored the Oklahoma State University Institute of Technology Pipeline Integrity Course graduation.

2019 is certainly off to a busy start for PPSA. We kicked-off 2019 with the PPIM conference and Annual General Meeting in Houston, Texas this February, followed by exhibiting at the 2019 Pipeline Technology Conference in Berlin, Germany this March.

Following the jointly hosted PPSA and PRCI pipe test loop event in April 2018, PPSA is in the process of setting up a similar event at Petrofac's test loop in Montrose, Aberdeen for YPP members. This will be in conjunction with the PPSA seminar.

The annual PPSA seminar is scheduled for November 20, 2019 in Aberdeen, U.K. The theme for this year's seminar is 'Operational Pipeline Pigging' with emphasis on the latest developments within the industry. A Call for Papers

NEW Members

Individual

Marian Copilet, Malaysia

Monica Fernandez, Oman

announcement was emailed on May 14, 2019. The deadline for submissions is Friday, June 28, 2019. For more information, visit www.ppsa-online.com/seminar.

Pipeline and midstream asset construction remains strong with oil prices at current levels. Our industry remains committed to "zero incidents" and the PPSA remains focused on supporting the efforts necessary to achieve and sustain an incident free industry. Through communication and closer cooperation, progress continues. Be Safe.

It is an exciting time to be PPSA president! We are well into the second quarter of 2019 and the industry is holding strong. Thanks to everyone in the Association for your support leading up to my current position as President. I look forward to making contributions that will enhance all the great things PPSA is currently doing for the industry!

The PPSA golf tournament

The tournament took place on Monday 18th February at the BlackHorse golf Club in Houston, USA. Thanks to our golf sponsors and the players for making it a very enjoyable event.



















1st Place – Team Speed Gilbert Thomson John Walker

Eric Pool Jason Herrington

Winners

Longest drive—Tyler Hunt Closest to the Pin—Trent Bertholet











To facilitate a rapid and appropriate response, TDW mobilized pipeline cleaning and ILI teams from regional solutions centers in the U.S. and Mexico.

Approach: Safe mobilization for effective progressive Pigging and accurate ILI

Prior to ILI, the pipeline must be cleaned to clear debris that can prevent the ILI tool's sensors from contacting the pipe wall and result in degraded data.

Progressive pigging—running a series of increasingly aggressive cleaning pigs in a pipeline segment until cleaning specifications are met—is the recommended practice for pre-ILI cleaning. The process typically begins with a pig made of urethane foam that's used to prove the pipeline is piggable. With each additional run, a more aggressive pig is set into action. The series is highly variable, and there is no standard progressive pigging program: Pipeline conditions determine the types of pigs to be used, and the number of runs depends on cleanliness requirements.

In this case, the progressive pigging plan included five 8-inch cleaning or gauging tools, each run once from the launcher in Nuevo Laredo to the receiver in Laredo.

After the pipeline met the cleaning standard, TDW performed ILI using its MFL+DEF technology. Because the combined tool detects and produces accurate data about pitting, general corrosion and interacting threats such as dents with metal loss in a single run, it saves operators time and money. Specifically, the MFL tool identifies volumetric corrosion features while the high-resolution DEF tool detects minute bore reductions— including dents, expansions, ovalities, wrinkles and misalignments.

The 8-inch MFL+DEF tool was propelled by water from Laredo to Nuevo Laredo. Once the inspection tool was received, the water remained in the pipeline and was used to complete the hydrostatic testing.

Results: Reinstated Pipeline Meets Operator's Business Development Needs

Analysts at the TDW global pipeline integrity solutions center in Salt Lake City interpreted the ILI tool data and expedited a preliminary report to the customer; the final report was ready within 30 days. The inspection survey detected a total of 32 metal loss groups, none of them pressure-reducing. This meant the pipeline could be reinstated to meet the operator's business development needs without any additional repairs.

The project was completed within the operator's time frame and other specifications. Since then, TDW has provided the operator with additional isolation, inspection and pigging services.

3X Engineering repairs oil pipelines in The Netherlands

The objective of the repair, performed in October 2018 by **3X ENGINEERING** (3X), was to repair and reinforce 4 external corrosion defects on 2 straight lines (2 defects situated on the 10" line and 2 defects on the 12" line). The pipes are located on the top of the bridge of the platform. Each repair is designed specifically according to the pipe characteristics, the operating conditions and the size of the defect. According to ASME PCC-2 standard and 3X repair calculations, 4 layers of REINFORCEKiT® 4D HT+, specifically dedicated to high temperature, were determined to repair each of the 4 defects.

Because of the complex pipes situation, the client provided scaffoldings to perform the repair.

Before starting the composite reinforcement, 3X technicians first recognized and delimited the repair areas with adhesive tape. Surface preparation was completed with grit blasting to get a good surface roughness and ensure the bonding between the steel pipes and the composite. The surface was then cleaned using acetone and hygrometric conditions were checked before wrapping procedure.

The composite repair for each defect was performed as follows:

- F3X8 filler application on each defect to give back the initial shape to the pipes.
- Wrapping process covering the delimited areas was completed using Kevlar® tape impregnated with R3XHT+ resin (4 layers for each defect but with a specific repair length in accordance to defect characteristics —> 260mm repair length for both 10" line defects, 457mm and 1060mm for the defects on 12" line).
- Reference plate for traceability purpose was positioned on each repair.

For each repair, samples of filler F3X8 and resin R3XHT+ were taken during installation for quality control. After 3X operation, anti-UV coating was applied by the client to protect the repair.

The lines suffering from external corrosion were successfully repaired using the REINFORCEKiT® 4D

HT+. Hardness measurements were performed and concluded the success of the repair. The design life for this composite reinforcement is 10 years.



Wrapping in progress

** 3X ENGINEERING is currently seeking for a Distributor in USA and Canada **