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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

I would like to take this opportunity to express my deep appreciation for the honor of being the first female PPSA President, 2019 was an exceptional year for the pigging industry and 2020 is off to a solid start. In addition, I would like to welcome the new PPSA members to the community and thank our existing members for their ongoing support.

It has been a busy several months for PPSA! The PPSA seminar took place in Aberdeen in November. It was a very informative event with 9 technical papers being presented and an exhibition. The papers and presentations are available at www.ppsaonline.com/papers. The day before the seminar, Petrofac and PPSA hosted a visit to the Montrose testloop (near Aberdeen) for YPP (Young Pipeline Professionals) members giving them an overview of pigging, as well as the opportunity for hands-on experience launching/receiving pigs.

Looking ahead, on Monday, February 17th the annual golf tournament takes place at the BlackHorse Golf Club in Houston. Thanks to both the sponsors and players for supporting this event. All proceeds go toward funding YPP projects. For details please go to www.ppsa-online.com/

The golf tournament kicks-off the 32<sup>nd</sup> Annual PPIM Conference that takes place February 17 - 21st at the George R. Brown Convention Center in Houston, Texas. PPSA will be exhibiting at booth 716. Please stop by and introduce yourself if you are there. The PPSA Annual General Meeting will be held at 3pm in the Marriott Marquis Hotel. Your participation is welcomed and encouraged to help shape and inform the direction of the Association.

During my time as PPSA President, it has been exciting observing the next

## NEW Members

#### **Associate**

Pipeline Products & Project Services Ltd., Nigeria

#### Individual

Vinu Vidhyadharan, U.A.E.

generation of pigging and pipeline integrity professionals entering the industry redefine best practices in pigging design, manufacturing and quality control processes. Pigging manufacturers are learning to embrace a culture of continuous improvement in order to meet the ever-increasing demands of the customers they serve. I said it last year, and I will say it again; it is an exciting time to be in the pigging industry!

Thanks to everyone at the Association for your support this year! Although I will be "passing the torch" soon, I look forward to continually making contributions that will enhance all the great things PPSA is currently doing for the industry, as well as supporting the next PPSA President.

#### Thank to all the golf sponsors!













































# More than 100 presentations in 30 technical sessions at 15<sup>th</sup> Pipeline Technology Conference in Berlin

Europe's leading pipeline event is now taking place for the 15th time, this time from 30 March to 2 April 2020 in Berlin's Estrel Congress Center.

A key factor in the success of **ptc** is the many operators from all over the world who will be present during the four-day event. For them, there is a series of high-ranking plenary sessions and panel discussions, all of which deal with topics of interest to operators worldwide. This includes comprehensive topics such as "Safety" and "Integrity" as well as current challenges in the areas of "Qualification & Recruitment", "Difficult to Inspect Pipelines", "Illegal Tapping" and "Digitalization". Important future topics such as hydrogen transport and Power-to-X are also included in the program.

Another unique selling point of the ptc is its internationality: "About two thirds of the participants come from abroad. Last year, we saw the greatest growth from Latin America and Eastern Europe, a large proportion of which were pipeline operators," says Dennis Fandrich, Chairman of the Pipeline Technology Conference. This makes ptc the most international event of its kind in the world. More than 900 participants from 50 different countries and delegations from 80 different pipeline operating companies are expected to attend ptc 2020.

The conference will be accompanied by a trade exhibition at which leading technology and service providers and pipeline operators will be able to present their innovative pipeline solutions. With more than 90 exhibitors, a new record is also expected in this area in 2020. The conference and the trade exhibition will be complemented by thematically oriented one-day seminars, workshops and operator round tables in which participants will be able to delve deeper into various topics.

### 3X Engineering performs high temperature repair in Oman

The objective of the repair, performed in August 2019 by **3X ENGINEERING (3X)** and its local distributor **SYNERGY**, was to reinforce 2 tees of 8" suffering from internal corrosion and through wall defect.

Calculations using 3X software were performed to define the minimum thickness and length necessary to give back the full integrity of the water pipe, (according to the design pressure <1 bar and operating temperature 60°C). Following client's request, it was decided to design the repair according to no standard, to reduce the number of layers. In these conditions,

3X advised to apply a minimum of 12 layers of REINFORCEKiT\* 4D HT+ (specifically dedicated to high temperature) to reinforce the tee with through wall defect and 8 layers for the one suffering from internal corrosion.

Due to through wall defect, the client shutdown and flushed the line in order to apply the composite on the leak.

Before starting the tee reinforcement, surface preparation was completed with grit blasting to get a good surface roughness and ensure the bonding between the steel pipe and the composite. Surface profile evaluation was performed to confirm the roughness was superior to 60µm. The surface was then cleaned using acetone and hygrometric conditions were checked before wrapping procedure (steps described below).

- F3XS1 filler with metallic plate was applied on through wall defect to seal the leak (this step was not necessary for internal defect).
- Wrapping process covering the delimited areas was completed using Kevlar® tape impregnated with R3XHT+ resin (12 layers for hole defect and 8 layers for internal defect -> both of them with 600mm repair length).
- Reference plate was installed on each repair for traceability purpose.

For each repair, samples of filler and resin were taken during application for quality control. This job was a great challenge because of the several complicated data: tee geometry and hole defect and high temperature. Despite these difficulties the 2 lines were successfully repaired using our REINFORCEKiT® 4D HT+.



View of tee with through wall defect



Wrapping completed (12 layers) & ID plate installed