



## Pigging Industry News

*the newsletter of the Pigging Products & Services Association*

### THE PRESIDENT'S LETTER

*By Michael Rapp, ROSEN Group, Germany*

I'd like to take this opportunity to welcome the new members of our PPSA community and thank the over 120 existing members for their ongoing support. The updated PPSA Buyers' Guide & Directory of Members 2018/19 has been published on our website and mailed to pigging industry representatives across the globe. If you haven't received your complimentary copy or would like to order additional copies for business partners, please contact Diane Cordell at [ppsa@ppsa-online.com](mailto:ppsa@ppsa-online.com). A new useful addition to our website is a reference list of key regulatory bodies and industry standards: <https://www.ppsa-online.com/regulatory-authorities>

Let's briefly look back at the recent IPC and IPE exposition in Calgary, at which PPSA exhibited, along with over 1300 attendees and over 250 exhibiting companies. Our booth was a great opportunity to spread the word about the products and services that our members and our Association provide. As for IPC, the world-class selection of papers and poster sessions has been very inspirational, providing a glimpse into the future of pipeline integrity management.

Next on our agenda is the annual PPSA seminar on 'Pipeline Pigging', that will be taking place in Aberdeen, Scotland on November 6th and 7th 2018. A tutorial on 'Flow Modelling & Assurance' will be run on the first day, followed by a networking dinner. The second day features eight papers on the

advances in Pigging technologies alongside an exhibition. Please see [www.ppsa-online.com/seminar](http://www.ppsa-online.com/seminar) for details on the program and how to book your attendance.

Further dates to mark in your diary include our annual PPSA golf tournament in Houston, Texas on Monday 18th February. Registration for players and hole sponsorship will open soon. This will be followed by our Annual General Meeting on Tuesday 19th February.

Looking further ahead, there seems to be a feeling of optimism across the pipeline pigging industry, as the volume of work appears to be rising, as well as the recognition of our sector's contribution to securing energy supply. Furthermore, regulatory authorities in the U.S. have indicated the upcoming implementation of more stringent regulations, such as the requirement to inspect Medium Consequence Areas (MCA), the assessment of Combined Threats, an increasing scrutiny on Distribution Networks and the necessity of Tracable, Verifiable and

## NEW Members

### Full

**Majestic Offshore Sdn Bhd,  
Malaysia**

### Associate

**Linalog Pipeline Inspection  
Pte Ltd, Singapore**

### Individual

**Peter Connery, USA**

**Ammar Elfatih Mohamed Ali,  
Sudan**

Complete (TVC) Pipeline Records, including material properties. As we have seen in the past, some of these might over time be adapted by regulatory authorities in other countries. Adding to the above is a rise in unconventional oil and gas production, combined with the constrained public energy infrastructure that has already led to temporary shortages in gas supplies in some regions. These trends are visible all across the world, driven by the increased utilization of gas to produce electricity, and will lead to further new pipeline construction. All together this indicates a growing demand in pipeline pigging products and services, especially rewarding companies that bring technology innovation to pipeline integrity. ●



## 3X Engineering repairs subsea gas pipeline

In May 2018 **3X ENGINEERING (3X)** and its local distributor **PETROENERTECH**, reinforced a 16" gas subsea pipe in Viet-Nam. The pipeline was suffering from internal corrosion at a 45-meter depth and had a maximum operating temperature of 45°C and an operating pressure of 125 bars.

According to ASME PCC-2 and 3X repair calculations, 70 layers of R4D-S were required to repair the defect.

Underwater, preliminary operations were performed prior to surface preparation by sandblasting to get a good surface profile (superior to 60µm).

The repair was then performed as follows:

- Preparation of the composite plate recovered with F3XSS filler and application over the defect using ratchet belts for tightening (after 2 hours of curing, the belts were removed).
- P3X32 primer application on the whole area to be repaired before wrapping to ensure a good bonding between the steel pipe and the composite.
- Kevlar® tape impregnated with R3X1050S resin and wrapped around the pipe. The tape impregnation is performed using BOBIPREG (3X specific machine allowing a quick and regular impregnation resin/fiber). Seventy layers were necessary to repair the defect (i.e. 35 passes of 50% overlap) for a total repair length of 1503mm.
- Specific subsea markers installation on the composite (to avoid any contact with the pipe), on each side of the repair. For that reason, it was necessary to increase the length of the repair of 150mm each side to be able to install these markers. At client's request, 3X created and installed these subsea devices to localize easily the defect at pigging inspection.
- Finalization of the repair with reference plate positioning for traceability purpose and protective cover application over the repair to protect the pipe from subsea aggressions.

The subsea reinforcement was successfully performed using REINFORCEKIT® 4D SUBSEA product. The good collaboration between 3X specialists, PETROENERTECH, PVMTC (diving company) and the client's representatives were also the key to success of this job.



Composite wrapping in progress

## Europe's leading pipeline event with additional key topics

From 18-21 March 2019, the international pipeline community will meet for the **14th Pipeline Technology Conference (ptc)** in Berlin. More than 700 participants and over 80 exhibitors from 50 different nations are expected. Delegations from more than 70 different pipeline operators took part in the last ptc.

In addition to the traditional technical focus of the conference and exhibition (19-21 March 2019), the topics "Qualification & Recruitment" and "Public Perception" will be covered in complementary "ptc Side Conferences" on 18 March 2019.

The pipeline industry as an employer must continue to work to remain attractive in the competition for qualified young talent. This important issue cannot be solved at national level alone. An international exchange of experience is essential for training and further education and for a qualified comparability of the various models. The day before ptc, a separate "ptc Side Conference" will be dedicated to this complex of topics.

Pipeline projects are today more than ever the subject of public debate and will be examined more closely and critically in the near future. Previous practices in dealing - or not dealing - with the public are no longer accepted. Directly before the ptc, the various approaches towards handling criticism, protest and manipulation will be discussed in an international exchange of experiences in a "ptc Side Conference".

Further information on the overall concept of the new ptc with the described side conferences, 6 seminars, several plenary sessions and 25 technical sessions can be found at [www.pipeline-conference.com](http://www.pipeline-conference.com).



Pipeline Technology Conference (ptc)