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October 2020

Pigging Industry News

the newsletter of the Pigging Products & Services Association

THE PRESIDENT'S LETTER

By Felix Schmidt, 3P Services, Germany

Another three special months are lying behind us. The PPSA members have always played an important role to the industry, but the current pandemic is highlighting this even more. Pigging products and services are a key to operating safe and efficient pipeline networks, which are essential infrastructure for the economy. Also driving technological developments and adapting to special circumstances is a strength of many PPSA members on which they could resort to adapt to the new demands in connection to COVID-19.

International travel and possibilities to meet clients, colleagues, partners or friends around the globe personally is still significantly affected, so we as an association need to adapt as well.

In this context, the yearly PPSA Seminar in November will be held online, to enable everyone to participate and to ensure the safety of all of us. The Virtual PPSA pigging

seminar will be held on 17th and 18th November via GoToWebinar. It comprises of nine technical presentations from pigging specialists, which further explore PPSA's chosen topic for the year , Challenges in day-today Pigging'. The programme and registration are available at https:// ppsa-online.com/seminar. Members and non-members can join the seminar free of charge. All papers and presentations will also be added to the PPSA website after the seminar.

Our new printed Directory of Members is now available and has been mailed worldwide. If anyone would like to subscribe for a free of charge annual copy they can do so at https:// ppsa-online.com/subscriptions. The Directory also includes a number of new members, which I would like to welcome, so please have a look at it.

At this stage, the annual PPSA events prior to the PPIM conference are still planned to be held in Houston. The

Members

Full

American Pipeline Solutions, USA

Cistom Engineering, UK

Individual

Marcelino Guedes Gomes. Brazil

annual golf tournament fundraiser is scheduled for Monday 22nd February 2021. Funds raised will help young pipeline professionals. We are looking for people to make up teams and to sponsor holes. If you are interested please contact Diane for more information at diane@ppsa-online.com.

The Annual General Meeting will be held in Downtown Houston on Tuesday 23rd February at 3pm. The PPSA will soon be accepting nominations to fill vacancies for two new Directors from the Eastern Hemisphere in 2021. Please let us know if you'd like to nominate someone.

I am looking forward to seeing many of you online in November and wish good health to everybody.



An online seminar

Challenges in day-to-day Pigging seminar 17th / 18th November 2020 Aberdeen, UK

for Operators, Contractors and Engineers

www.ppsa-online.com

Industry news.

Case Study - Site operations: Pull-through Pig—Inpipe Products

iNPIPE PRODUCTS™ was approached to provide an onshore to offshore cable pull-through pig and site execution to an offshore windfarm service Company. The 12"NS HDPE pipeline required a 2" messenger wire threading through the 600m long onshore to offshore pipeline prior to a 5" cable pull-through by the Client.

Following review of the project details and discussions with the Client, iNPIPE PRODUCTSTM provided a turnkey solution, which included:

- Project Management
- Pig Design
- Development of Pigging Procedures and Risk Assessment
- Manufacture of the Cable Pull-Through Pigs
- Site Management
- Site Personnel
- Pigging Equipment Supply including Temporary Pig Launcher
- Cable Pull-Through Operations



14" x 12"NS temporary pig launcher



12"NS Cable pull through pig

The project required iNPIPE PRODUCTSTM to mobilise their site personnel, cable pull-through pig, temporary pig launcher and equipment spread to a site on the east coast of Scotland. The pipeline is 12"NS in diameter x 600mm long with numerous bends (size unknown).

Following the mobilisation of the personnel, temporary pig launcher and equipment on schedule, the operation was coordinated in conjunction with a 3rd party on behalf of the end Client.

On completion of the ground works and with the pipeline exposed and the temporary launcher / receiver installed complete with pigging pump fitted, the cable pull through was good to commence.

After pigging of the metal bodied pig which became lodged due to an unknown crushing of the pipeline, a special dual density foam pig was produced in record time to be on-site to be able to run through the pipeline, but also be able to negotiate a 45% pipeline reduction.

The project was completed successfully and ahead of budget.



TDW isolates burning natural gas liquids pipeline for repair following third-party strike

T.D. Williamson (TDW) crews isolated a ruptured 14-inch natural gas liquids (NGL) pipeline while product continued to flare off, enabling repair while the system remained in service and creating the conditions for the fire to extinguish itself.

The west Texas pipeline exploded after it was hit by a third-party contractor excavating the right-of-way nearby. The explosion and massive fire that followed, which shot flames 300 feet into the air, injured four people, one critically, and destroyed the trencher and all other equipment within a 300-yard radius. It was said at the time of explosion the concussion was felt (10) miles away. The responding fire department registered a temperature in excess of 1500°F.

The operator moved quickly to reroute product at a drastically lower flow rate. Within hours of the line strike, TDW had begun mobilizing equipment and personnel to the site, including eight hot tapping and plugging (HT&P) technicians who arrived from multiple TDW service centers in Texas, Oklahoma and California to provide around-the-clock coverage.

The team performed a double STOPPLE® operation to isolate the affected section. Sweeping the hot tap holes — a process that removes any metal chips or debris that could prevent the STOPPLE head from sealing securely — created a partial seal that caused the fire to bellow; when the STOPPLE heads were fully set, they robbed the fire of the NGL fumes fueling it, and the blaze extinguished itself.

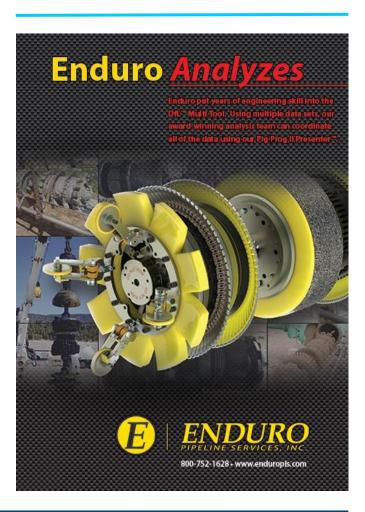
STOPPLE plugging machines have safely and reliably isolated pressurized sections of pipeline without shutdown or interruption of service for more than 60 years. They are part of a total TDW advanced isolation and intervention solution that includes hot tapping machines, fittings, valves and plugging heads.

Charles Parrish, TDW technical sales representative, West Region, Texas & New Mexico, said the company's response included 40 individuals, seven operations centers and six departments from across the U.S. Parrish said that full COVID-19 precautions were followed at every step.

"Everyone came together so efficiently that in less than six hours after the operator's initial call the fittings were out the door," Parrish said. "And it took less than one day on the job site to solve our customer's problem, safely and successfully."



TDW isolates ruptured 14-inch natural gas liquids pipeline



ROSEN Group headed for hydrogen

Over 30 years of pipeline experience now applied to hydrogen pipelines.

With more than 30 years of experience in pipeline integrity management, the **ROSEN Group** is investing in a new challenge to support operators in the transition towards a low-carbon future. The company has been developing a holistic approach for managing the integrity of hydrogen pipelines. This approach can be applied to the conversion of existing natural gas pipeline grids to hydrogen, or used to new build networks.

Hydrogen is a reliable and efficient energy source that will contribute to the increasing demand for renewable energies. According to "Shell Hydrogen Study — Energy of the Future?" (2017), 1,600 miles of hydrogen pipelines are already in operation in the US alone. The increasing interest in transporting this energy source with pipelines brings on two specific challenges: the conversion of existing natural gas infrastructure for hydrogen transportation and the need for integrity management of these assets, as the long-term effects of hydrogen on pipelines introduce new challenges compared to natural gas.

ROSEN is fostering a constant knowledge exchange with operators and experts to prepare engineering guidelines and practical procedures for this transition towards hydrogen. To help ensure the active development of the market, the company is participating in the joint-industry partnership "HYREADY."

In cooperation with numerous pipeline operators and industry stakeholders, ROSEN's participation in the "HYREADY" project includes contributing to the investigation of the consequences of hydrogen on existing gas infrastructures and practicable mitigating measures. Having many years of experience in providing comprehensive inspection and integrity solutions for critical equipment used in harsh environments, including already successfully performing in-line inspections in 100% hydrogen pipelines during operation, ROSEN will offer valuable practice-based insight and world leading expertise to this joint industry project.

ROSEN's aims are to encourage the pipeline industry to be ready for hydrogen by proposing practicable processes and approaches for the introduction of this energy source into the existing grid and continue to provide operators innovative solutions for a safe, sustainable future.



ON THE GO.

Round-the-clock availability is essential. Which is why ROSEN provides second-to-none service delivery. Get what you need, where and when you need it. Every time.





Shaping tomorrow's innovation today

Over the next five years, the **ROSEN Group** is sponsoring a professorship for "Semantic Information Systems" on the AI Campus of the **University of Osnabrück**, Germany. The computer scientist Prof. Dr. Martin Atzmüller was hired for the position and met the sponsor for the first time at the beginning of September.

Previously, the ROSEN Group had acquired a share in the German Research Center for Artificial **Intelligence** ensuring the dynamic continuation of the trustful cooperation of both partners. This important cooperation in the field of Artificial Intelligence (AI) is now followed by the sponsoring of the professorship for "Semantic Information Systems" on the AI Campus of the University of Osnabrück, Germany, as a next step towards the future. University President Prof. Dr. Susanne Menzel-Riedl expresses her gratitude to the ROSEN Group for its intensive support: "The commitment helps us to rapidly advance the expansion of the AI Campus at the University of Osnabrück. The professorship will be optimally embedded in the campus in an interdisciplinary manner, in order to not only address important research questions in the technical sense," the

University President expresses her satisfaction. She adds that it is important to consider not only information technology and cognitive science aspects in the profiling of Artificial Intelligence, but also other influences of the increasing use of AI, such as legal, sociological or ethical ones.

"Artificial intelligence is an important technology for the ROSEN Group and will provide us with an enormous innovation boost in the coming years. We are very pleased that we are in good hands on the AI Campus of the University of Osnabrück and that we can add another piece to the mosaic," Patrik Rosen, representative of the owner family, explains the commitment of the ROSEN Group. "The university not only researches and develops innovative software solutions, but also investigates ethical and legal issues, for example. Artificial intelligence is increasingly influencing society today, so it is important to shape this change positively. This is very important to our company".

Since August 1, 2020, the computer scientist Prof. Dr. Martin Atzmüller has been working on interpretable and explainable machine learning, the analysis of multimodal complex data, and interactive decision support within the framework of the endowed chair "Semantic Information Systems". "With the help of these Artificial Intelligence/ Data Science approaches, large amounts of data – which are obtained through digitalization and the Internet of Things (IoT) – are to be analyzed, semantically interpreted and thus made more useful for humans," the scientist explains. Atzmüller formerly worked as a professor at the universities of Würzburg and Kassel in Germany, the Université Sorbonne Paris Nord and the Dutch Tilburg University.

Tracerco secures large flooded member inspection (FMI) project in the Caribbean

Tracerco, part of **Johnson Matthey Plc**, has recently been awarded a large-scale project to verify the integrity of multiple platform members in the Caribbean sea.

Via the use of a Remotely Operated Vehicle (ROV), the TracercoTM Diagnostics Flooded Member Inspection will provide an 100% accurate and reliable method of identifying the presence of any flooding in multiple vertical, horizontal and angled members, without the need to remove any marine growth or specialist coatings.

Over the course of the 25-day inspection project, Tracerco's experienced subsea engineers will provide an immediate assessment of the degree of flooding for each member surveyed, before providing a full report of platform member integrity at the end of the project.



The operator will then utilise this data to inform any potential remedial work that is needed for each of their platform structures.

With Lloyd's Register recognition for its conformance and industry quality standard in the application of FMI, Tracerco was chosen as the technology solutions provider due its ability to provide 100% accurate measurements in real time. Not only does this ensure that inspections are right the first time, it also reduces the financial risk and impact associated with repeat inspections (or remedial work that may not even be required), meaning the operator can be very confident in the integrity assessment of their jackets.

To learn more about how a Tracerco DiagnosticsTM Flooded Member Inspection can allow you to reduce the operating costs of your subsea inspection campaigns, visit tracerco.com/services/subsea/ or email tracerco@tracerco.com

Successful baseline ILI project completed by Quest Integrity in Nigeria

By Chinedu Oragwu, Technical Advisor, Quest Integrity

Project Overview

A major Operator in Nigeria contacted **Quest Integrity** to perform a baseline ultrasonic (UT) in-line inspection (ILI) for an offshore 10-inch flowline. The baseline inspection was part of a larger offshore pre-commissioning scope with multiple offshore contractors on standby to commission the pipeline as soon as the baseline inspection had been completed. Project delays would adversely affect the client's KPI and product delivery commitments.

Challenge

The flowline had 8"/10" dual-diameter sections and 26mm wall thickness. In addition to the limited platform space, the launcher and receiver barrels were short (1.2m). The client had a narrow window for the cleaning and ILI campaign due to construction and commissioning demands and required Quest Integrity's urgent mobilization to complete the baseline inspection.

Solution

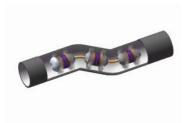
Quest Integrity mobilized a two-man crew and two dual-diameter 8"/10" InVistaTM UT ILI tools on an emergency basis within two weeks after receiving the initial invitation from the client. No modifications were required to the existing short 1.2m launcher and receiver barrels as the InVista tool was used for this project had a compact length of just 1.1m. Since all InVista tools provide 100% coverage for wall thickness and geometry (caliper) data in a single run, this eliminated the need to run an additional caliper (geometry) or gauge tool, ultimately reducing the time required to complete the baseline survey. Additionally, offshore mobilization and tool handling was enhanced by the 8"/10" InVista tool's small form factor and extremely lightweight (25kg), making it ideal for the space-constrained environment.

On-site confirmation of a successful baseline inspection was provided within two hours after receiving the InVista tool. Following the field

inspection data verification and preliminary report, an API 579-1 / ASME FFS-1 Level 2 fitness-for-service assessment was performed on the entire length of the line. The pipeline inspection data was analyzed for wall thinning and anomalies such as corrosion, denting and ovality, and the fitness-for-service of the pipeline was determined. The remaining strength factor (RSF) and reduced maximum allowable operating pressure (MAOPr) were also reported for the line.

A baseline inspection provides the basis against which integrity management evaluation can be performed through the pipeline service life. Quest Integrity's final inspection report documents any deviations from the design or installation drawings and identifies any manufacturing anomalies for future integrity management, including condition monitoring locations and recommended inspection intervals.





Quest Integrity's custom UT ILI technology

Benefits of the InVista Technology

The Quest Integrity InVista technology overcomes challenges associated with traditionally difficult-to-inspect and unpiggable pipelines.

- Improved safety and flexibility InVista tools are extremely lightweight, short and easy to handle. This allows them to be launched in short barrels, require no lifting equipment, less logistics and shorter preparation time which leads to time and cost savings.
- Simplified inspection process High-resolution UT sensors acquire direct measurements providing geometry and wall thickness data in a single inspection run; no gauging and caliper pigging is required.

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- 30% Local collapsibility Collapsible design allows for full navigation of the pipeline with a reduced local cross-section up to 30%. Combined with bi-directional capabilities, this alleviates the need to remediate ID restrictions in the case of malfunctioning valves or restrictions.
- Reduced operational risk InVista tools are low friction, neutrally buoyant, un-tethered, and bi-directional.

Secondary tool mobilized on-site - A backup tool is mobilized on-site as a standard operational practice to increase project efficiency and minimize the chance of delays at no extra cost to the client.

Meeting challenging requirements during pre-commissioning of a critical jet fuel pipeline

Halliburton Pipeline and Process Services successfully completed a pre-commissioning project in the Middle East on a 24-inch, 132-kilometer pipeline which transports Jet Fuel from a Refinery to an Airport. The work was considered to be of critical importance, due to the stringent acceptance criteria for Jet A1 Fuel at the Airport.

There were several significant challenges in the project including the following:

- The pipeline was constructed using internally uncoated steel pipe: the first such Jet A1 Fuel Service line in the region
- Onerous acceptance criteria: ASTM D5452/ IT423 calls for ≤1.0 mg/lit of debris, JIG 1530 requires water content ≤0.1 ppm
- Any non-compliant fuel must be routed back to the refinery by road tankers
- Lack of water in the area determined that it had to be re-used and optimized
- Disposal constraints restricted the chemicals which could be used in the hydrotest water
- The political situation in the region led to delays in construction materials
- Project schedule was critical due the strategic importance of the project

Halliburton developed tailored engineered solutions to meet these challenges, working with the client as partners during the pre-engineering stages to determine the methodology and basis of construction.

Initial pigging and cleaning of the pipeline was performed in 5 sections: based on availability of water and storage/evaporation ponds. The pigging sequence was engineered to maximize debris removal and bring final debris amount to below 5 kg per section in order to meet the

cleanliness acceptance criteria.

Approval was gained to use only a biocide treatment in the hydrotest fill water and to re-use it across the 5 Pipeline Sections. In order to prevent corrosion of the internal surface of the pipeline after hydrotesting, each section was dewatered and swabbed, vacuum dried and packed with Nitrogen in a short time frame.

The project was executed by experienced Halliburton engineers and crew whose detailed pre-engineering and preparations ensured flawless execution of the pre-commissioning services. Some of the key successes of the execution include:

- Initial cleaning runs of the 5 sections resulted in a debris level of less than 2 kg per 20 km section
- Filling operations were carried out with minimal air entrapment across all sections
- Hydrotesting required high resolution instrument accuracy, the pipeline operator and Halliburton worked together to establish a standard protocol
- Successfully re-used Hydrotesting water from section to section by analyzing water quality and re-dosing biocide based on results
- Drying acceptance criteria of -20°C was achieved successfully for the full 132 km pipeline in 12 days using Vacuum Drying
- The final cleaning run recovered less than 450 gm of debris, the acceptance threshold was 36 kg
- Successfully completed final gauge pigging in a single run, only using back-pressure for the complicated terminal end construction pipework

The unique combination of engineering, collaboration with the customer, efficiency of operation and optimization of schedules resulted in a successfully pre-commissioned pipeline with a record low debris recovery, thus exceeding the customers' expectations and successfully meeting their goals.



Remote monitoring of pipeline equipment and factory testing proves its worth post Covid-19 for STATS Group

Communication technology is transforming the way **STATS Group** conduct testing on client projects and on the safe monitoring of pipeline isolation tools when deployed.

A Factory Acceptance Test (FAT) is an important milestone of every project – providing assurance that STATS equipment is performing to specification.

The FAT is typically witnessed by the client (and where required by an independent verification body) at STATS operational base near Aberdeen in the UK, or at one of its international bases in Canada, America, the Middle East or Asia Pacific.

Increasingly, and particularly following the Covid-19 pandemic, witnessing a FAT at a STATS site is not always possible, so the pipeline technology specialist has developed a system where customers, regardless of location, can witness a FAT without attending in person.

Utilising up to 12 cameras, remote live streaming captures every aspect of a FAT. This high-definition stream, with real-time voice communication, is combined with live data feeds, and securely shared through a centralised web console to any global location. All data captured during testing is securely stored and can be easily accessed for future reference.

Steven Byers, STATS Group Director of Operations said: "Clients have been very positive on being able to remotely view Factory Acceptance Tests as they offer not only transparency and reliability, but lead to significant savings in travel and accommodation costs and time out of the office.

"Without the requirement to travel, remotely screened FAT's also help in reducing the carbon footprint of our customers and importantly during the Covid-19 pandemic, reduce the risk of spreading the virus."

The company's approach to exploring new ways of working has extended to the methods deployed when monitoring pipeline isolation tools post-installation in client infrastructure.

STATS Remote Monitoring Centre has been established to allow the company's range of Tecno Plug® isolation tools to be securely monitored from an onshore location throughout the entire isolation period, while reducing the need for personnel to remain in attendance on site.

With the new remote satellite system, once STATS technicians have installed, positioned and set the tool, all but one of the team can be demobilised and return to base. This approach offers customers both substantial savings and additional offshore bed space, which is often at a premium during maintenance campaigns. Located at its UK base in Kintore, Aberdeenshire, STATS Remote Monitoring Centre provides round-the-clock assurance to clients that the company's isolation tool is operating as expected.

STATS Group Chief Executive Officer, Leigh Howarth, said: "Modern communication systems and monitoring technologies are changing the way in which we can test our equipment and in how we can monitor tools at our clients' facilities. As a company specialising in technology and engineering solutions, we will continue to be at the forefront of developments which enable our products and services to be cost efficient while operating at optimal safety levels."



Remote monitoring for factory acceptance testing at STATS Group's HQ



No fear of heights: TDW cleans and inspects under-bridge pipeline using wireline method

Height makes managing the integrity of under-bridge pipelines complex and more difficult, with potential risk increasing inch-by-inch. When the bridge has an above-water clearance of 41 meters (135 feet), accessibility may seem particularly daunting. But as the **TDW** Pipelines Services team recently proved on a project over Massachusetts' Cape Cod Canal, there's always a way to bring things down to a more manageable size.

As part of a structural integrity assessment, the operator of a 10-inch natural gas pipeline contracted TDW to clean and inspect a section affixed to the underside of a 429-meter (1,408-foot) bridge. The arch bridge carries foot, vehicular and bicycle traffic to the Cape Cod peninsula. The pipeline under it is one of three supplying the area, a popular vacation spot whose year-round population of about 215,000 more than doubles during the summer.

Because of the pipeline's height, Pipeline Services couldn't rely on typical equipment to launch and retrieve cleaning pigs or in-line inspection (ILI) tools. Instead, they employed a pull-through approach with wireline equipment. This method is frequently used for the controlled pigging of short segments such as water, highway or road crossings, for new pipe that hasn't been connected into a system yet and for pipelines without launching and receiving equipment.

A Better Option

Height wasn't the only challenge the operator and TDW had to consider. There was no access to insert or remove the cleaning pigs or in-line inspection (ILI) tools, and no way to install traps. Flow rate was another issue. Because the flow came from end-user demand on the line, there wasn't much the operator could do to regulate the flow rate, which under normal circumstances, would keep the pigs and tools moving at optimal velocity.

To try to deal with these concerns, the operator initially considered using robotic remote-controlled ILI, but that idea was also fraught with problems. For one thing, to reach the entry and exit points, the robot would have to make a 110-foot vertical climb on the inlet side. Not only did the vendor doubt the robot could pull itself straight upward, they were afraid that if the tool actually made it to the top it might make an uncontrolled drop on the descent. Direct inspection was also a thought, but that could be dangerous, expensive and time-consuming.

By contrast, the TDW wireline solution enabled the cleaning pigs and ILI tools to safely ascend into the pipeline and move through it at a regulated speed. The

operation began with progressive pigging — a process of using increasingly aggressive cleaning pigs until cleanliness standards are met — to prepare the pipeline for good sensor contact during the ILI phase.

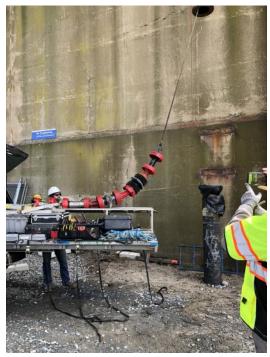
Safe, Successful Operation

According to Senior Field Technician Brandon Bolesky, who led the project, the first step was to provide entry and exit for the tools by removing a piece of pipe at each end of the section and replacing it with a blind flange with an attached valve. Next, the cable from the wireline truck was attached to a tow pig in a disc cup disc cup (DCDC) configuration and pushed into the pipeline. Nitrogen pushed the tow pig through the line to the far end.

"We didn't have a lot of information about the cleanliness of the line, so we started cleaning with zero expectations and adjusted as necessary, using increasingly aggressive pigs," Bolesky said.

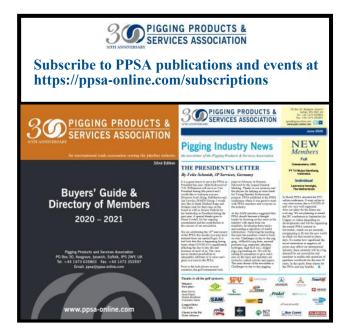
After achieving the level of cleanliness required for a good ILI run, TDW ran a gauge pig to check for bore restrictions and then launched magnetic flux leakage (MFL) and deformation (DEF) technology in combination. Not only did the tools provide vital information about metal loss and out-of-roundness, dents and other geometric anomalies, running them together served a safety purpose: The MFL tool provided enough drag to prevent the possibility of it falling during descent.

This was the third successful water crossing project TDW completed for the operator in the greater Boston area. The team will be providing similar services in and around New York City in the coming weeks.



ILI tool being inserted into the pipe

ILI tool being removed from the pipe



Leak repair of 10 inch oil pipeline in Colombia—3X Engineering

Overview

The objective of this job, performed in May 2020 by **3X ENGINEERING (3X)** distributor in Colombia – C.P.S, was to seal online an oil leak on 10" straight line. The line had a design pressure of 250 psi, an operating maximum pressure of 150 psi and a temperature of 49 degrees Celsius. To perform the repair, it was decided to use 3X emergency leak sealing system STOPKiT® and then secure it as long-term solution by overwrapping the STOPKiT® with the composite repair REINFORCEKiT® 4D.

Scope of work

The repair procedure was performed following two main steps.

- ->STOPKiT[®] installation: <u>emergency online leak</u> <u>sealing system</u>, patented by 3X.
- ->REINFORCEKiT® 4D application according to ASME PCC-2 and 3X repair calculation: composite reinforcement system.

Below are the different stages of the procedure:

- STOPKiT® was installed in few minutes on the defect to stop the leak following 3X installation procedure.
- Surface preparation was then performed on both sides of the STOPKiT® using manual and mechanical tools to eliminate corrosion and coating residues and get a good surface roughness (superior to 60µm) to ensure a good bonding between the pipe and the composite. Hygrometric conditions were checked and the surface was cleaned and degreased with ethanol.
- F3X8 filler was used to level the surface and smooth irregular edges and geometries between the STOPKiT® and the pipe.
- the STOPKiT[®] and the pipe.

 REINFORCEKiT[®] 4D composite wrapping over the STOPKiT[®] was completed using Kevlar® tape impregnated with R3X5 resin -> 14 layers for a total repair length of 1500mm.
- Final layer of R3X5 resin was applied on the whole repair to ensure good wetting and improve the visual aspect. Reference plate was finally installed for traceability purpose.

Samples of filler and resin were taken during the various stages of the repair for quality control.

Results

The leak was quickly stopped thanks to the STOPKiT® and the composite reinforcement system application was performed successfully using REINFORCEKiT® 4D. The measurement of the resin hardness was made after 72 hours of curing, exceeding the minimum values required.



STOPKiT[®]installed



F3X8 Filler application



View of the repair completed

Young Pipeline Professionals Europe

Young Pipeline Professionals Europe (YPPE) faced challenges raised by COVID-19 and the corresponding lockdown in the form of events being cancelled. Undeterred, the group pivoted to make the most of an opportunity to keep the pipeline community connected and learn something new every day. Over a 12-week period from March to June, 50 webinars were presented from 34 different organisations during the online YPPE Fest. With excellent audience engagement from the 340 attendees from 120 companies, the daily webinar series was an ideal addition to a "working from home" schedule.

Presentations covered a broad range of topics including pipeline inspection, new technologies and energy transition. Recordings of the webinars now form part of the YPPE Library which is free to access for YPPE members via the website www.yppeurope.org.

With more than 300 members and 1800 followers on LinkedIn, the YPPE has clearly changed gear in 2020 with many more initiatives to come to ensure the longevity of the pipeline industry and supporting the career development of young professionals.

Dick Williamson wins Energy Industry Lifetime Achievement Award

T.D. Williamson (TDW) Chairman Emeritus Richard B. "Dick" Williamson received the International Pipeline Conference Lifetime Achievement Award Sept. 30 during the **International Pipeline Expo**, held virtually from Calgary, Alberta, Canada.

The IPC Lifetime Achievement Award is given to a "person or group that has demonstrated through their work and actions that the safety and economy of pipeline systems has been advanced."

In their announcement, IPC credited Williamson with expanding the international presence of the American Society of Mechanical Engineers (ASME), including co-founding its International Offshore Pipeline Forum (IOPL), helping form and serving as vice president of ASME's International Petroleum **Technology Institute** and working to develop the first-ever ASME-sponsored India Oil & Gas Pipeline Conference. Williamson has also been actively involved with the American Petroleum Institute (API), National Association of Corrosion Engineers (NACE), and Gas Appliance Manufacturing Association (GAMA). He helped the **American Society of Training and Development** (ASTD) frame the core elements of the U.S. in-line inspection (ILI) system, program and training standards. As a board member of the American Gas Foundation (AGF), Williamson worked with industry leaders and state and federal pipeline safety regulators to establish the Distribution Integrity Management Program pipeline standard. In addition, he has supported engineering professional and career development programs throughout his career.

IPC added that through Williamson's passion, TDW has become "synonymous with pipelines." Williamson's deep expertise stems from the fact that he's been with the company nearly his entire life: As the grandson of company founder T.D. Williamson, Sr., Dick Williamson grew up in the industry. He even worked at TDW as a high school student, helping prepare service equipment for the field.

Williamson formally joined with TDW in 1971 as a plastics engineer. As he progressed through a number of career steps, including working as an HT&P technician in 1976, he had the opportunity to supervise people, work directly with customers and feel what he called "the thrill of a job well done", experiences that helped him become an even better manager and leader. He said, "It was my days in the ditch, on the pipeline and in the plant that taught me about the heart of the industry we serve. I worked alongside people who cared for pipelines as their vocation. I was learning the heart of the industry as it is experienced by the people whose days -- and nights -- revolved around assuring that the pipeline operated safely and that its customers were being served."

STATS Group land Santos Australian pipeline isolation contract

STATS Group has been awarded a significant pipeline isolation services contract by leading independent Asia-Pacific oil and gas producer **Santos**.

The long-term call-off contract covers all Santos assets in Queensland and South Australia, including pipelines and facilities in the Cooper Basin, Port Bonython, and the GLNG upstream and downstream operations at Gladstone. Santos has one of the largest exploration and production acreages in Australia and extensive infrastructure and is committed to supplying homes, businesses and major industries across Australia and Asia.

STATS Group are market leaders in the supply of pressurised pipeline isolation, hot tapping and plugging services to the global oil, gas and petrochemical industries. The company's patented isolation tools provide leak-tight double block and bleed isolation that enables safe and efficient maintenance and repair of pipeline infrastructure, with a focus on reducing system downtime, minimising environmental impact and increasing worksite safety. Gareth Campbell, STATS Group's Asia Pacific Regional Manager, said: "This is a landmark contract award for our growing Australian business and we are delighted to have been given the opportunity by Santos to showcase our technologies.

"This lays the foundation for further expansion of STATS Group to serve the Australian energy industry and we have attracted a good deal of interest in our advanced technologies from potential clients across the extensive gas transmission sector. With revenues in Australia growing by up to 30% year on year, we are in a strong position to build on our reputation of on time delivery and client responsiveness."



STATS Group's 20 inch BISEP with integrated bypass maintaining production during maintenance and repair

Following the reorganization of Europe's leading

EITEP's 2nd Virtual Pipeline Summit

Following the reorganization of Europe's leading pipeline conference and exhibition, the **Pipeline Technology Conference (ptc)**, into an online event, the **EITEP Institute** established a new series of online events called Virtual Pipeline Summits (VPS). For the 2nd VPS on "Leak Detection and Third-Party Impact Prevention" on 7 October 2020, 697 pipeline professionals from 74 different countries registered. More than 30% of those participants were pipeline operators.

Pipelines can face various internal and external conditions which cannot always be exactly predicted or controlled by pipeline operators. Pipeline leakages, third-party damage and illegal tapping are severe problems not only regarding economic aspects but also in terms of safety, integrity, and the environmental impact of pipeline systems. Pipeline operators can choose from a variety of both internal and external leak detection and third-party impact prevention and detection systems available on the market.

The summit was opened with a comprehensive overview on "Operational Experience with Various Leak Detection and Third-Party Impact Prevention Systems" by Dr. Axel Scherello, Project Leader at **Open Grid Europe.** The subsequent discussion round, led by Michael Cech of **OMV** and with participants from Canada, Brazil and Colombia, addressed the problem of illegal tapping in greater depth. In a lively discussion with the participants of the summit, various technical, economic and social aspects of the problem could be discussed. In order to further support the international exchange of experience, there will be another illegal tapping round-table discussion exclusively for pipeline operators at the upcoming Pipeline Technology Conference 2021 in Berlin.

Several market leaders in the field of leak detection were represented in a virtual exhibition and answered questions from the audience during their technical presentations. The participants made extensive use of the chance to get in touch with the participating companies and to talk to each other via a LinkedIn-like activity feed and to exchange virtual business cards with each other. Even beyond the date of the live event, the participants could follow up with the speakers and the other representatives from the virtual exhibitors in case there are questions that had not been answered during the sessions. Moreover, all live content will stay online as recorded videos for participants who were not been able to join the live video feed.

The EITEP Institute is now working on the upcoming 3rd Virtual Pipeline Summit to be held in December and on the 16th Pipeline Technology Conference and Exhibition that will take place in Berlin in March.