

World Pipelines asked NDT Global and In-Line Pigging Solutions some questions about pipeline pigging.



A NATHAN LESLIE, Senior Vice President - Sales and Marketing Management, NDT Global

Responsible for the overall sales and marketing functions of NDT Global, Nathan focuses on delivering value to current and future customers while looking for ways to enhance and strengthen integrity management programmes.

A HADDOW THUL, Business Development Manager, In-Line Pigging Solutions

Haddow Thul is a young pipeline professional who is eager to provide industry leading service to pipeline owners and operators through combining field expertise and new technology. Starting his career as a Field Technician eight years ago, he has since grown to become the Business Development Manager at In-Line Pigging Solutions, Canada.

Q Discuss a recent technological enhancement that has benefitted your inspection instruments or inspection capabilities

A NATHAN LESLIE, NDT Global
NDT Global is excited to unlock Acoustic Resonance Technology (ART), a cutting-edge technology to complement NDT Global's ultrasonic technology (UT) solutions. With the addition of ART, we are extending our market reach, offering gas operators the same level of service and asset insights as we are currently delivering to liquid pipeline operators.

By adding ART to our portfolio, we have successfully intertwined exceptional people and technologies to collectively serve and advance the entire pipeline industry. From an operator perspective, NDT Global can now be viewed as a 'one stop shop' for gas and liquid pipeline inspections and integrity management services. 

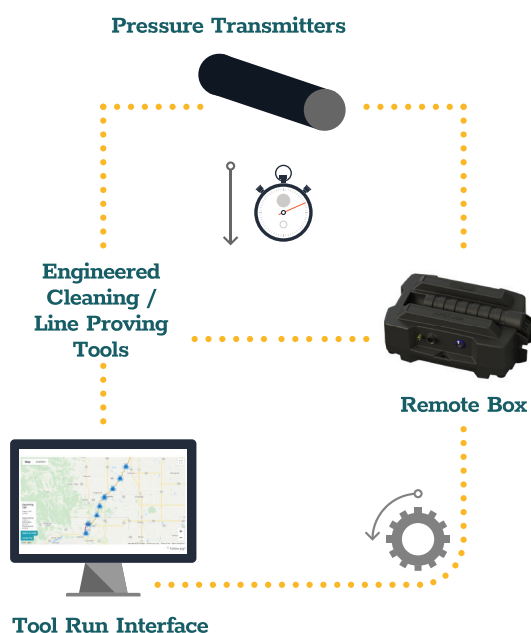
A HADDOW THUL, In-Line Pigging Solutions

Over our past 18 years in service, we have gained the trust and respect of our clients through supporting them with industry leading experience and service when it comes to pipeline integrity projects. In-Line Pigging Solutions (ILPS) has adopted a technology-eccentric strategy to pair with our industry expertise as part of our business model in the highly competitive market of pipeline integrity. Our goal for investing and bringing in technology is to execute our services in a safe, reliable, and cost-efficient manner for our clients. To fulfill this goal we have created a proprietary system solution called The Element System.

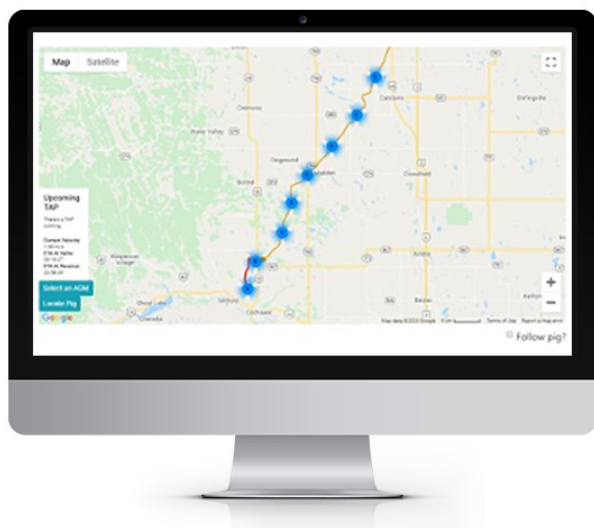
PIGGING Q&A

The Element System combines remote box tracking technology, portable pressure instrumentation and our Element Web Interface to tie all components of a project together to take our project execution, communication, and efficiency to another level.

Each element of the system can be used together as a system or individually based on customer needs. Traditionally, tracking sheets and run information is stored on Excel spread sheets, stand alone gauges, and the pig is somewhere in the line, and information is communicated through a burdensome amount of phone calls and texts. The Element Web Interface solves these issues, providing a live view of a tool run in which all of the associated data is in one easy to view location for project stakeholders. The Web Interface App is a user-friendly website that allows all stakeholders – from field employees to project managers –



In-Line Pigging Solutions: the Element system.




In-Line Pigging Solutions: the Element web interface.

to access run information. A user can view tool speeds, tool locations and various ETAs, along with pipeline pressures. The Element Web App receives its information from live trackers, remote tracking boxes and portable pressure transmitters. Integrated software allows for consistent communication and decision making during fast paced projects. Once a project is complete, it is archived for future reference for project planning and decision making.

The Remote Tracking Boxes (RTB) are unmanned tool tracking units that provide real-time tracking updates by providing passage times and the ability to live stream geophone, ELF and magnetic data. The boxes have presented outstanding value in safety sensitive and remote locations that are difficult to access. The RTB is placed on the pipeline right-of-way and allows for trackers anywhere on the line to access the box and stream live data, as if they are physically there. For example, a tracker no longer has to enter unsafe or difficult to access areas during a tool run as the remote box will be placed and can be used to remotely listen to the pipeline. The Remote Tracking Boxes make it extremely difficult to miss a passage, and they help to understand what is happening on a pipeline to ensure a tool run is being executed as planned.

The Portable Pressure Sensors (PPS) provide precision oversight to quickly understand what is happening during a pipeline integrity project. The PPS continuously captures second by second pressure data and provides cry-out alarms when a pressure threshold is surpassed. Traditionally, field crews would have to rely on watching gauges or calls from the pipeline control centre. These devices have proven to be invaluable when performing ILLs (purges, smart tool runs, commissioning and decommissioning) hydrotests, during cut outs, and when locating stopped tools.

Although In-Line Pigging Solutions has begun to use advanced technology products to ensure a higher level of service, these tools are only as valuable as the ILPS field professionals using them. Our field professionals now have more tools and information than ever before to complete projects successfully and safely. Clients have also reaped the benefits of this system as we are beginning to see cost savings on projects of up to 30%. 

Q Outline the scope of a recent inspection project (or upcoming one) for oil/gas pipelines

A NATHAN LESLIE, NDT Global

Regulatory body PHMSA and industry association PRCI are joining forces to improve inline inspection (ILI) technologies, in particular the ability to detect, size, and characterise features interacting with dents. At NDT Global, we thrive on the opportunity to overcome unique and difficult operator challenges. We continuously look for new ways to push technology boundaries to ensure pipeline operators have the best understanding and insight of their pipeline conditions.

Our experts have been working hard to advance our technologies as we understand the current challenges and uncertainty operators face of not knowing if a dent




NDT Global: customer inline inspection test loop run at NDT Global test yard.



NDT Global: inline inspection tool preparation at NDT Global warehouse.


has an interacting feature, such as a crack or corrosion. By successfully detecting these injurious features operators can optimise their integrity management plans, prioritising critical remediation efforts and operate their pipeline assets safely.

Challenges like this are where NDT Global has always differentiated itself. We have some real advantages that we believe will help the industry. 



HADDOW THUL, In-Line Pigging Solutions

We recently completed a full turnkey service for decommissioning an 11 km NPS12 pipeline in a remote

northern Alberta location carrying hot oil. This scope included purging, cleaning, drying, tool tracking, waste disposal and third party management. Due to the remote location and customer budget, we utilised the Element System to be more effective in completing the scope of work. Using the Element System, the project saw considerable savings. We were able to use the PPS to understand pressures in various positions on the line. We used RTBs to track the various tools that were in the line. All this information was tied back to the Element Web Interface, which aided decision making and communication between field and office staff. 



How is your company weathering the COVID-19 storm? How are you adapting to current norms?




NATHAN LESLIE, NDT Global

We have a phenomenal crisis team in place across the NDT Global business who continue to meet regularly and lead our organisation on a cautious path ensuring our employees' and clients' ongoing safety. Where practical, we have moved to remote working while maintaining the same level of service our clients have come to expect from NDT Global. What was initially a one-day working from home trial is now approaching a nine-month reality.

From a customer perspective, business continuity plans are in place across all NDT Global facilities and functions, ensuring we meet the needs of our customers. In the event we must close a facility, we are prepared to re-distribute the work immediately to ensure there are minimal disruptions to project executions. Our teams have worked hard to ensure business as usual during this uncertain time as we are in regular contact with our customers so we can understand individual restrictions and requirements related to COVID-19.

We understand the importance of ensuring our customers can continue to operate their critical assets while protecting the environment and people by managing safe pipelines with functional integrity programmes.

We have kept at a forefront the potential psychological and physical impact COVID-19 has on our employees.

This is particularly important as the spread of the virus continues indefinitely. We continue to maintain high levels of engagement and communication with our employees. We recently ran a mental health and wellness week, to encourage and promote healthy habits and routines which benefit mental, as well as physical health. 



HADDOW THUL, In-Line Pigging Solutions

Our team has done a phenomenal job navigating the COVID-19 storm. Project Managers, accounting, operations, scheduling, warehouse and support staff came together working remotely to ensure there were no hiccups to operations or the success of field-based projects. Just before the pandemic hit and forced everyone to work remotely, we had fortunately adopted a new internal communication platform. This communication platform made it seem as if we were still operating in the office together.

Our field staff (which comprises approximately 70% of our workforce) went above and beyond to protect co-workers and themselves. Tailgates meetings were held remotely, everyone respected local rules, wore proper PPE, and they communicated with project managers when they felt they were in a potentially compromising situation. 