

Pipeline Inspection Services

Advanced pipeline inspection technologies supported by integrity engineering expertise and powerful data visualization software to help drive enhanced pipeline safety.

With over 40 years of experience and expert data analysis, Baker Hughes, Process & Pipeline Services (PPS), enable you to more confidently manage pipeline integrity threats. Whether your pipeline is onshore or offshore, or if it transports liquid or gas, our in-line inspection (ILI) service technologies help you meet your integrity program objectives.

Our ILI services identify threats, such as corrosion, cracks, mechanical damage, and stress and strain from construction or due to movement. Our extensive and diverse range of inspection technologies provide the accurate information you need to most efficiently plan your maintenance programs.

Corrosion Inspection

We have an unrivaled suite of market leading Magnetic Flux Leakage (MFL) technologies for corrosion detection and measurement so you can rest assured we have the right tool in the box.

If you need to maintain high flow rates for optimum product throughput we have active gas bypass tools to maximize flow and optimize data quality. Baker Hughes set the benchmark for accurate metal loss sizing when we introduced triaxial sensor MFL technology. If your dig costs are escalating then this is the choice to make for improved confidence.

When axially oriented corrosion is a risk or you need a second view of the line condition, axial flaw inspection tools provide you the solution.

Applications

- Gas
- Liquid
- Petrochemical (LNG, propane, olefins)
- Energy transition (H₂, CO₂)

Benefits

- Confirm integrity with in-line inspection services including:
 - VECTRA™, VECTRA™ GEMINI and MagneScan™ combination magnetic flux leakage (MFL) inspection services
 - TranScan™ inspection services for axial flaws and seam weld defects
 - EMATScan™ and UltraScan™ CD Plus inspection services for crack measurement
- Obtain accurate pipeline geometry and mapping data
 - CalScan™ and GEOPIG™ high resolution caliper and mapping services
 - AXISS™ ILI axial strain measurement services
- Supported by an industry leading portfolio of integrity engineering services including:
 - Corrosion assessment
 - Crack assessment
 - Dent and strain assessments
 - Risk and other threat management



Crack detection inspection

PPS invests in and develops technologies that can inspect older pipelines, with a propensity for weld seam cracks and hook cracks. We have solutions that allow operators to accurately locate and highlight pipeline cracks. Our pipeline inspection capabilities can identify stress corrosion cracking (SCC) and cracks of unknown gestation. We can also employ recognized engineering techniques to predict rupture pressure when adjacent crack(s) interact if extensive SCC crack fields are populated with critical and sub-critical cracks.

Our crack inspection tool portfolio utilizes Electro Magnetic Acoustic Transducer (EMAT); ultrasonic; and axially-orientated magnetic flux technology to detect and measure a full range of cracking defects.

Pipeline movement monitoring and mapping

We introduced inertial mapping to in-line inspection in the 1980s and we still lead in inspection technologies specifically designed for pipeline movement and strain assessment caused by geohazards, 3rd party interference, or resulting from construction. In 2016 we introduced another breakthrough technology for axial strain monitoring. Add this to our ability to provide bending strain, movement monitoring, and mapping with most of our ILI tools and you've got it covered.

Deformation inspection

When it comes to validating or identifying deformations you need the right tool for the job. Whether you are running with

low pressure, line proving while de-watering, conducting a pre-inspection verification, or a proactive check for 3rd party damage, each task has unique challenges to collect great data, first time. With a full range of construction caliper to high resolution inertial geometry tools, our fleet is up to any job.

Analysis services

The strength of PPS and what separates us from our competition, is our analysis and integrity engineering capabilities, performance, and responsiveness. Our ability to interpret the data collected by our tools is unmatched in the industry. Our secret, the best data quality, most advanced algorithms, rigorous process, and commitment to comprehensive training and competency systems fully aligned with ANSI ILI PQ 2010.

We offer proven, industry-accepted pipeline integrity engineering solutions that support a pragmatic approach without jeopardizing pipeline safety. This comprehensive range of assessment techniques evaluates anomalies critically and enables us to recommend control measures, repair processes, or changes to the system process to promote long-term pipeline integrity. Rest assured, no matter where you are in the world, we will have an expert on hand to help you make the right decisions with your data.

Contact Baker Hughes or visit bakerhughes.com/process-pipeline-services to find out how you can more confidently maintain pipeline integrity and confirm compliance with our pipeline inspection services.

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