

Pipeline Integrity Management

Pipeline integrity management and assurance play a significant part in any [integrity-management program \(IMP\)](#) within the oil, gas, power, and many other industry sectors.

Across many sectors, pipeline inspection services provide a vital service-condition evaluation of the piping's material properties. Deploying specialist NDT pipeline tools, [pipeline integrity management](#) provides detailed information and data on any anomalies found, which assists the asset owner in avoiding unnecessary maintenance or unplanned shutdowns.



THE Applus+ SOLUTION

Applus+'s Pipeline Integrity Assurance (PIA) services offer the on-site evaluation of pipeline anomalies in support of direct-assessment (DA) programmes, in-line inspection (ILI) validation programmes and class-change programmes undertaken by pipeline owners and operators. They involve specially developed inspection techniques, technologies and technician training which are designed specifically for thin-wall pipeline applications.

The Pipeline inspection services at Applus+ offer on-site evaluation of anomalies to support direct-assessment (DA) programmes, ILI pipeline inspection (in-line) validation programmes, and class-change programmes undertaken by pipeline owners and operators. These involve specially developed pipeline inspection techniques, technologies and technical training for thin-wall pipeline applications.

Pipeline Integrity Assessments must be delivered with an assurance of competency, with the prerequisite NDE certification awarded from the different regulatory entities. Applus+ ensures its competency when delivering pipeline integrity assessments through a progressive and standardized training and certification program. Similar to the ASNT-TC-1A certification program, the Applus+ program is monitored to ensure a combination



of in-depth theoretical training and field experience as pipeline NDT technicians, followed by a rigorous written and practical examination.

As a leading pipeline inspection company, Applus+ has extensive resources to carry pipeline integrity assessments to meet our client's project needs, including code interpretation and compliance, inspection-data management, or critical-feature assessment.

Applus+ uses advanced NDT techniques and equipment in its pipeline inspection services, including:

- **Applus+ InSite** – a field-reporting and data-management system
- **Engineering review and assessment** capabilities
- [RTD IWEX](#) – for inspecting seam and pipe-body anomalies
- **3D laser mapping** – for external corrosion and ILI tool-data pattern matching
- **Material characterization** and verification testing expertise
- [DTI Treksan](#) – for difficult-to-inspect pipelines

Target customers

Applus+ offers comprehensive NDT pipeline inspection services for both transmission-pipeline integrity-assessment management and distribution-pipeline integrity-management programmes.

For projects related to:

- ILI pipeline validation and remediation – seam weld, MFL and deformation ILI tool assessments
- Direct assessment (ECDA, ICDA and SCCDA) direct examination
- Pipeline and corrosion reconditioning
- Material verification programmes

Pipeline inspection for anomalies with advanced NDE:

- UT shear-wave anomaly evaluation
- Phased array UT anomaly evaluation
- Encoded TOFD and PAUT seam-weld scanning
- IWEX Weld and SCC feature evaluation
- Automated UT for internal-corrosion mapping
- Automated and manual laser mapping of external corrosion

Key customer benefits



Applus+ has pioneered the development of pipeline integrity assessment solutions over the decades, offering a comprehensive suite of services to complement owners' and operators' pipeline inspection programmes.

With over 20 years' experience, Applus+ has developed a comprehensive solution for pipeline inspection, and supports these resources with the best training programme to develop well-qualified technicians for pipeline integrity assessment and inspections.