Phased Array (PAUT)
PAUT instruments produce accurate, detailed cross-sectional pictures of internal structures at fast inspection speeds. PAUT technology uses multiple ultrasonic elements and electronic time delays to create beams that can be focused electronically for fast inspection, full data storage, and multiple angle inspections. PAUT technology provides precise measurement with the most reliable results. PAUT applications include manual and encoded weld scanning. Encoded scans offer extremely accurate sizing of weld flaws along with cross sectional planar views of the entire encoded scan area.

Automated ID Corrosion Mapping
PAUT corrosion mapping systems utilize 64 transducer elements versus conventional corrosion mapping systems, which typically have only one. This provides the accuracy of PAUT with an acquisition speed five times faster than that of conventional systems.

OD ANOMALY ASSESSMENT
We combined our Creaform laser scanner and Pipecheck software to provide extremely accurate (up to 50 micron) and repeatable results with acquisition speeds up to 80 times faster than manual pit depth gauging.

Corrosion: The Pipecheck corrosion module offers very fast and reliable data processing that generates instant, on-site results. In comparison with traditional measurement methods, this software offers accuracy and repeatability that are beyond expectations.

Mechanical damage: The Pipecheck mechanical damage module has been developed specifically for pipeline mechanical damage analysis. This module features numerous key functionalities that increase dent understanding and facilitate the decision making process.

Corrosion in mechanical damage: Pipecheck software is the one and only solution on the market to offer sophisticated tools able to extract corrosion depth that is located within a mechanical damage. This confidence will result in lower maintenance cost and reduced risk of costly failure.

Our three-step process to gather accurate and reliable data:

Scan
- High resolution capture of all corroded areas
- Fast surface acquisition to increase efficiency
- Improved scanning performance for small features such as pitting

Analyze
- Feature detection using real pipe geometry
- Automatically applied interaction rules
- Estimated burst pressure calculation
- Enhanced virtual pit gauge capabilities near welds and obstacles

Report
- Reports include worst-case profile and predicted failure path
- Export to CSV available for further analysis
- Mesh export available
- Customizable pass/fail criteria
- Snapshot tool for 3D reporting
OES (Optical Emission Spectroscopy)
- Lab results from the field
- Portable OES offers chemical analysis, material composition, and carbon equivalency
- New technology is allowing advancements in development and use of smaller, more portable, hand held analyzers

Instrumented Indentation Testing (IIT)
Unlike existing destructive measurement equipment and evaluating method, Frontics AIS Series delivers IIT testing method which is non-destructive, economic and an efficient measuring method to provide reliable Ultimate Tensile and Ultimate Yield Strength Testing. Our stated tolerance is +/- 10% of Ultimate Yield and Tensile Strengths.

Other NDE services offered
- Pipeline Integrity Rehab NDE
- External Corrosion Direct Assessment (ECDA)
- Internal Corrosion Direct Assessment (ICDA)
- Stress Corrosion Cracking Direct Assessment (SSCDA)
- Re-Coat Project NDE Services
- NACE CIP Level II Coating Inspection

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