

Asset Integrity

Elevate Your Asset Integrity Program

Pipelines traverse nature preserves, parks, water supplies, businesses, and our communities. That's why it's paramount to apply the latest technology to managing pipeline integrity which allows for proactive measures to ensure pipeline safety, reliability, and compliance.

Irth Asset Integrity, a fully integrated enterprise-level solution built on the highly secure Microsoft Cloud, gives owners a systematic approach to managing the integrity of their critical assets effectively. It leverages advanced data science and machine learning to enable pipeline operators to make efficient data-driven decisions to prevent pipeline failures and protect the safety of people and the environment.



Data Integration & Alignment Using ML

Harness machine learning (ML) to ingest any inline inspection (ILI) report, regardless of vendor or format. Effortlessly integrate and align your ILI reports, pipeline data, external corrosion surveys, internal corrosion control activities, and even repair data for advanced condition and threat analysis.



Enterprise Risk Management

Understand and visualize threats to your assets through correlated datasets, engineering analyses, built-in data science models that predict points of failure, and enterprise Power BI dashboards and reporting. Use a single platform to quantify risk, allowing for quicker data-driven decision-making.



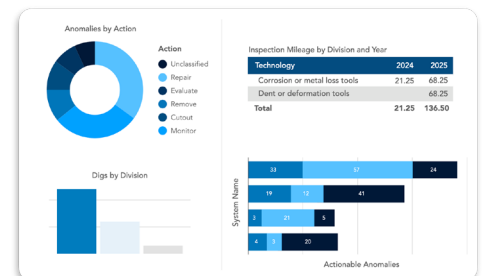
Elevating the Industry

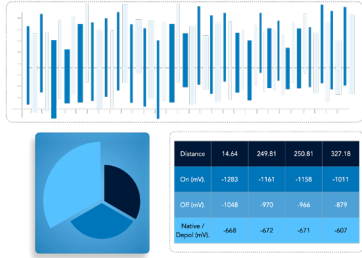
Ushering in a new era for pipeline safety by digitally transforming asset integrity programs, eliminating data silos and providing a holistic view of asset risk. Providing a platform for sharing knowledge and insights through our analysis condition library, annual State of Integrity reports, and User Summits.

Asset Integrity for Pipelines

Formerly CIM, a fully comprehensive inline inspection (ILI) data management platform.

- ✓ **Centralize and analyze pipeline integrity data** using ML to automate assessment planning, anomaly classification, and regulatory compliance.
- ✓ **Perform advanced engineering evaluations** (e.g., burst pressure, corrosion growth, fitness-for-service) to support risk-based decision-making and reassessment planning.
- ✓ **Streamline end-to-end workflows** from inspection to repair with dig planning tools, automated reporting, GIS integration, API 1163 analyses, and a secure vendor portal.





External Corrosion Module

Turn your external corrosion control surveys into actionable insights

- ✓ Align & integrate external corrosion control surveys with ILI and pipeline data.
- ✓ Analyze corrosion control survey data with pre-built SME-designed conditions.
- ✓ Identify deficient regions, create mitigation plans and track workflow actions.

Internal Corrosion Module

Integrate varied internal corrosion control activities to assess program effectiveness

- ✓ Integrate coupon, pigging, ILI, chemical, and operational data into a single platform.
- ✓ Detect active internal corrosion and evaluate mitigation effectiveness.
- ✓ Streamline tracking and reporting with enterprise-level dashboards, automated KPIs, and tools to manage tasks, expenses, and continuous improvement.

Location	Inspection Date	API 570 Sealable	API 570 Flange/Nozzle	SIB Sealable	SIB Flange/Nozzle
Bum	May 8		✗	✗	✗
Bum	February 10		✗		✗
Bum	November 2	✓	✗	✓	✗
Bum	August 17	✗	✗	✗	✗
Bum	May 8	✗	✗		✗
Bum	January 4	✗	✗	✗	✗
Bum	October 25	✓	✗	✓	✗
Bum	June 13	✓		✓	
Bum	April 23	✓		✓	✓

Risk Management Module

Utilize “Best Practice” risk models to provide on-demand quantitative risk analysis and reporting.

- ✓ Assess the 9 threat categories from ASME B31.8S utilizing a combination of structural reliability and historical-based models.
- ✓ Quantify the real-time probability of failure in meaningful units.
- ✓ Utilize models designed by C-FER Technologies and validated by PHMSA data.

Crack PCFA Module

Perform pressure cycle fatigue analyses on cracks identified from inline inspection data.

- ✓ Determine the severity of pressure cycle fatigue at each flaw location.
- ✓ Estimate the fatigue growth rate and remaining life, using MAT-8.
- ✓ Perform “what-if” scenarios with different pressures & material properties.

