SOFTWARE & TECHNOLOGY:
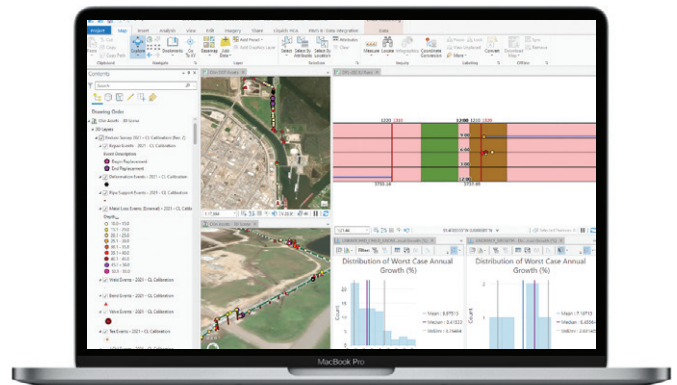# PIMS ILI DATA INTEGRATION TOOL

EN Data Solutions, a sector of ENTRUST Solutions Group, provides best-in-class software that utilize modern, scalable, and accurate tools to aid operators in fully utilizing inline inspection (ILI) data in support of pipeline integrity management activities.

Tracking pipeline anomalies across multiple generations of ILI assessments is a daunting task, but is critical to assessing corrosion growth rates, and the remaining strength and life of your pipeline assets. While software does not replace the knowledge and experience of a Level III ILI expert, our cost-effective tools help operators effectively process and analyze the ever-increasing volumes of data generated by modern inline inspection tools.

OUR APPROACH

The EN Data Solutions PIMS ILI Data Integration Tool is a comprehensive software suite that performs a variety of crucial ILI data integration and analysis functions:

- Calibration of ILI data to your enterprise GIS system
- Calibration of multiple generations of ILI data to each other
- Establishment of pipeline "weld maps"
- Calculation of ASME B31G remaining strength attributes
- Correlation and matching of pipeline anomalies across multiple generations of ILI assessments
- Calculation of corrosion growth rates
- Prioritization of anomalies for confirmation and repair
- Automated layout of anomaly confirmation/repair digs

ENDATA
SOLUTIONS

The PIMS ILI Data Integration Tool brings the full power of Esri GIS technology to bear on the complicated challenge of tracking pipeline anomalies through time, across multiple generations of ILI assessments. Rather than relying on a human expert to manually correlate a set of handpicked anomalies across multiple ILI runs, the PIMS ILI Data Integration Tool software uses GIS-based spatial proximity analysis to evaluate and process all anomalies across all ILI runs of interest. This repeatable and consistent GIS-based anomaly matching and correlation process results in statistically significant corrosion growth rate calculations, providing operators with deeper, more informed understanding of pipeline asset condition and remaining life.

EN DATA SOLUTIONS DELIVERS

The EN Data Solutions PIMS ILI Tool maintains its own project database, or integrates directly into your enterprise GIS system of record. It allows users to pull pipeline data from any database, and ILI data from any vendor format. Results are generated as geospatial features, easily exported into tabular formats, and readily imported into your enterprise GIS.

The tool increases staff efficiency by automating the process of anomaly matching and correlation across multiple generations of ILI runs.
Key features include:

- Esri® ArcGIS Pipeline Referencing (APR)/ Utility Network (UN) integration.
- UPDM and PODS 7™ compatibility.
- Accurate assessment and documentation of corrosion growth rates, pipeline remaining strength and life.
- Actionable spatial insights for risk and pipeline asset management.

- Helps in prioritizing work procedures for confirmatory digs, repairs, and additional integrity-related activities and ensuring compliance with regulatory codes and rules.
- Executive dashboards and reports for tracking and reviewing the financial impacts of pipelines with the largest amounts of HCAs and MCAs.
- Implemented as ArcGIS Pro geoprocessing tools and a Python Conda package for maximum flexibility in deployment and use.

IMPROVED ACCURACY AND SCALABLE ANALYTICS FOR SAFER OPERATIONS

- Results are consistent, reproducible, defendable
- Reduced ILI data processing cycle times
- Better understanding of corrosion growth
- Accurate determination of remaining pipe strength and life