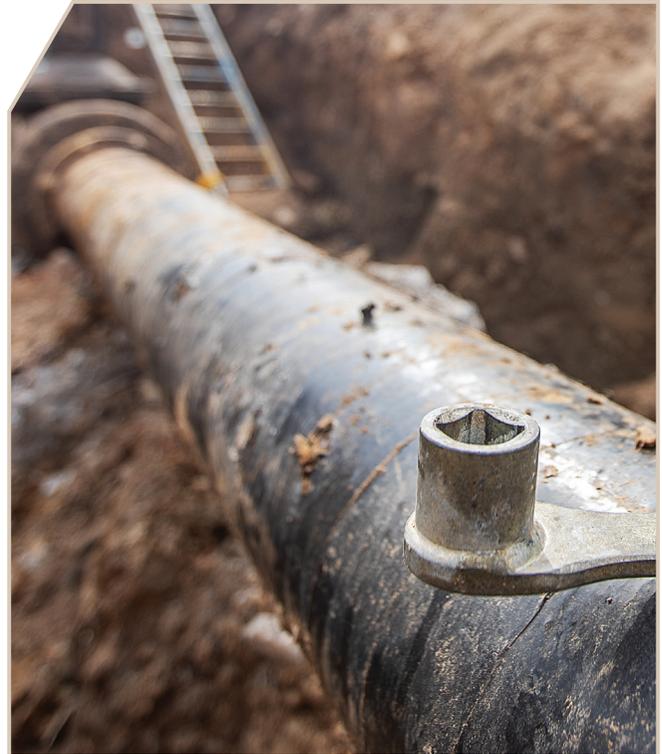


Pipeline Evaluation Services

Take advantage of EWI's extensive engineering expertise and first-class laboratory resources to address your pipeline issues

EWI offers a broad suite of material engineering and laboratory testing services to support the oil, gas, and petrochemical industries. Our team has decades of experience evaluating pipeline construction and lifetime integrity to address problems with technical solutions. Our 9001:2000 ISO certified lab maintains fully equipped mechanical and metallurgical setups, an in-house specialized machine shop, heat treatment equipment, nondestructive evaluation systems, and welding facilities. With specialists in mechanical testing, numerical modeling, materials, and weld engineering, our technical groups work in coordination to provide clients with expert interpretation and analysis to solve a full range of pipeline challenges.



EWI capabilities range from standardized testing of large quantities of material to one-off tests of unique configurations. Our integrated staff of degreed engineers and skilled technicians deliver ingenuity and experience that can be applied in the design of testing solutions and oversight during implementation. EWI is also involved in the development and publication of various industry codes and test standards. Many staff members actively participate on committees of major codifying bodies such as AWS, API, and ASTM.

SOME OF OUR CAPABILITIES INCLUDE:

- **Analysis of inline inspection anomalies:**
 - Inspection of pipelines with “smart pigs” that travel through the pipeline and use various NDE methods to look for corrosion, cracks and mechanical damage.
 - To confirm accuracy, areas with detected problems can be cut out and inspected to compare the detected results with the actual pipe sample.
 - Comparisons are used to “tune” the rest of the inspection, make it more accurate, and help to prioritize the detected feature list.
 - The knowledge of identified defects in the pipeline can guide reinspection intervals, operational pressure, and further analysis.
- **Failure analysis:**
 - Complete metallurgical failure analysis capability
 - Resources available for analysis include scanning electron microscope with EDS capability, several varieties of optical microscopy and photography, full metallurgical preparation lab and most importantly experience in failure analysis, and an understanding of pipeline operation.
- **Traceable, verifiable, and complete records for compliance with Federal regulations**
- **When records are not available, EWI can conduct these pipe tests to produce regulation compliant material properties records:**
 - Tensile – identify pipe strength
 - CVN – quantify pipe toughness
 - Metallography - identify seam type
 - Chemical composition
 - Basic diameter and WT measurements
 - Can do more advanced fracture mechanics test on seam and pipe body
- **API 1104 Appendix A - Alternative Acceptance Standards for Girth Welds:**
 - In-house capability of full test matrix
- **Deep understanding of pipeline manufacturing and construction methods:**
 - Strengths and weaknesses of pipe of based on vintage, method of fabrication and in some cases, manufacturer.
 - Thorough knowledge of historical manufacturing standards



The EWI Advantage

With precision equipment and a world-class engineering team, EWI is uniquely qualified to offer a full range of testing. Going beyond assessment, our experts seek out root causes to help customers maintain the highest quality products and service. By combining unmatched expertise and advanced manufacturing technology resources, EWI serves as an integral extension of our clients' innovation and R&D teams. We can assist you at any stage in your process— or collaborate with you from start to finish.

Get Started

For more information about EWI pipeline evaluation services, contact

Paul Zelenak
pzelanak@ewi.org
614.688.5187



EWI WORLD HEADQUARTERS

Columbus, Ohio
614.688.5000
info@ewi.org

BUFFALO MANUFACTURING WORKS

Buffalo, New York
716.710.5500
info@buffalomanufacturingworks.com

WWW.EWI.ORG→