

Metallurgical Services and Operations Support



EN Engineering provides in-depth metallurgical and operations expertise. Our diverse capabilities include metallurgical design and failure analysis, development of welding procedures, corrosion analysis, and review and development of pipeline integrity programs.

With more than 40 years of experience, our experts come from diverse backgrounds, ranging from gas transmission and operations, to manufacturing and fatigue/failure analysis. Our past projects include some of the first cross-country work on X-70 line pipe runs, development of welding procedures for hot-tapping pressurized pipelines, and failure investigations on a variety of pipe materials, pressure vessels, and pipeline compressor station components. Our experience in the preparation of specifications, production and maintenance of engineered materials provides an added asset to our support services.

Services Provided

- Failure analysis
- Materials selection
- Pipe, fittings, valves, pressure vessel, induction bends, and coating specifications
- Welding procedure development and qualification for production and maintenance
- Integrity assessments
- Repair/replacement decisions

Metallurgical Failure Analysis

- Stress corrosion cracking of steel pipelines
- Fatigue cracking of rotors, crankshafts, and other compressor station components
- Pressure vessels
- Internal and external corrosion
- Mechanical damage
- Pipe steel defects
- Seam weld defects
- Girth weld defects
- Hydrostatic test failures