Structural Integrity provides best-in-class pipeline integrity field inspections. SI’s Non-Destructive Examination (NDE) consulting offerings are aimed at providing the tools, training, and services necessary to complete the fundamental inspections and documentation necessary for pipeline integrity projects.

**NDE PROGRAM SUPPORT**
- NDE Written Practice & Procedures
- Training and Certification
- Field Data Collection and Reporting Tools (Riptide)
- Data Management, Analysis, and Support
  - Design & Import/Export
  - GIS Integration
  - NDE Consulting
  - Analytics / Trending
  - QC Support

**NDE PROCEDURES**
- Best in class, similar to SI other procedures
- Detailed NDE Procedures
  - Basic UT Inspections
  - Magnetic Particle Inspections (MPI)
  - Direct Examination & IILI Verifications (Bell Hole)
- Customized to client needs
- Incorporate certification requirements

**UT PROCEDURE**
- Based on decades of experience in Power Generation and Oil & Gas industries
- Includes best practices and covers all basic requirements to certify technicians:
  - Equipment & software requirements (tailored to client’s needs)
  - Personnel, training and certification requirements
  - Component and examination area requirements
  - Equipment calibration
  - Examination and data collection
  - Data analysis and reporting
RIPTIDE APPLICATION
SI’s Reporting Integrity of Pipeline Tool with Integrated Data Exchange (RIPTIDE) solution was designed to facilitate consistent field data collection during pipeline integrity inspections. SI designed a mobile application tool designed to be deployed on any iOS or Android device that provides a set of forms that drives systematic integration of the required field data collected during a pipeline integrity inspection.

- Cloud based project management supporting Pipeline identification & Inspection
- Integrate the required field data collected during a pipeline integrity inspection
- Enable remote off-line data collection and automatic synchronization
- Assign and notify in field inspection tasks remotely
- Expedite inspection documentation report forms
- Standardize SQL database (PODS compliant) and integrate with GIS
- Provide cloud based project management supporting identification
- Quick analytics with a consolidated field database

MAGNETIC PARTICLE INSPECTION (MPI) PROCEDURE
- Ensure consistent and repeatable process are followed to ensure no defects are left undetected
- Includes best practices and covers all basic requirements to certify technicians:
  - Personnel and equipment requirements
  - Safety precautions
  - Reference standards
  - Component and surface conditions
  - Magnetic field adequacy and directions
  - Examination procedure
  - Indication evaluation
  - Acceptance criteria
  - Report forms and documentation

DIRECT EXAM & ILI VERIFICATION
- Collect detailed pipeline information to support integrity projects and characterize degradation
- Optimize Inspections for ILI or Direct Examination
- Key information pertinent to defects identified
- Includes best practices and covers all basic requirements to certify technicians:
  - Personnel and equipment
  - Safety considerations
  - Field data collection
  - Photo documentation
  - Detailed reporting and form completion

NDE Training & Certification
- Basic Bell Hole and Pipeline Integrity Inspections
- Fundamentals of Ultrasonic Testing (UT) Inspection
- Fundamentals of Magnetic Particle Inspection
- NDE for Engineers and Managers
- Pipeline Damage and Flaw Evaluation