Structural Integrity Associates, Inc. offers fully integrated engineering solutions to the High Pressure Industry, including high pressure vessels, piping and fittings. This includes a full cradle-to-grave approach which includes design, engineering, inspection, third party oversight, fitness-for-service, and life management for all types of high pressure equipment.

**STRUCTURAL INTEGRITY HIGH PRESSURE EXPERIENCE**
- Over 35 years in the design, manufacture, use and maintenance of high pressure equipment
- ASME section VIII Division 3, design of high pressure vessels
- Fitness-for-Service (API 579-1 / ASME FFS-1)
- ASME B31.3 Chapter IX high pressure design
- Risk-based hazard mitigation and inspection planning
- Active ASME code participation and leadership

**CORE COMPETENCIES**
- Design of high pressure equipment including certification of user’s design specifications
- Life assessment and management of critical business assets for long term, safe operation
- Third-party design oversight and inspection for critical asset management
- Independent authority in high pressure design evaluation

**ADVANCED DESIGN AND ANALYSIS CAPABILITIES FOR LONG-TERM ASSET MANAGEMENT**
- Finite element analysis (Abaqus, Ansys®)
- Industry leading fracture mechanics software including Structural Integrity’s own pc-CRACK®
- Fitness-for-Service assessment including API 579-1 / ASME FFS-1
- Environmental issues including stress corrosion cracking
- High pressure / high temperature equipment
- Autofrettage and weld residual stress analyses
- Hydrogen issues

**INSPECTION IN HIGH PRESSURE INDUSTRY**
- Advance ultrasonics and surface examinations
- Linear phased array (UT)
- Annular phased array (UT)
- Eddy current array (ET)
- Smaller detectable flaw sizes for maximizing life management
- Ability to remotely scan difficult areas accurately with automated/semi-automated equipment

**THE STRUCTURAL INTEGRITY ADVANTAGE**
Structural Integrity provides true integrated engineering solutions for High Pressure Equipment by applying advanced engineering tools and inspection techniques. Our vast experience brings this together for solutions that can reduce life cycle cost, reduce downtime and extend equipment life.