

Asset Integrity Management & Mechanical Services

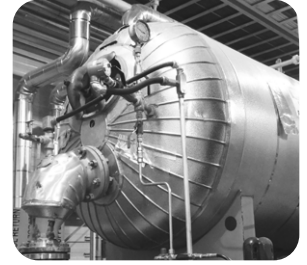
BOILER, PRESSURE VESSEL, PIPING & TANK SUPPORT SERVICES



A HIGHER LEVEL
OF RELIABILITY®



Life Cycle Management



ASSET INTEGRITY SERVICES

Acuren experts work to ensure integrity and quality at every stage of the asset life cycle including construction, commissioning, in-service, turnarounds, and decommissioning. Acuren endeavors to help clients maintain assets in a fit-for-service condition while extending its remaining life in the most reliable, safe, and cost-effective manner. We provide asset integrity services for all industries including: oil and gas, petroleum, petrochemical, pipeline, chemical, pulp & paper, power generation, manufacturing industries.

Acuren's leading programmatic approach supports our partners by establishing a customizable program that fits their needs or can help at any stage of their current program. Our goal is to support our clients transform a reactive plan to a predictive programmatic solution, but we understand that the strategy depends on the clients' need.

Reducing risk across the asset integrity lifecycle with a customizable data driven programmatic solution.

OUR DIGITAL SOLUTION

Our focus on the owner/user approach empowers us to deliver solutions to our customer's frequent pain points. Pangea, ARES, and AcuView were created to help manage projects, reporting, and invoicing through a data driven approach.

- Digitally keep the project on time by quantifying how much time we have spent vs where we are on deliverables enabling us to quickly pivot to meet project timelines. This same system is tied to our digital invoicing which ensures they are delivered timely to our customer.
- Our reporting platforms enable us and our customers to gather and review data remotely. Experts across our integrated organization can rapidly provide second opinions when needed.
- We can identify deficiencies and can report them quickly to the correct level of the organization, reducing client risk while we are on site.
- Acuren's digital solutions are flexible and adaptable. They can be customized to meet our clients' processes and reporting goals. Our programs can either integrate into our partners current programs or can be deployed to create new programs from the ground up.
- Our data consistency from conception to the delivery of the reports/recommendations allow our clients to have high-quality confidence. We also leverage better insights across industry and provide big data solutions that are shared for future value.



Asset Integrity Program Elements



Our integrated approach enables us to be the turnkey solution for asset integrity management. Acuren's programmatic approach ensures that we meet our client's needs from program conception to program audit reviews.

ENGINEERING & LAB SERVICES SUPPORT

Asset Integrity Inspectors at Acuren are backed by fully equipped laboratories and highly specialized engineering services. Acuren engineers can:

- Develop integrity programs for owners to improve reliability
- Assess a component's condition for continued service or determine the long-term feasibility of operation
- Evaluate a components chemical or mechanical properties for conformance to codes, standards and client specifications
- Identify unknown scales and process materials found during inspections
- Identify failure/damage mechanisms and perform root-cause analysis
- Perform API 579 fitness for service evaluations on damaged components
- Develop weld procedures and other engineered repairs

RELIABILITY SERVICES

Acuren provides integrated reliability services and processes throughout all levels of an organization in order to assist them in meeting their unique goals. Some of these services include:

- Predictive Maintenance (PdM)
- Reliability Engineering
- Piping Integrity
- Valve Integrity
- Asset Lubrication Program

RISK-BASED INSPECTION (RBI)

Acuren employs subject matter experts in the foundations of asset management including: ISO 55000, PAS-55, ISO 31000, ASME PCC-3, API 580/581, ISO 14224. Acuren can aid owners in various stages of the RBI process including: data and information collection, develop risk assessment models and rankings, inspection and mitigation plans, and re-assessment.

CHIEF INSPECTOR SERVICES

Acuren provides contract Chief Inspector services or support existing owner's chief inspectors. We provide these services to ensure safety, operational reliability and regulatory conformance of the pressure equipment throughout the full life cycle of the equipment. Acuren's Chief Inspector services include:

- Develop Quality Management System manuals, programs, and procedures customized to owner's business practices
- Provide training for operations, maintenance, engineering, and asset-integrity personnel
- Manage databases of pressure equipment static data, in Acuren or client programs
- Third-party quality audits of vendors, such as PSV service companies and fabricators
- Surveillance activities/inspections during repairs, fabrication of pressure equipment
- Perform in-service inspections
- Undergo audits with owner to ensure regulatory compliance

TURNAROUND MANAGEMENT / PLANNING SERVICES

Careful and consistent planning are key to ensuring the success of a plant turnaround. Acuren personnel can manage turnarounds or work as part of a team to coordinate shutdown activities including timing, personnel selection, inspection plans, process optimization, and perform pre-outage inspections. Acuren can select and manage vendors required during routine out-of-service inspections (eg. cleaning, scaffolding, safety watch) which improves efficiencies and reduces costs and downtime for our clients.

BOILER & PRESSURE VESSELS

- Pressure vessel integrity assessments performed by highly experienced qualified API 510 individuals
- Boiler inspections performed by National Board commissioned inspectors, where required
- Accredited to local jurisdictions (ABSA, TSask, etc.)
- Select NDE methods and locations
- Certification of equipment for continued use
- Specify inspection intervals based on code and jurisdiction requirements



PIPING SYSTEMS

- In-service inspections of piping performed by qualified API 570 personnel
- Fulfill duties of owners inspector for new construction activities and repairs
- Develop piping inspection plans for facilities
- Select NDE methods and locations
- Perform stress analysis to identify areas of high stress

TANKS

- Inspections of tanks are performed by highly experienced, qualified API 653 personnel
- Oversee construction, commissioning, onstream & out-of-service inspections, rehabilitation activities
- Latest technologies to perform NDE, including laser scanning, automated UT, TOFD, MFL
- Certification of equipment for continued use
- Specify inspection intervals based on code and jurisdiction requirements

ROPE ACCESS TECHNOLOGY

- Rope access is a safe, flexible alternative to scaffolding, swing staging, and personnel baskets
- The benefits are cost savings and quicker inspections, reducing equipment downtime
- Uses industrial climbing equipment to access equipment to be inspected, redundant safety measures, highly qualified rope technicians
- Many types of inspection, maintenance and NDE activities can be performed using rope access methods

EQUIPMENT REPAIRS

- Determine if repairs are required based on relevant regulations, codes, standards, specifications
- Develop repair plans for scheduled or found work
- Oversee all repair activities on behalf of owner
- Ensure repair performed in accordance with applicable jurisdictional, code and customer requirements
- Certification, NDE, and inspection of repaired equipment

QUALITY PROGRAMS

Acuren employees follow internal quality and safety programs to ensure work is performed to a high standard of excellence. Acuren quality programs include:

- ISO 9001 Certification
- Acuren Labs accredited to ISO 17025 across various locations and scopes
- Quality programs with local jurisdiction (e.g. ABSA) to perform in-service inspections of pressure equipment
- Authorized CSA W178.1 Inspection Company
- Authorized National Board In-Service Inspection Agency



WHY ACUREN?

- A fully integrated approach, combining engineering, inspection, NDE, industrial trades and rope access services. Acuren leads the industry as the one true supplier that can be the single turnkey vendor to execute a comprehensive asset integrity program.
- Digital strategy that allows for sophistication on KPI's tracking, timely reporting/invoicing, and ability to quickly identify and report deficiencies. Platforms are customizable to meet client needs.
- Scalability on demand with a network of 90+ branches and deepest breadth of expertise in market.
- Being a leader in industry allows us frequent availability to new technology. Acuren innovation, advanced applications, and cutting-edge inspection solutions result in significant cost savings.
- At Acuren, safety is our priority. Our safety culture is instilled in the way we operate daily with a 2021 IFR.19, 2020 IFR .16.

BEYOND INSPECTION



VIEW OUR BROCHURES



NONDESTRUCTIVE EXAMINATION (NDE)

Acuren inspectors understand the damage mechanisms that plague the pressure equipment industry. Acuren provides in-house traditional, nondestructive testing of components including: ultrasonic thickness testing, magnetic particle testing, liquid penetrant testing, and conventional radiography. Advanced NDE services are also offered including: laser scanning, phased array ultrasonic testing (PAUT), time of flight diffraction (TOFD), EMAT screening, pulsed eddy current (PEC), real time radiography (RTR), digital/computerized radiography (DR/CR), guided wave. Tubular inspections can be performed with Eddy Current (EC) Remote Field Testing (RFT), and acoustic pulse reflectometry (APR), magnetic flux leakage (MFL), and IRIS techniques. Remote inspections can also be performed with videoscopes and unmanned aerial vehicles (UAV)



CONTACT OUR AIM / MI EXPERTS TODAY

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