



Condition Monitoring Solutions

ASSET RELIABILITY

Asset reliability is an integral component in a successful organization. Understanding the current state of an asset requires effective Preventative (PM) and Predictive Maintenance (PdM) Programs.

Condition monitoring utilizing remote and wireless tools to provide asset owners the information required to make decisions. Conventional route-based collection has its place in the offering however the frequency, consistency, and repeatability of installed IIOT sensors provide timely results with reduced exposure hours.

Our solutions team will assist you in **selecting the right data option** to meet your reliability goals

Safety: Installed sensors reduce exposure hours in the field.

Efficiency: Spend time reviewing and analyzing results – actions that add value to the program while reducing the time spent in data acquisition with supporting analytics provided by a larger dataset.

Accuracy: Same sensor, same location, every time. Technician and equipment variability is eliminated.

Sensors:

- 3 axis vibration and temperature
- High temperature vibration options
- Strain, motor current, pressure, online oil monitoring tools available
- Remote ultrasonic pipe thickness (UT) up to 930F
- Hazardous environment options available

PULP & PAPER

Program benefits:

- Supports “on machine”, critical, and balance of plant equipment
- Data acquired in time based intervals from 10 minutes and up
- Sensor is in “always on” state providing data on alarm excursions
- Data is cloud based and available when needed
- System maintenance and software included
- 24 hours services supported by our large team of experienced technicians and engineers
- Data subscription programs available – no CapEx required



A HIGHER LEVEL OF RELIABILITY®

OPTIMIZE YOUR OPERATIONS

ACUREN SERVICES THOUSANDS OF CLIENTS EVERY YEAR IN OVER 15 INDUSTRIES

DIAGNOSTICS AND TROUBLESHOOTING

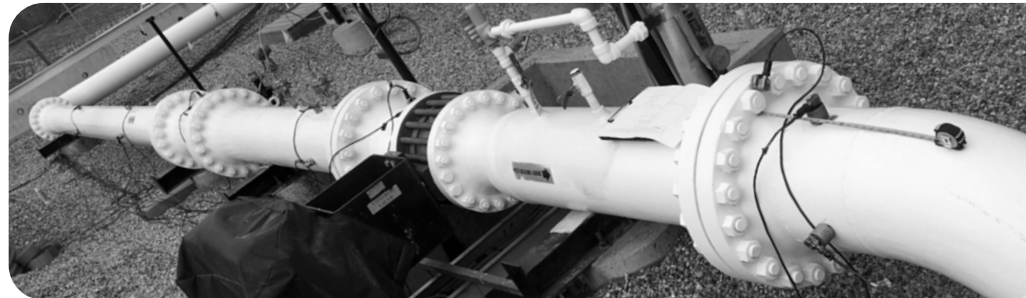
Whatever challenge you present us with, we will get to the bottom of it. We can provide complete project support from diagnostics and troubleshooting to recommendations and corrections.

- We utilize highly specialized techniques deployed by experienced, results-oriented teams
- When sporadic or transient problems occur, Acuren's remote monitoring services capture data and identify trends over time
- Operating Deflection Shape analysis (ODS)
- Modal analysis (natural frequency testing)
- Structural evaluation and testing
- Laser shaft alignment
- Torsional analysis
- Motion amplification

CORRECTIVE SERVICES

We offer a number of corrective solutions for equipment issues. We also specialize in structural correction. Our corrective services include:

- Alignment and balancing
- Finite Element Analysis (FEA)
- Structural correction



CONDITION MONITORING

With pressure on profitability, you can't afford not to know how – and what – your equipment is doing. We utilize many techniques to diagnose and monitor equipment condition for routine or customized programs including:

- Infrared thermography
- Ultrasound
- Motor Current Evaluation (MCE)
- Vibration analysis
- Oil analysis
- Pulsation analysis
- Remote equipment monitoring
- Process monitoring
- Wire rope inspection
- Steam trap inspections
- Visual inspections

RELIABILITY ENGINEERING

- SCORE™ assessment
- Vibration control solutions
 - Force reduction
 - Mass addition tuning
 - Isolation
 - Damping

SPECIALIZED SERVICES

- Equipment maintenance plans
- PM and PDM evaluation and optimization
- Root cause failure analysis
- Sensor verification services
- Equipment and machine baseline assessment services

CONSULTING SERVICES

- RCM studies
- Critical analysis
- Asset walkdown alignment
- Maintenance program consulting and assessments
- Operator Driven Reliability (ODR) Program
- Lubrication program management

LIFE ASSESSMENT STUDIES

- Strain gauging
- Stress analysis
- Finite element analysis
- Fitness for purpose
- Air, water, and oil contaminant analysis

Please reach out to our team of specialists to learn more and understand how these systems can work for your facility.



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