



Emerson Impact Partner

STEAM GENERATION AND DISTRIBUTION

STEAM IS CENTRAL TO INDUSTRIAL PROCESSES AND REQUIRES ITS OWN SYSTEMS AND SUPPORT. The value of steam's potential is often underrealized due to outdated equipment and a lack of specialized expertise and maintenance. With a solutions-driven approach, your steam system can improve reliability and efficiency, reduce energy costs and emissions, and increase profitability. ECI's steam expertise, product portfolio and local service can optimize your steam system.

Reliable, Turnkey
Steam Solutions
Developed to
Improve Operation

Turnkey steam solutions developed to improve operation, maintenance and controls can positively impact performance. Optimizing controls of feedwater, steam quality and distribution, condensate recovery, combustion air and fuel maximizes efficiency and minimizes emissions. Steam surveys are an essential step to assess current state and produce custom solutions aligned with operational goals. ECI offers the expertise, audits, solutions and support to improve steam operations and deliver efficiency, reliability and safety.

Specialized Steam Expertise

As staffing trends move toward leaner teams and more generalized expertise, steam experience is often not available in-house. A true steam partner possesses both product and technical knowledge and the ability to apply steam expertise across the plant. The steam system does not operate independently and the impact on all operations must be accounted for when implementing system upgrades, assessing effectiveness and safety and developing maintenance strategies.

ECI can operate as an extension of your team, bringing decades of specialized steam experience and a breadth of solutions that will advance your operations. ECI also provides operation, controls and maintenance training to empower users to confidently manage and support steam systems.

Steam System Audits

Steam systems that become outdated or modified, and are not properly maintained, produce a host of issues. Daily operation becomes complex, the lack of proper integration leads to poor maintenance and efficiency and reliability are greatly reduced. Challenges also occur when portions of a system are upgraded but the entire plant is not optimized. The result is segmented operations which hinder efficiency and reliability.

A fully evaluated and optimized steam system delivers significant return on investment. ECI conducts extensive steam audits that evaluate equipment, safety, energy management, opportunities for improvement and total system performance. From steam trap leakage to utilization, this holistic audit accounts for not just plant-wide efficiency and large-scale ROI but also ease of use. Systems that encompass multiple controls schemes and manual procedures require excessive time from operators and are prone to human error. ECI can upgrade controls and equipment to ensure all elements work together. Automating manual functions improves performance, eliminates errors and enables personnel to focus on other areas.



Predictive Maintenance Strategy

Reactive maintenance and repairs following failures is problematic. The more effective measure is a predictive maintenance strategy with short- and long-term plans to ensure equipment safety and reliability. With the proper controls and instrumentation, troubleshooting and testing can be deployed to monitor operation parameters and identify potential issues before they occur. A strategic approach helps ensure predictive maintenance remains a priority and catastrophic failures are prevented.

Safe Steam Solutions

Any potential steam system issue is a potential safety issue. Steam systems that are not adequately upgraded and maintained are inherently unsafe due to critical instrumentation issues and lack of current technology. Code compliance must be strictly followed to ensure the safety of personnel, equipment and the entire operation. ECI conducts steam safety reviews to evaluate and assess systems and identify code compliance concerns. This prompts the implementation of system improvements and upgrades to help ensure safety is not just improved but a continuing priority.

A Holistic Approach

A comprehensive range of solutions, services and engineering expertise enables a holistic approach to steam and single source accountability. With a broad view into your steam operations and extensive steam experience, ECI can develop a custom solution that addresses efficiency, safety, reliability and ongoing maintenance. From correct valve sizing to accurate venting, the specification of every product and process in the steam system needs to be precise. With the right products, services and support, your steam system can maximize efficiency and reduce energy consumption.

Industry-Leading Solutions

- Control and Isolation Valves
- Pressure Regulators
- Pressure Relief and Blowoff Valves
- Level Columns and Gages
- Pressure, Temperature and Flow Transmitters
- Flue Gas Analyzers
- Water Treatment Analyzers
- Desuperheaters (Attemperators)
- Steam Traps
- Pumps
- Condensate Systems
- Vibration Monitoring
- Eductors
- DeltaV Controllers

Services and Support

- System Audits & Optimization
- Steam Trap Services
- Safety Relief Valve Services
- Boiler Inspection & Tuning
- Combustion System Tuning
- Safety Compliance Inspections
- Reliability & Vibration Monitoring
- Valve & Equipment Repair
- Controls & BMS Solutions
- Commissioning & Startup Support
- Skid Solutions

Engineering Expertise

- Steam Solution Health Assessments
- Steam System Energy Audits
- Boiler Controls Upgrades
- Long-Term Upgrade and Compliance Studies
- Steam System Instrumentation Audits
- Steam System Control Safety Audits (ASME/NFPA/SIL)
- Turnkey Projects



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SALES AND INFORMATION

724-746-3700
or **www.ECI.us**

After Hours Emergency
Support: **800-569-6030**

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