



Reliable Solutions for Steam Generation and Distribution

Emerson Impact Partner

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 The value of steam's potential is often underrealized due to outdated equipment and a lack of specialized expertise and ongoing maintenance.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, complete product portfolio and local service capabilities can optimize your steam system.

Turnkey steam solutions that are 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 in assessing current state and producing custom solutions aligned with operational goals. ECI offers the expertise, audits, solutions and ongoing support to improve steam operations and deliver efficiency, reliability and safety.

Specialized Steam Expertise

As staffing trends continue to move toward leaner teams and more generalized expertise, steam experience is often not available in-house. The unfortunate result is a lack of focus despite the priority need for efficient steam operations. A true steam partner is one that 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 learn the skills needed 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Steam systems that become outdated or modified, and are not properly maintained, produce a host of issues.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 while the entire system is not optimized. The result is segmented operations which hinder efficiency and reliability.

A fully evaluated and carefully optimized steam system delivers significant return on investment. Steam systems should be developed to manifest a safe and reliable operating environment. ECI conducts extensive steam audits that evaluate equipment, safety, energy management, opportunities for improvement and total system performance. From steam trap leakage to steam 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 will improve performance, eliminate errors and enable personnel to focus their time and attention on other areas.

Sales and Information

724.746.3700 or www.ECI.us
After Hours Emergency Support: 800.569.6030



Predictive Maintenance Strategy

A comprehensive maintenance strategy is critical to successful steam operations. Reactive maintenance involving product repair or replacement when there are failures is problematic. The more effective measure is a predictive maintenance strategy that includes 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 have not been adequately upgraded and properly 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 the safety of the steam system 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. A poorly designed steam system is costly. 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

- Flow Control Valves
- Pressure Regulators
- Pressure Relief Valves
- Isolation Valves
- 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
- Skid Mounted Solutions
- DeltaV Controllers
- Specialized Engineered Products

Services and Support

- Boiler Emissions Tuning
- Boiler Inspections
- Drone Inspections
- Controls Troubleshooting
- Steam Trap Surveys
- Vibration Analysis
- Pressure Relief Valve Services
- Control Valve Services

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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In Territory Expertise:

Lawrence, PA | Columbus, OH | Lima, OH
Solon, OH | Dunbar, WV | Salem, WV