

A man wearing a blue hard hat and a dark blue work shirt over a light blue collared shirt stands with his arms crossed in a modern industrial control room. The background shows large glass windows and people working at computer workstations.

Expertise You Can Rely On

Performance and Reliability Monitoring

Improve reliability and gain more value from your technology investment



EMERSON[™]
Process Management



Reaching for Reliability

Don't spend your valuable time sorting through mountains of data. Instead, leverage Emerson's years of expertise in performance and reliability monitoring.

Reliable operations do not simply happen. It requires time, resource, and expertise. However, you are faced with an aging workforce, data overload, and too much work to do.

Ultimately, you want a consistent, available, predictable process so you can confidently meet your business goals. In your organization, how do you ensure that kind of confidence – for your facility or even across your enterprise? Do you have the tools, time, and expertise required to gather the data, digest information, and interpret the knowledge?

Access Experts When You Need Them

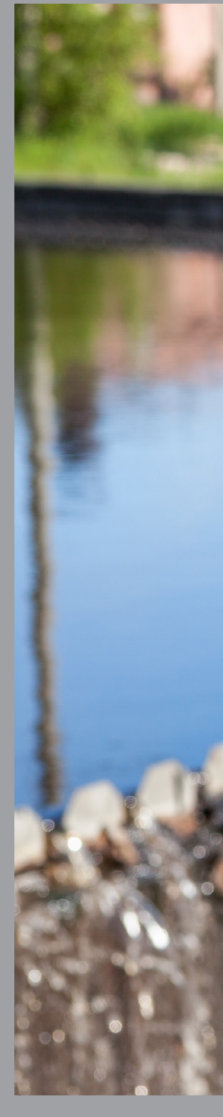
Expertise is important when you need it. But it is costly to develop experts and too often, those experts move on. Get the expert help you need without the risk. Emerson experts are always there – ready to help.

Convert Noisy Data to Actionable Information

Make your data work for you. Combine the advanced diagnostics from your process equipment with expertise from Emerson for effective data analysis and recommended actions.

Realize Value from Your Investments

You have already invested in technology to improve reliability. Because of resource constraints and incomplete data, you haven't experienced the expected ROI. Put your technology investment to work. Emerson experts will manage the technology and recommend actions while you focus on your business goals.





Emerson's Performance and Reliability Monitoring Services are your expert resources in gathering, analyzing, and interpreting equipment and process information. This service is part of Emerson's overall promise of reliability, made visible and proven through our customers' continuous availability, profitability, and safety.

6 ^{TO}
7
years

It takes an average of six to seven years to develop new employees into autonomous petrotechnical professionals who can make non-standard, original technical decisions.

—2010 SBC Oil & Gas HR Benchmark, Schlumberger Business Consulting Energy Institute, March 2011


50% MORE
repair costs

It costs approximately 50% more to repair a failed asset than if the problem had been addressed prior to failure.

—U.S. National Response Center

Making it Easy to Change

In pushed-to-the-limit conditions, operations and maintenance groups generally run in place — unable to move ahead. Without insights into equipment performance, you cannot gain even a single percent in availability.

Improvements are nearly impossible when:

- Resources, both people and tools, are static or reduced.
- In-house knowledge is expensive, specialized, and stretched.

Although you might not know it, you probably have many of the tools already in place. Intelligent devices and advanced applications hold a treasure of data and information. Using this data and information, Emerson experts not only can help improve asset reliability, we can find ways to develop greater efficiency in the equipment you have now.



\$8.4 million
per year

Every 1% gain in availability is worth \$8.4 million of additional margin capture per year in a typical 200,000 bpd refinery.

- Doug White, Emerson Industry Expert – Based on Current Refinery Economics.



Availability, profitability, and safety grow when enterprises move from “What just happened?” (reactive maintenance) to “This is what we want to happen” (predictive maintenance).

A Simple Path

You know reliability is important, but you don't have to act alone to improve it. Leave the navigation to Emerson. We'll help keep you running so you can focus on your business.

Emerson experts will monitor your assets, interpret the results, and provide an actionable summary so you can align maintenance and operation responses with your business strategy. Make decisions that are informed by existing conditions and experience to improve the output of your existing equipment, systems, and applications.

- Improve work prioritization so the right actions are taken at the right time.
- Predict process upsets and plan for action based on business goals.
- Use your resources, people and equipment, more effectively to drive business goals.

Emerson has the expertise, knowledge, and readiness. By combining local onsite providers and remote monitoring by subject matter experts, we provide actionable knowledge that is supported by information from your plant floor.

What can you offload from your to-do list to free up time for more valuable activities?

What value can you find in your existing tools and applications?



Technical professionals may be spending as much as 60 percent of their time managing data before they are able to focus on the more critical, "value-added" work such as analysis and decision-making.

—Jon Krome, John Matson, and Greg Mitchell. "Connecting the dots," Exploration & Production, December 2006.



Improve Your Operation

With Emerson's Performance and Reliability Monitoring Services, you can rely on us to help keep your plant running. We offer three tiers of monitoring services that can be customized to your unique needs.

- **Health Monitoring Services** involve continuous monitoring of fault detection alerts from onsite devices and systems. Alerts typically result in maintenance activity, such as a repair or replacement. When applicable, expert analysis on alerts is applied to diagnose the fault condition.
- **Condition Monitoring Services** involve human expert analysis to predict failures through various analytical methods. Analysis is performed weekly or monthly. Analysis can also be triggered by an alert from online condition monitoring systems.
- **Performance Monitoring Services** involve expert analysis to monitor equipment performance using thermodynamic and empirical models. Analysis is performed weekly or monthly. Analysis can also be triggered by an alert from online performance monitoring systems.

Regardless of your current conditions and your starting point, Emerson can work with you to develop monitoring plans that support your operational goals.



*Connect with Emerson experts
no matter where
you are in the world.*

Emerson Process Management

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