

Rosemount Instrumentation for the Petrochemical Industry



Reliable Instrumentation for Petrochemical Applications

ROSEMOUNT


EMERSON
Process Management

Challenges of the petrochemical industry

Today, petrochemical companies face greater demands on their people and resources than ever before. Working with an experienced supplier that understands these challenges and can partner with you to get the job done is critical to your success.

Produce without interruptions, maximize plant availability

An unscheduled shutdown can upset your process for several days and causes losses in production and profitability. Reliability is the foundation of an efficient petrochemical plant. The choice of an experienced and knowledgeable instrumentation supplier is crucial to the reliability and performance of your plant.

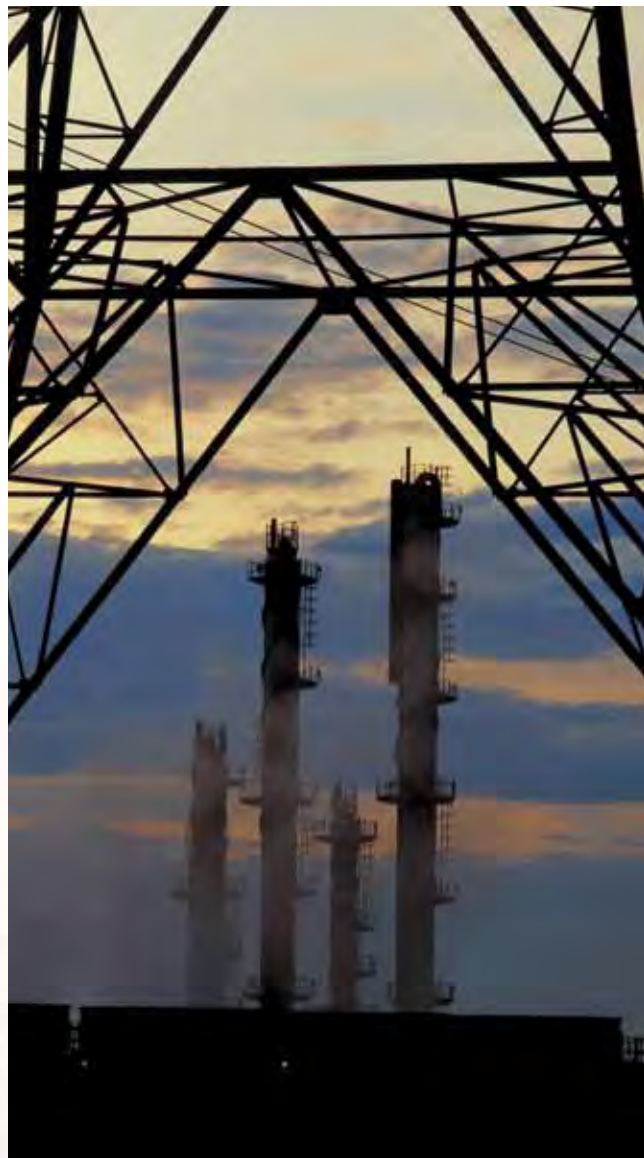


Reach your zero accident safety goal

Safety is a paramount concern in the petrochemical industry. Working with flammable and hazardous substances under severe process conditions puts your production and maintenance teams under constant pressure. To achieve your safety goal and avoid accidents, you need access to information that can alert you to developing problems before an accident occurs.

Maximize yield, minimize energy consumption

Meeting your quality specs and operating at maximum production is no longer enough. You need to make sure you maximize yield and minimize your impact on the environment, with particular focus on reducing energy usage. Wasting resources is not an option.



Solve your challenges with Emerson

For over 50 years, reliable and innovative Rosemount products from Emerson have been helping customers in the petrochemical industry run their plants safely, and more efficiently. Here's how:



Rosemount devices are reliable and easy to use

Unmatched reliability, quality checks on every device and strict manufacturing techniques simplify your job. Our products arrive assembled, tested and ready-to-install out of the box. The long-term stability of our devices reduces the frequency of calibration man hours.

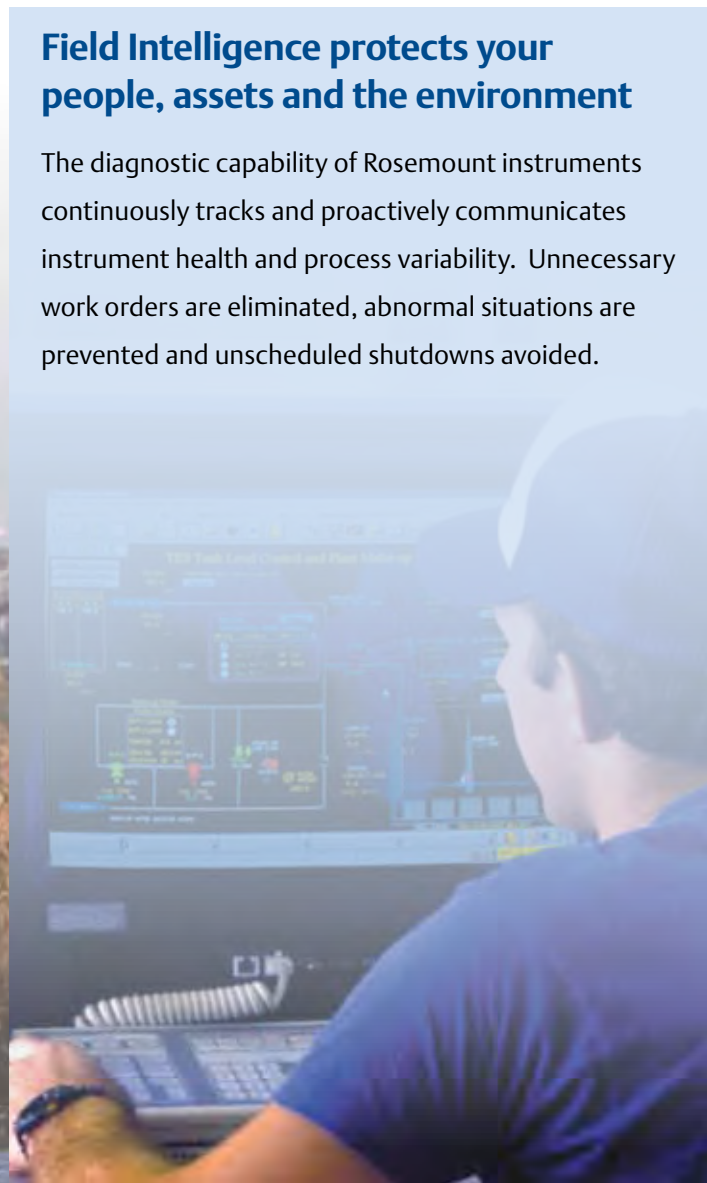
Best implementation practices make the difference

Emerson offers a broad range of innovative Rosemount instruments and the expertise to make sure they are implemented to solve your application needs. Our experienced salespeople know the petrochemical industry and can recommend best practices for your applications to make your plant more efficient.



Field Intelligence protects your people, assets and the environment

The diagnostic capability of Rosemount instruments continuously tracks and proactively communicates instrument health and process variability. Unnecessary work orders are eliminated, abnormal situations are prevented and unscheduled shutdowns avoided.



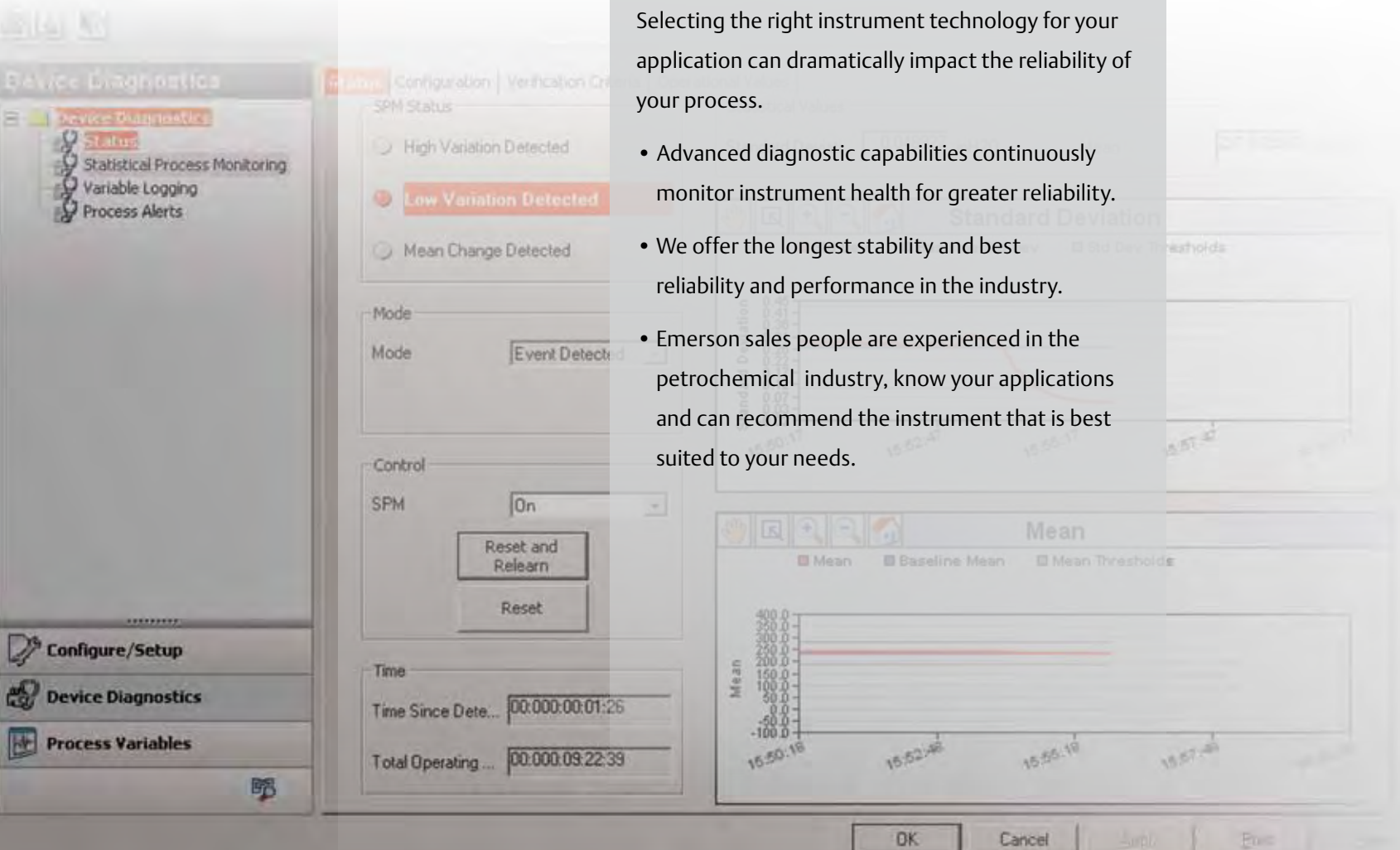
Minimize unscheduled shutdowns

Have you ever had an instrument checked late one night when the production unit was waiting for it to restart? Maybe you've lost countless valuable hours of production re-checking a measurement that looked suspicious but ultimately was not responsible for the problem. Choosing reliable Rosemount instruments helps you avoid these problems and expedite start-ups.

Your reliability goal requires best-in-class technologies

Selecting the right instrument technology for your application can dramatically impact the reliability of your process.

- Advanced diagnostic capabilities continuously monitor instrument health for greater reliability.
- We offer the longest stability and best reliability and performance in the industry.
- Emerson sales people are experienced in the petrochemical industry, know your applications and can recommend the instrument that is best suited to your needs.



Installation and maintenance made easy

Errors in the installation of instruments can result in shutdowns, loss of productivity or even in accidents.

- Our configuration software, such as Radar Master®, provides clear guidance through set-up making it easy, even on the first try.
- All our products arrive assembled, tested, calibrated and ready-to-install out of the box.
- Our maintenance and reference documentation is available online for easy access.



Process information you can rely on

Optimal plant reliability requires getting the right information to the right user, in time to make a difference.

- The advanced diagnostics in Rosemount instruments alert users to a device or process problem, helping to predict and eliminate issues before they make your unit trip.
- With our Smart Wireless technologies it is now possible and cost effective to see “blind spots” in your plant, improving access to valuable information that can help you anticipate problems.

Reach your zero accident safety goal

Keeping your people and assets safe is a primary concern. The ability to reduce the potential of hazardous situations is critical, and you also need to demonstrate to various regulatory agencies that your plant is safe. Emerson can help you reach your zero accident goals.



Reliability is your best guarantee

- Shutdowns and start-ups are the times when most accidents happen. So our focus on reliability is your best guarantee for safety.
- Fewer trips to check instruments lessen the chance of an accident.
- Whatever happens in your process in the lifetime of our transmitter, you will know it immediately: impulse line plugging, overheating, loss of stirring in a reactor will be detected and reported in real time through Rosemount diagnostics.



Whatever your approach to safety, we support you

IEC 61511 recognizes two methods for qualifying sensors for use in SIS applications: certification to IEC 61508 or use of sensors with a proven history of safe operation (prior use). Whichever method is right for you, Rosemount devices offer full compliance.

- Emerson provides industry-leading pressure, temperature, flow and level safety-certified sensors. We start with our field-proven designs and enhance them to meet IEC 61508 safety standard requirements for use in SIL 2 and 3 applications.
- Rosemount devices have billions of safe operational hours backed by third-party documentation, in support of the prior-use methodology. We can lower your compliance cost by simplifying documentation through online access.



Reduce your people's exposure to hazardous situations: let our transmitters do the work!

- Eliminate unnecessary trips to the field. Our Smart Wireless instruments let you add more eyes in the field and replace manual devices.
- Reduce work at heights. Our Smart Wireless devices allow you to skip the long and dangerous cabling work.
- The Rosemount offering leverages FOUNDATION™ fieldbus technology to convey the information from multiple measurement points through a single cable.
- Our wireless devices are literally “plug and play” requiring minimal work to get started.
- Reduce leak points. Rosemount transmitters, primary elements and mechanical connections can be purchased as an assembly. Integrated instrumentation means less connections, results in fewer leak points and translates into safer installations.



Ensure your plant delivers its full potential

Yield improvement and energy efficiency are primary challenges of the 21st century. Public and governmental pressure to minimize environmental impact is intensifying. Emerson can help you to achieve these objectives.



Maximize your product yield

- Losing a measurement can cost a lot of money due to reduced yields:
 - Rosemount instruments are self-managed. Our predictive diagnostics, ASP (Abnormal Situation Prevention) and Hot Back-up® features help you move from reactive to predictive maintenance.
 - Emerson after sales capabilities offer competent support for quick troubleshooting.
 - Emergency delivery options available.
- Stable and optimal control of key process variables in all parts of your process is important.
 - Our MultiVariable™ mass flow meters offer the highest accuracy possible in steam, natural gas and compressed air measurement.

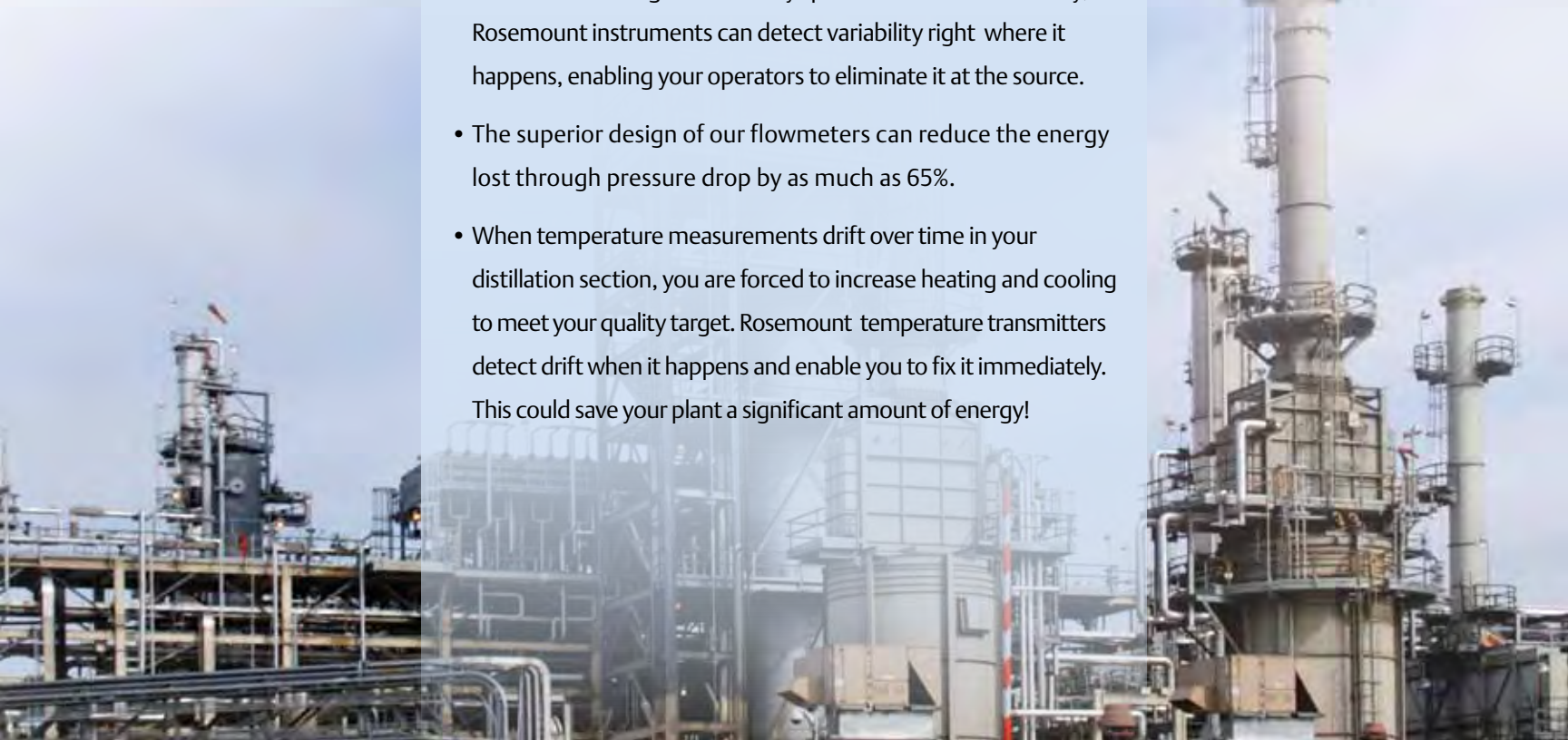


Improve environmental performance

- Regulations require monitoring of effluents that are often located in difficult to access or remote locations (e.g. high stacks or waste water flow). Our Smart Wireless technology now makes it easy and cost effective to add points as required.
- Improving environmental performance often involves retrofitting existing plant structure with more measurement points. Our conditioning orifice plates allow high accuracy measurements in tight spaces and minimize piping costs.

Minimize your energy consumption

- Low measurement accuracy often makes the source of process variability impossible to locate. Variability, however, does not go unnoticed by your process and forces you to run above target to meet your quality specifications. This results in increased energy costs. With the highest accuracy specifications in the industry, Rosemount instruments can detect variability right where it happens, enabling your operators to eliminate it at the source.
- The superior design of our flowmeters can reduce the energy lost through pressure drop by as much as 65%.
- When temperature measurements drift over time in your distillation section, you are forced to increase heating and cooling to meet your quality target. Rosemount temperature transmitters detect drift when it happens and enable you to fix it immediately. This could save your plant a significant amount of energy!



Project and support capabilities

In today's environment, projects are always on a tight schedule. It is increasingly challenging to find the right resources to complete your engineering design in the time frame you need, and keep costs down at the same time. And once your plant is up and running, you need a vendor that is always available.

Minimize project cycle time and cost

With over 50 years experience in petrochemical applications, our experts can recommend the best measurement solution right from the beginning, saving you rework and a lot of time.

If you choose to work with us as a Main Automation Contractor (MAC) or Main Instrumentation Vendor (MIV) from the Front End Engineering Design (FEED) stage of your project, our team of experts can take care of the design for you, freeing up time for your other project responsibilities.

Our expert MIV team ensures you get all your documents in the right format, when you need them.

Our easy-to-use Instrument Toolkit® software package cuts your sizing time in half. Go from process conditions to model numbers to instrument data sheets in minutes.

Our innovative technologies such as MultiVariable, Smart Wireless, and conditioning orifice plates help reduce the number of points and infrastructure needed. Together with our diagnostics capabilities, they make commissioning easier, and quicker, and reduce costs.



An extension of your automation staff

Our sales representatives have extensive experience serving the petrochemical industry everywhere in the world. They know your applications and are trained continuously on them so they can help you select the best technology.

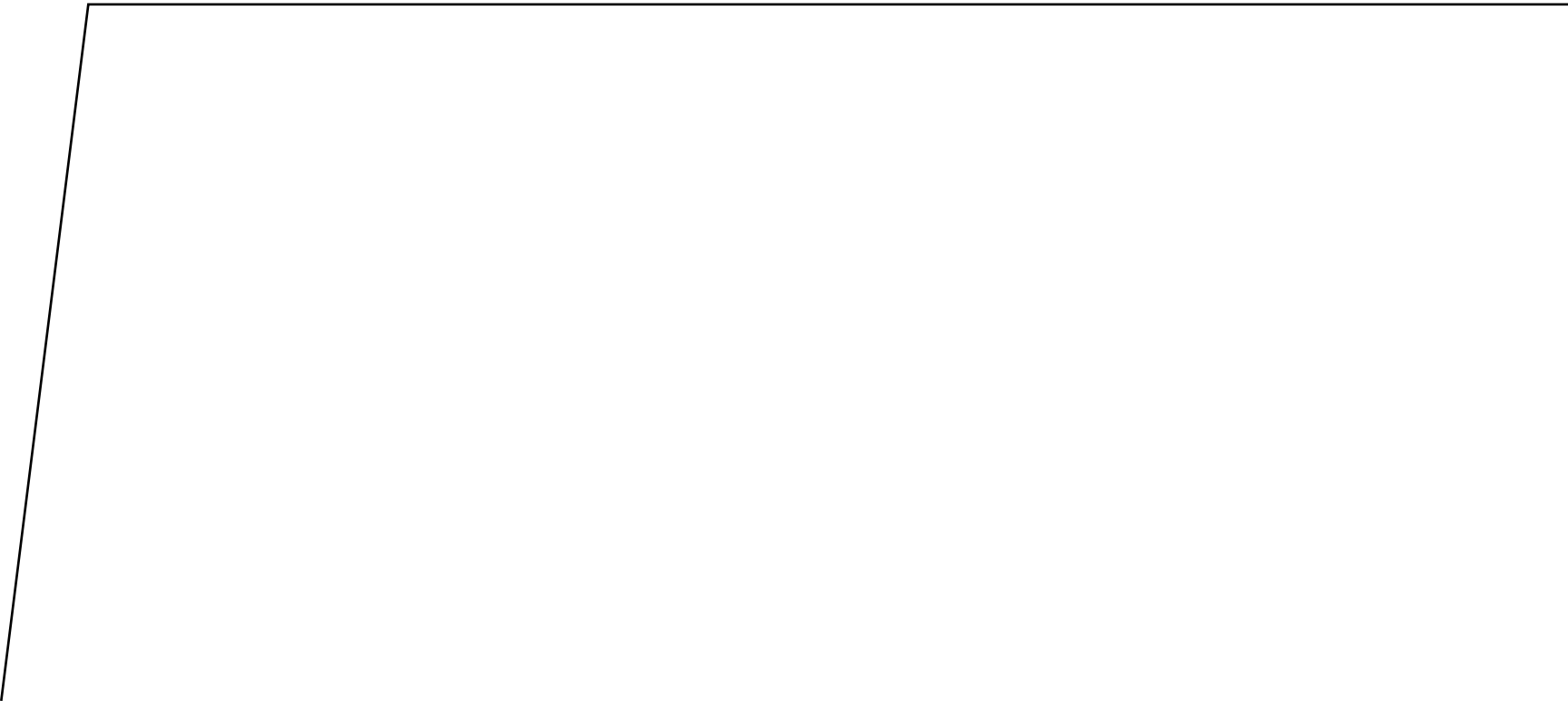
Our customer care center has access to resources and tools to support your needs 24 hours a day, seven days a week.

Training seminars on how to make the best use of our technology are possible for your automation staff.

For a list of our global locations, please visit us at www.emersonprocess.com







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