

Novaspect

Automation Services

■ Application Engineering

Product and process expertise that will allow you to optimize your system and keep it operating in a higher state of automation. This includes process review and/or design, instrumentation and final control element review, control strategy design, configuration and acceptance testing.

■ Planned Maintenance

Proactive system backups, system diagnostic verification, system clean up and modifications as well as documentation of the as found and as left condition of the system. This improves plant availability.

■ Expert Technical Support

Phone or email support by Emerson Certified Professionals. Get the answers you need when and where you need them. This improves staff productivity.

■ Remote System Diagnosis

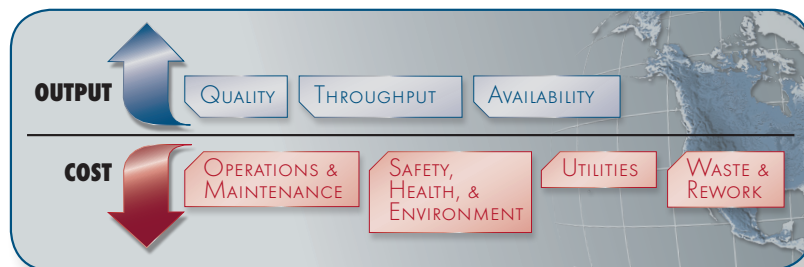
With secure VPN capability, we are able to remotely access a system to verify operating performance and run system diagnostics. This has the potential to reduce down time and identify process variability.

■ Software Updates

We will install major version and maintenance releases. This includes new features, functionality, and performance enhancements.

■ Emergency Access and Dispatch

Novaspect is available 24-hours a day to respond to emergency needs. We can support these efforts remotely or by dispatching our team to site.



Our Technical Experts are uniquely focused on producing and sustaining Business Results

OVERVIEW

In this competitive world manufacturers are operating lean, so properly deploying best in class automation technology to their advantage is a challenge. Over our 75 years in the process automation business, we have hired and developed a highly skilled staff in process automation, application solutions, data integration and analytics. Our team is ready to serve our customers in a collaborative manner to improve their business results.

We provide a number of Automation Services to augment our customer's capabilities. Using the figure above as a guide, we focus on improving the products produced through improved quality, increased throughput, and increased critical equipment availability. To drive production costs down, we provide tools and help with processes to improve efficiency of the team by automating routine tasks or by providing exception reporting to meet compliance and drive down waste.

Our service professionals will customize our service to optimize the value to each customer organization/engagement. These services typically include expansion projects, upgrades, routine maintenance, periodic update installation, process optimization and/or loop tuning.

In addition to providing preventative and proactive services, Team Emerson is available on an emergency or reactive basis 24-hours a day to assist our customers. Our team is prepared to provide service or parts that are required to minimize any down time and assist in returning the process control system to normal functionality.

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The Services Portfolio

The Services Portfolio is comprehensive and flexible to allow our customers to select those services that meet their particular needs and help them achieve the required business results with their Process Automation Equipment. The following is an example of available service offerings.

Factory Product Support – Software release updates, technical support, access to support website for articles and downloads. This support is delivered through Foundation Support for most products and Guardian for DeltaV. Guardian includes additional proactive system notification services

Express Module Replacement – Rapid access to replacement parts. Typically next business day.

Emergency On-Site Services – Access to on-site remedial hardware and software support service specialists. 24 hour access.

Scheduled On-Site Services – Inspection, Initialization, Preventive Maintenance, and other planned services by our service specialists.

Service Bank – A pre-defined bank of engineering support hours for on-going system support. Includes troubleshooting problems to implementing system enhancements.

Alarm Management Services – Assessment and improvement of alarm system functionality for improved plant safety and operator effectiveness.

Control Performance Improvement – Detailed analysis of your system's control loops resulting in recommendations for improvement in loop utilization, process input status, control limitations, and abnormal process variability.

Control Valve and Instrument Asset Management Service – Proactive diagnostics and troubleshooting of field devices with a focus on final control elements and instrumentation. Control Valve Services include the use of the Fisher FlowScanner™ or Valvelink™ software for diagnosing control valve problems.

Combustion Control Performance Tuning – Loop tuning, system performance tuning. Control strategy optimization. Combustion equipment analysis and optimization.

Partnership Support – Tight integration of Your Support Services team and Team Emerson with a focus on prevention, continuous improvement and strategic Process Automation System (PAS) Life Cycle Management. An assigned SureService Lead Engineer will assist in the monitoring of system reliability, system updates and upgrades.

CUSTOMER BENEFITS

- **Reduced risk** to the process by proactively addressing any known issues and performing routine maintenance and diagnostics.
- **Better decision making** with data from many sources combined, analyzed and turned into user-personalized and actionable information with Guardian Support and Novaspect services.
- **Improved staff productivity** through global collaboration across systems and sites.
- **Lower operations and maintenance costs** by shifting from a reactive/preventive strategy to predictive/proactive maintenance.
- **Reduced down time** by utilizing Novaspect's certified service professionals for remote or on-site troubleshooting.
- **Better operating performance** via proactive software updates and upgrades. As new features and maintenance fixes enable improvements in plant control operations.
- **Improved capital efficiency** through increased investment life as new products and technologies become available.