Emerson covers the full range of modern control system technology including basic and advanced control, procedure automation, alarm management, advanced operator displays, control room design and staffing, and process simulation.

Performance experts can help deliver operational and project certainty with improved run time, startups, and shutdowns and increased quality and throughput.

See improvements throughout your facility, whether in the chemical, petrochemical, life sciences, metals and mining, refining, pulp and paper, or oil and gas industry.

**CONTROL PERFORMANCE**

Determining the process variables associated with product quality and throughput are key to process performance. Emerson’s Control Performance solutions can help optimize the performance of the control loops in the process, which will lead to improving your facility’s profitability, product quality, throughput, and yield and higher process availability.

**OPERATOR PERFORMANCE**

Operator Performance is used to describe the human interaction with your process. One of the most important roles in the operation is the operator running the control system. Emerson’s holistic approach offers a complete suite of services and products to improve and optimize Operator Performance at your facility and achieve regulatory compliance.

**SIMULATION**

Dynamic simulation with Mimic Simulation Software provides accurate and real-time simulation of plant behaviors. Made for users with process automation experience, not simulation experts, Mimic automatically integrates with DeltaV or other offline control systems. Use the exact same operator graphics and controls to test configurations and train new or inexperienced operators.
Control Performance

**Advanced Process Control (APC)**
Identifies variables that are key to process performance and drives them to their desired values.

**AspenTech DMC3 Software Interface**
Standardized interface modules provide the necessary logic for a successful Aspen DMC3 implementation with DeltaV.

**Assessments**
Troubleshoot an existing, poorly performing process, or evaluate the suitability of enhanced process control strategies, such as APC.

**Compressor Control**
Maintains, sustains, and enhances the performance of your compressors.

**DeltaV Loop Service**
Interprets control loop data and provides actionable recommendations to help maintain and improve your Control Performance.

**Loop Tuning**
Using the EnTech™ Toolkit for advanced loop analysis and tuning.

**Model Predictive Control**
Obtain greater throughput, reduced variability, and increased safety on complex unit operations.

**Regulatory Control**
Development or modification of existing control strategies to include more advanced regulatory schemes such as Feed Forward Control.

**SmartProcess® Optimization Software**
Turnkey, off-the-shelf advanced control and monitoring applications to optimize your process.

**State Based Control**
Reduce unplanned events and operator error using autonomous operations for a safer, faster startup.

Operator Performance

**Advanced Operator Displays**
Design and development of the operator interface for your control system.

**AgileOps™ Alarm Management Software**
Emerson’s complete alarm management solution that provides consistency and reliability to the control system by keeping it optimally configured for the process state.

**Alarm Rationalization**
Review and design of every point in the alarm system. Dynamic alarming design that modifies alarm configuration based on plant operating state.

**Assessments**
Compare site metrics to current industry standards and best practices and actual performance vs desired performance.

**Control Room Design**
Ensure that the control room users are provided with an environment that allows them to work at a high level of efficiency, in comfort.

**Industry Standards Workshop and Philosophy Development**
Produce cohesive philosophy documents and standards that apply specifically to your site.

**Operator Staffing**
Ensure that you have the right number of operators and an efficient operations team to consistently perform their assigned duties.
Process Simulation

Mimic™ Simulation Software
Provides real-time, dynamic process and IO simulation built to deliver business results of the Digital Twin to process industries.

Automation Development & Testing Systems
Enhance control system testing in an offline environment to reduce time and cost during capital projects and change management.

AspenTech HYSYS Link
Provides HYSYS Dynamics case management and integration with Mimic for IO integration, training, and testing.

Mimic Field 3D
Leverage existing CAD models to create an immersive and interactive environment for smart design reviews, operator training, or live data visualization.

Multi-Purpose Dynamic Simulation
Use simulation to provide benefits across the lifecycle of a facility from design to commissioning and startup to operation.

Operator Training Systems
Improve operator efficiency and decision making with realistic, hands-on training.

Simulator Maintenance Services
Ensure longevity and peak performance of your simulation system, without requiring in-house expertise.

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