



EcoStruxure Foxboro DCS

Elevate your operational efficiency,
productivity, and reliability.

se.com/foxboro-dcs

Life Is On

Schneider
Electric

The three most important ways a process automation vendor can help its customers secure their future is to protect the operational integrity of their plants, enhance the operational insight of their people, and enable them to adapt easily and affordably to change.

100+

years of proven, reliable process automation expertise

Go further with EcoStruxure™ Foxboro™ DCS

Evolved from decades of collaboration with the world's leading processing companies, the Foxboro DCS elevates the efficiency, productivity, and reliability levels of every operation it controls.

180

countries worldwide with Foxboro control systems installed



Why EcoStruxure Foxboro DCS?

2500+

global delivery
engineers dedicated
to serving our
Foxboro customers

Operational integrity for safe, secure, reliable production

The Foxboro DCS reduces risks to your process and protects your profitability. No common mode of failure, integration with the world's leading safety system, and a three-pronged cybersecurity approach help ensure minimum downtime and continuous production.

Operational insight for faster, more accurate performance

Advanced troubleshooting, situational awareness, decision support, and proactive maintenance tools make every team member faster, more accurate, more agile, and better able to drive production efficiencies that improve the plant's operations and business.

Future-proof technology for easy and affordable evolution

Foxboro DCS protects investments in technology and intellectual property made today, and is ever-ready to transition into tomorrow. Drawing on more than 30 years using a unique future-proof approach, it features open industry standards; flexible, object-based architecture; plug-and-play upgrade paths; and standardized technology.

Integrated control for lowest cost of ownership

Foxboro DCS is the industry's strongest platform for commanding the entire enterprise. Designed to power a true enterprise control system, it features a component object-based platform with common industrial service-oriented architecture. So you get the opportunity to expand control across your entire enterprise with a single system.

The EcoStruxure Foxboro DCS is packed with technologies based on open standards. All are designed to protect operational integrity, provide operational insight, and offer the future-proof evolution of your process capabilities.

Go further

EcoStruxure Foxboro DCS at a glance

In the field:

An innovative family of fault-tolerant, highly available components collects and disseminates valuable information to every corner of the plant.



Powerful, flexible family of I/O

Space-saving designs and flexible, software-configurable features offer many design possibilities for system installation, upgrades, or expansion projects. Inherently safe and remote I/O meet any environment or design criteria.



High-capacity, fault-tolerant control processors

Foxboro DCS control processors are designed for nonstop operation and offer regulatory, logic, timing, and sequential control, as well as data acquisition, alarm detection, and notification. Our controllers are interoperable with earlier generations to assure an easy transition path for upgrades, significantly reducing your cost of ownership.

Choice of integrated control and safety

Offers integration with world-leading Triconex safety instrumented system while maintaining separate design integrity. Solutions range from safely unifying the user experience at the workstation to integrating the safety system as a node on the control network — all with no common mode of failure.

Scalable network

Fast, secure control network allows large system segmentation, distributed system connection, and third-party network for remote support. Provides wireless capabilities.



Cybersecurity hardening

Offers a three-pronged approach to cybersecurity. Includes state-of-the-art hardening of system and architecture components. Helps meet industry compliance and ensures best practice implementation.



In the control room:

Advanced features consolidate critical information, elevate each team member's capabilities, and ensure flawless, continuous operation.

Time-saving engineering tools

Deliver intuitive configuration, reduce manual steps, and accelerate fault-finding with features like dynamic SAMA and System Auditor.

Engineer anywhere capabilities

Allow use of best person for job, regardless of location. Simplify and speed up engineering. Provide flexibility to make last-minute changes.

Proactive maintenance

The unique Maintenance Response Center provides contextualized alerts for correct decisions and knowledgeable responses. Predictive maintenance tools spot issues before they can occur. Field Device Manager quickly and easily commissions, configures, and maintains devices.

Flexible Lean Project Execution (FLEX)

FLEX offers an innovative methodology to project execution. It ensures better execution flexibility by leveraging project data as soon as it is made available. FLEX removes automation from the critical path, keeping project risk and cost under control.

Foxboro DCS easily integrates with a variety of plant-wide assets, including PLCs and intelligent power and motor control centers, to increase engineering efficiency and reduce total cost of ownership.

Human-machine interface (HMI)

Situational awareness graphics elevate the human elements of HMI. We meet or exceed latest best-practice industry standards to minimize operator distraction and fatigue, and help eliminate errors for ultimate operational safety.

Enterprise historian

High-capacity data engine provides rich analysis and reporting of past measurements and trends. Complements system's powerful predictive capabilities.

Engineer

EcoStruxure Foxboro DCS reduces both workloads and risk for system engineering and project engineering team members. It offers flexible features to simplify and automate engineering, including design, configuration, and troubleshooting.



Find and fix issues fast

The system's intuitive design makes detecting and locating data simple and speedy. In fact, the system works to streamline every part of the engineering workflow, eliminating manual steps – and their associated risks – wherever possible.

Shrink system footprint and cut costs

EcoStruxure Foxboro DCS process-connected components like universal I/O, virtualization, and high-capacity controllers eliminate significant footprint and cost through reduction of infrastructure, spares, and inventory. They also offer compliance with multiple standards plus future-proof compatibility with multiple-generation products.

Evolve to meet constant change

The system easily adapts as project requirements shift or grow and plant technologies evolve. EcoStruxure Foxboro DCS offers “engineer anywhere” geographical flexibility, accommodates last-minute design changes, helps meet or beat schedules and delivery dates, and improves operational agility.

Success metrics

- Approximately 40% reduction in breakdown resolution time
- Approximately 30% decrease in cabinet space
- Approximately 30% cost savings in network infrastructure

Operate

For plant operators, EcoStruxure Foxboro DCS offers situational awareness and embedded user guidance. Optimized for the most effective presentation of data, the system supplies each team member with unprecedented operational insight. Errors are avoided; ease and productivity are maximized.

Run at peak performance

The Foxboro DCS HMI provides easy visualization of historical trends, ad hoc analysis, and a central data repository. Operators gain a real-time view of all relevant activities for enhanced decision-making to optimize plant performance.

Quickly resolve abnormal situations

Situational awareness graphics reduce operator fatigue and offer a broad view of plant operations with simple shapes and meaningful colors plus consistent analog indication of objects. Configurable alarm management analyses let users reprioritize alarms based on changes in operating conditions — accelerating understanding, action, and resolution.

Improve response and productivity

Operator visualization based on market-leading InTouch™ software takes control and optimization to new levels, offering plantwide visibility to third-party devices, applications, and systems. Synchronized role-based responses to events plus managed workflows and audit trails provide clear guidance. Results: minimum human errors, optimum response times, and maximum productivity.



Manage

The Foxboro DCS system empowers managers and executives to unlock the true potential of every team member. Dashboards for strategic, financial, and operational guidance share accurate overviews to enable the best decisions. System design extends the lifespan of process-connected components while allowing change out of control room elements for modernization without disruption — and the lowest total cost of automation ownership.

Maximize ROI on technology and IP investments

Foxboro DCS is ideal for planners who want to optimize their ROI in evolving technologies and intellectual property. It furnishes all the tools needed for the future-perfect plant, including open industry standards; flexible, object-based architecture; plug-and-play upgrade paths; and use of common technology.

Ensure safety, security, and compliance

We help managers secure their plants against a wide variety of threats. Secure integration with the world's leading safety system adds flexibility without adding risk. Cybersecurity is covered by system hardening as well as expert consultation. And standards-embedded work flows plus advanced emission reporting aid regulatory compliance.

Maximize production value

More than any other automation offering, Foxboro DCS ensures alignment of measurement and business systems via plantwide collaboration among all functional roles. Real-time dashboards plus enterprise modeling and monitoring provide a clear path to increased plant profitability.



Success metrics

- Approximately \$400K per year total savings
- Approximately 6% energy feedstock savings
- Approximately 4% electricity cost saving

Maintain

With the Foxboro DCS, maintenance supervisors and technicians can achieve greater efficiency, decrease mean time between repairs, and promote a proactive culture. Alarm triage and advanced performance monitoring come with the unique Foxboro DCS maintenance response center, which supplies real-time, contextualized alerts and analytics, improving the supervisor's ability to make correct decisions and provide knowledgeable responses.

Maintain plant-wide devices

Elimination of costly, tedious manual engineering — plus the quick, effortless commissioning and configuration of devices via our field device manager — make almost all maintenance duties faster, easier, and more productive. A single, unified database eliminates mismatches between process system and asset databases. Foxboro DCS supports all major smart device protocols.

Avoid costly downtime

The system helps avoid the truly exorbitant expenses of production halts in the modern plant with contextualized, real-time extended alerts and guided work-flow, advanced event analysis to predict potential issues, and powerful metrics reporting.

Reduce risks of working remotely

Foxboro DCS features extensive support for cloud-based technologies and mobile devices from tablets to smartphones. Users get maximum freedom and flexibility to access maintenance software, review stored procedures, and generate reports from the field.



Success metrics

- Up to 50% less time for device commissioning, configuration, or replacement
- Approximately 30% cost savings using predictive maintenance vs. reactive maintenance/scheduled shutdowns

Protect

Users keep their plants safe, available, and secure with the Foxboro DCS. It offers unrivaled protection from both cyber threats and abnormal process events.

Guard against operational risk

Foxboro DCS helps avoid unexpected outages via a uniquely unified control and safety user experience. The system increases early visibility of risks, provides contextual information to enable faster responses, and helps eliminate downtime due to operational error.

Integration with market-leading Triconex enables effective sharing of operational information while keeping the safety system functionally isolated.

Guard against cybersecurity risk

Effectively protect your plant from cyberattacks with the three-pronged Foxboro DCS approach: system hardening, best-practices services, and secure delivery.

Protective system elements include complete endpoint protection; switch hardening; BIOS security implementation; role-based access controls; and centralized monitoring, management, and device health controls.

Protective services include remote watch, expert cybersecurity consulting, and data security training.



Centre for Chemical Process Safety study shows business benefits from good process safety

- Approximately 3% decrease in production costs
- Approximately 5% reduction in maintenance costs
- Approximately 20% cut in insurance costs
- Approximately 1% decrease in capital budget

Life cycle services

Outstanding upgrades

Whether plants are already running Foxboro technology, using a competitor's DCS, or starting from scratch, it's easy to get going with the EcoStruxure Foxboro DCS.

We offer phased HMI, plug-in I/O, or total system replacement solutions. Foxboro technology users can migrate with little or no downtime, depending on which Foxboro version they are running. Users of competing systems whose wiring terminations are still functional can migrate to Foxboro DCS without ripping and replacing infrastructure, thus significantly reducing costs and downtime.

Fast-track installs

In the hands of skilled project engineers, our proven FLEX model; intelligent marshaling; advanced, cloud-based engineering tools; and virtualization technology fast-track greenfield implementations and system expansions, minimizing risk and ensuring peak long-term performance. On large, complex projects, customers can gain additional advantages by naming Schneider Electric as their main automation contractor. This produces dramatic savings via efficiencies gained when we handle everything from site audits, project management, and FEED through installation, testing, commissioning, and delivery.

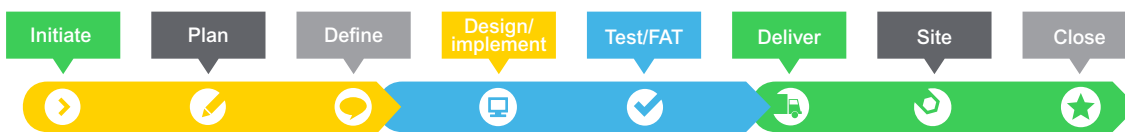
And once the system is up and running, innovative support programs help keep it that way.

Lifetime support

Schneider Electric offers cradle-to-grave life cycle support programs, defined by product phase. For example, exchanging older equipment enjoys significant discounts, and periodic updates keep systems future-proof. Results: less risk, fewer errors, improved integration quality, fast-track startup, and automation implementation cost cuts up to 30%.

We maintain centers in more than 50 countries, responding to the needs of customers in over 200,000 locations within more than 180 nations. A rich portfolio of essential services, from 24/7 coverage to remote monitoring to lifetime, future-proof support helps protect investments in our products and solutions.

Customer reports consistently ranked Foxboro among the best-served systems in the industrial process world. We are determined that the Foxboro DCS will receive support that meets or exceeds that high standard.

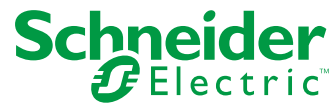


Go further with EcoStruxure Foxboro DCS

Explore how Foxboro DCS process automation can deliver the operational integrity, operational insight, and future-proof capabilities to elevate your plant performance and profitably.

Visit www.se.com/ecostruxure-foxboro-dcs or call your Foxboro representative today!

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