Rockwell Automation

FT Historian SE

Data management for global manufacturing

Secure, scalable, accessible:
world-class historian

Driving data-based decision making for a better bottom line.
Real-time access to reliable information is the key to improving productivity and efficiency. When you know what's happening on the plant floor, you can make better decisions—about process, time and material management—whatever key performance indicators (KPIs) you've identified as contributing to your continuous improvement objectives. The expanded capabilities of FactoryTalk® Historian Site Edition (SE) provide you with the data capture, management and analytical capabilities to drive improved decision making.

World-class historian
PG 2

Turning information into action
PG 4

Visualize your enterprise
PG 6

Case study
PG 10

Services
PG 11

2

FactoryTalk Historian provides a data infrastructure for obtaining real-time process and production information. The platform supplies complex manufacturing data, providing insight into performance parameters from a single subassembly, to a production line, or across the enterprise. It uses off-the-shelf interfaces, and it automates installation procedures with Logix control systems. Additionally, it can be configured for interoperability with other legacy controls systems. As a result, FactoryTalk Historian SE is faster and easier to bring online than traditional historians.

Advantages

- Scalable real-time process historian

- Premier integration to FactoryTalk® and Integrated Architecture™ products, reducing time to value

- Auto Discovery and Auto Configuration helps reduce deployment time and lowers total cost of ownership

- Asset modeling, event tracking, and notification provide a rich data set with context for analytics applications

- Robust and reliable data collection application

- Powerful archive technology to help provide long-term data storage with fast, efficient data retrieval

- Comprehensive support for redundancy and high availability to ensure continuous access to data

- Full featured process historian for validated applications

World-class historian
PG 2

Turning information into action
PG 4

Visualize your enterprise
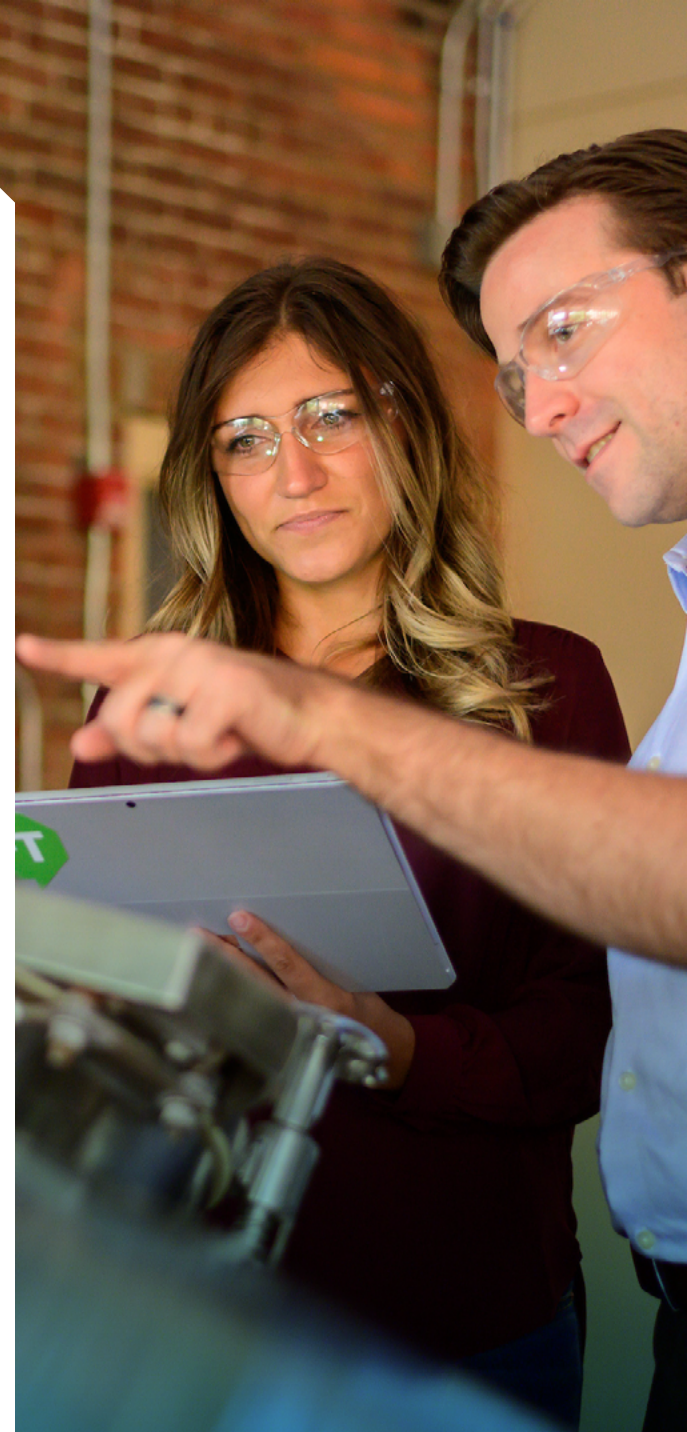PG 6

Case study
PG 10

Services
PG 11

3

Turning data into actionable information

Plant supervisors can view historical data for individual machines, process equipment or production lines on demand; production supervisors can compare and analyze batch operations for an individual site against enterprise-wide corporate production parameters.

This enhanced visibility helps identify and correct sources of inefficiencies quickly, leading to improved manufacturing consistency, reduced energy use, improve first-pass quality and other factors that impact your overall manufacturing performance.

" FactoryTalk Historian SE provided us with the ability to automate data management. We were able to identify line interruptions and places we needed to take corrective action to open up our high-speed bottling line. Ultimately, we were able to achieve a six-percent increase in efficiency on this line."

Production Manager,
Soft drink bottling company

World-class historian
PG 2

**Turning information into action
PG 4**

Visualize your enterprise
PG 6

Case study
PG 10

Services
PG 11

4

Each industry is unique, and each customer is unique within that industry. In many regards, the products and methods may be similar, but the challenges may vary. Regardless of industry, FactoryTalk Historian SE automatically discovers data sources and relevant tags in your system, then historizes and configures them with the most optimal parameters.

FactoryTalk Historian SE contextualizes process data by associating process attributes to physical assets in your facility. The asset definition includes process tags, streaming event-based analytics and notification, and other data sources such as relational databases. Asset analytics can then be used to configure, schedule, and run expressions, rollup calculations, or other SQC calculations. Additionally, event-based data can be captured through trigger conditions from the control system.
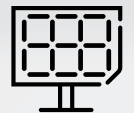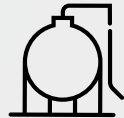
FT Historian SE

Visualize your enterprise

using the powerful data collection and analysis engine of FactoryTalk Historian SE and its extensive series of Microsoft®-compatible reporting tools

Automated install and configuration

FactoryTalk Historian will automatically install and configure itself on a standard FactoryTalk platform. It will auto-detect Logix and other **Rockwell Automation controllers** and automatically detect relevant tags to be historized.

Interoperable data collection capabilities

FactoryTalk Historian can connect to virtually any control system or **HMI software (such as FactoryTalk® View)** and collect real-time data at high speeds and at full resolution.

Simplified calculation engines and totalizers

Intuitive configuration of complex calculations like asset efficiency, real-time cost accounting and batch summary. In addition, you can program communication applications such as alarming, emailing, and paging, and data integration programs or applications that do not require user intervention.

Built-in redundancy

FactoryTalk Historian supports several layers and methods for redundancy and high availability above hardware redundancy and Microsoft clustering. The first level collects data to the server using redundant interface nodes; the second level places servers in server "collectives," where interface nodes will feed both the primary server and secondary server.

Accurate archiving with optimized data store

FactoryTalk Historian uses tag and historical archiving. This method records only those data points that exceed an acceptable range of values and reduces the required amount of stored data points, while maintaining accuracy. Data archive storage and retrieval is optimized to maximize performance even with large amounts of data (1 GB or higher).

System-wide transport security

Transport security uses Windows SSPI for encryption to provide confidentiality and signing of messages for integrity. Windows-based transport security uses symmetric key encryption and hash-based message authentication codes.

Boost performance

Provide real-time operation and production data to other supply-chain management functions (maintenance, scheduling, accounting, etc.)

- Monitor or calculate effective equipment usage and performance.

- Detect degradation of performance, initiate alerts or requests for operations and maintenance actions.

- Help improve transformation of raw materials to product and overall equipment effectiveness and utilization.

- Help improve scheduling and tactical execution of equipment maintenance.

- Monitor materials consumption and production (raw, intermediates, final product utilities, etc.) Help reduce the amount of materials lost due to overproduction, as well as help reduce materials lost during operation product or grade changes.

Increase compliance

Take advantage of comprehensive auditing capability for tracking configuration changes and data modification.

- Facilitate, validate and document performance within regulatory or permitted boundaries.

- Help reduce validation efforts by including OEM delivery and testing.
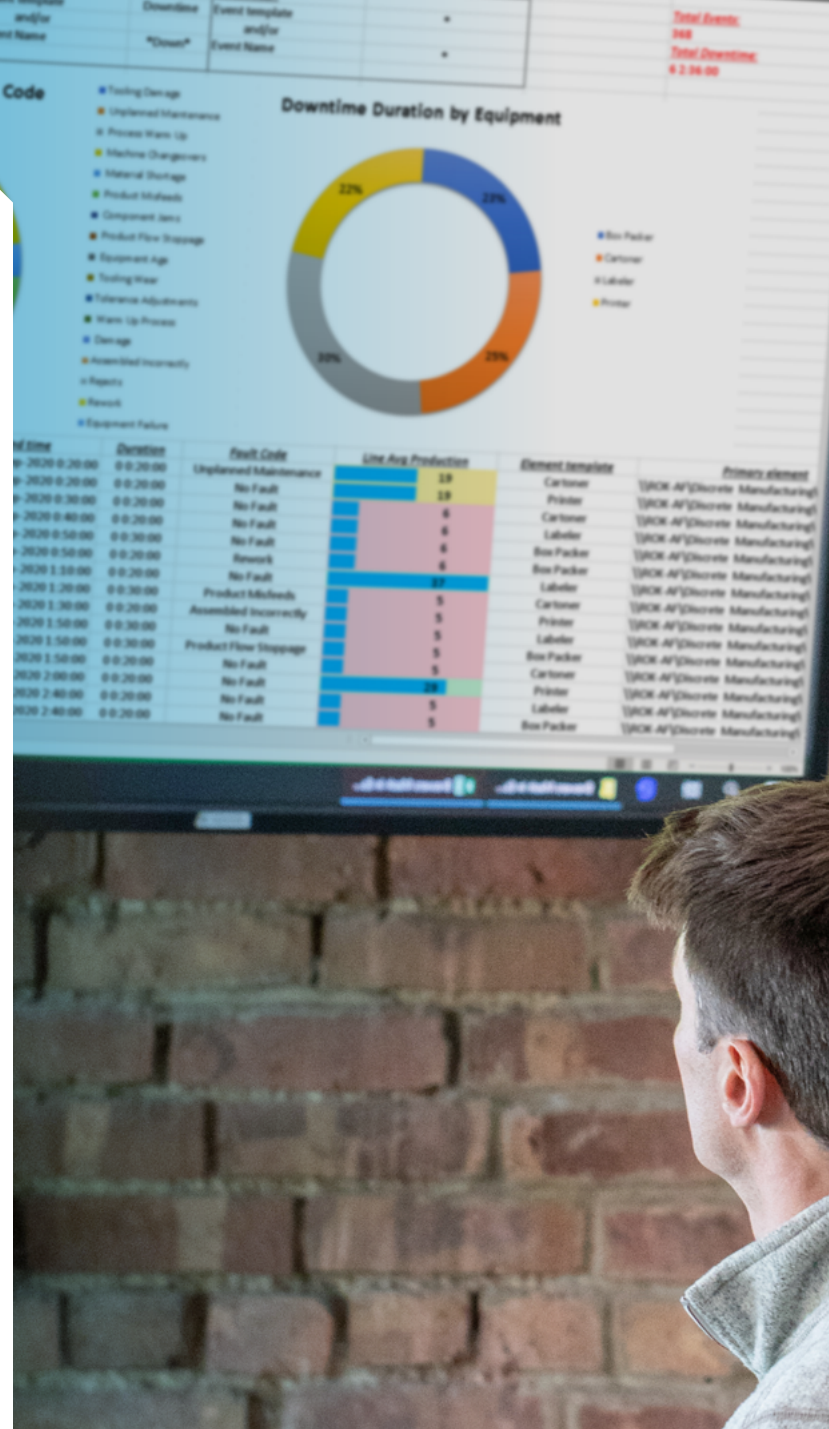
Reduce time-to-market

Monitor and analyze operation and production activities to identify opportunities.

- Help reduce time to execute grade or product changes.

- Help minimize product waste, recycle and blending. Increase effective equipment capacity and positively impact materials cost management.

- Help improve product development by collecting and evaluating data related to new operation actions, materials, equipment, equipment capabilities and procedures.

- Identify operation or production bottlenecks and improve operating efficiency to avoid unnecessary capital spending.

Maximize quality and continuous process improvement

Document actual versus model production and operations to identify deviations and sources of quality issues.

- Examine product quality in accordance with specifications and operations and product constraints.

- Analyze for new process and operational boundaries when throughput, material or equipment changes occur.

- Increase effective (downstream) capacity by identifying and isolating off-spec product earlier (upstream) in production.

Case study

Excellent visibility drives consistency and quality improvements as manufacturer goes global

The power of information-driven manufacturing operations management is well documented. Driving bottom-line performance improvements across a manufacturing enterprise is a direct result of the ability to visualize, gather and analyze production data. For one high-tech manufacturer, achieving its stringent, first-pass quality requirements required it to make critical improvements in its ability to manage its supply chain and to improve process consistency across several newly opened global production facilities. FactoryTalk Historian SE provided the toolset the manufacturer needed to achieve those performance goals.

"Our production facilities—and our supply chain—literally cover the globe," said the Plant Manager. "The tools that FactoryTalk Historian SE provided us gave us the visibility we needed to identify areas that needed improvement and to collaborate on problem-solving. It's made us much more responsive and able to get ahead of potential issues before they can affect production."

The application provided plant managers visibility into every aspect of its supply chain. A tagging system providing rapidly available genealogy for subassemblies coming from suppliers and performance data for parts installed in its customers' plants. In addition, performance data could easily be compared among existing plants and those that had recently come online in new locations. Machine, labor or process inefficiencies could be identified and corrected to bring across-the-enterprise improvements in key performance indicators.

FactoryTalk Services

FactoryTalk® Services deliver value. They are a shared set of common features that enables superior interoperability and commonality between applications for reduced engineering, operations and training costs, while extending the life of existing investments. The FactoryTalk Services provide a solid foundation for today and a path for the future.

	ACTIVATION	DIRECTORY	SECURITY*	DIAGNOSTICS	AUDIT	LIVE DATA	ALARMS & EVENTS
FactoryTalk Historian SE	✓	✓	✓	✓	✓	✓	

*Historian SE supports Windows integrated security model that can be utilized through FactoryTalk® Security Windows linked users.

View Your Options

With the **myRockwell Software Portal**, explore simplified and flexible software solutions within a familiar online ecommerce interface. The portal offers:

Web-based quoting and license management

Recommended products and add-ons

Simple and dynamic software activations

Access to software updates

Connect with us.

rockwellautomation.com ———————————————————————————— expanding **human possibility**®