

Life Is On

Foxboro®

by Schneider Electric

Sanofi Pasteur

Industry: Life Sciences

Sanofi Pasteur
Gerland, Lyon, France

sanofipasteur.com



Schneider Electric Helps Sanofi Pasteur Achieve 30 Percent Increase in Overall Equipment Effectiveness

“The Schneider Electric solution has met all of Sanofi Pasteur’s expectations by providing easy migration with the existing system, high availability and a secure architecture to store and manage all the facility’s technical data.”

- Christian Colin, Life Sciences & Systems Business Manager
Schneider Electric

Val de Reuil, France – Protecting the health of people around the world is Sanofi Pasteur’s primary focus and concern. As the world’s leading producer of vaccines to safeguard the world’s population from infectious diseases, Sanofi Pasteur is the largest company entirely dedicated to vaccines. Recently, the company produced 1.6 billion doses of vaccines to immunize more than 500 million people across the globe.

Goals

- Sanofi Pasteur needed to implement a solution that would enable the company to continually gather information and monitor its manufacturing processes
- The company required a system that could be easily integrated into a pharmaceutical validation system

Challenges

- Sanofi Pasteur was limited in the flexibility and expandability of its previous proprietary system
- The instability of the former system triggered numerous false alarms, resulting in operators being sent incorrect hardware and network failure information
- Only manual written records could be produced and these were prone to operator mistakes resulting in data entry errors

Solutions

- Foxboro control system

Results

- Sanofi Pasteur has achieved an estimated 30 percent increase in overall equipment effectiveness (OEE)
- The stability of the Foxboro architecture and its object-oriented technology enabled Sanofi Pasteur to achieve a 15 percent reduction in time and engineering costs
- Maintenance operations have significantly improved with the ability to immediately address issues on the line when operators are notified by the Foxboro System alarms and alert information

Conforming to strict quality and regulatory requirements is a constant challenge for Sanofi Pasteur. That means the company's manufacturing operations have to maintain the highest level of control and accuracy to meet the health needs of the public with a reliable supply of vaccines.

To ensure that its production of vaccines complies with strict international regulations for quality and efficacy, the company implemented the Foxboro system from Schneider Electric to operate its facility in Val de Reuil, France.

The Importance of Quality in Vaccine Manufacturing

As the world's largest company entirely dedicated to producing vaccines that immunize the public from more than 20 infectious diseases, Sanofi Pasteur recently expanded its manufacturing operations to fulfil the ever-growing demand for its products. The new production facility was designed as a highly advanced and rapid production operation which, in the event of a global influenza pandemic, could rapidly produce large quantities of vaccines to accommodate the high volume of anticipated demand.

The prior system was unable to manage this manufacturing requirement because the technology was obsolete and built on a specific proprietary hardware platform that could only be maintained by the company that developed the system.

This required Sanofi Pasteur to enter into costly service contracts with the developer in order to keep the manufacturing facility running. In addition, the proprietary system had several instability issues. Alarms were triggered erroneously, causing the production line to halt and resulting in significant downtime and lost revenues. The system experienced numerous hardware and network failures which also contributed to unacceptable downtime events. Moreover, the previous system was unable to provide electronic data reporting; instead Sanofi Pasteur had to rely on paper reports to complete production audit trails to meet various regulatory requirements.

"Because of the proprietary nature of the former system, Sanofi Pasteur was limited in the flexibility and expandability of its manufacturing operations," said Christian Colin, Life Sciences and Business Systems Manager at Schneider Electric. "After reviewing the manufacturing requirements that were not being met by the original system, the company began researching various technologies that could not only address Sanofi Pasteur's requirements for today, but provide the scalability to meet expansion needs in the future."

Because of continued production downtime, new international regulations for product quality control and increasing market demands for its vaccines worldwide, Sanofi Pasteur was forced to find a more reliable and productive solution.





Sanofi Pasteur Implements Foxboro System to Provide High Performance, Increased Reliability and Cost-Effective Redundancy Options

After completing an intensive evaluation process, Sanofi Pasteur selected the Foxboro System from Schneider Electric.

“The Schneider Electric solution offers high availability architecture at all operations levels,” Colin said. “The reliability and redundancy features provided by the Foxboro System and data servers ensure that Sanofi Pasteur operators and management receive a continuous flow of information.”

The Foxboro System provides Sanofi Pasteur with an estimated 30 percent increase in reliability of its manufacturing operations. The company experiences less downtime and has more confidence in the integrity of the reports provided by the Foxboro system.

The Foxboro System is a high-performance hybrid automation controller system. It is an extremely reliable technology featuring high I/O densities with cost-effective redundancy options. Its control unit and I/O system form the basis of a complete distributed control and recording environment capable of continuous analog, logic and sequential control. Combined with secure data recording for accurate manufacturing measurement parameters, the Foxboro System collection of features is designed to maximize Sanofi Pasteur’s return on investment.

The Foxboro System offers data record integrity which is critically important in regulated industries such as pharmaceutical manufacturing. A production batch of vaccines can result in significant revenue for the company. However if accurate records on the production cycle are not maintained properly, a batch can be scrapped and the production cycle must be done all over again – wasting time and money.

The Foxboro System is designed to store vital information collected during the production process and is managed locally within the device and then forwarded to the appropriate business system via the network. In the event of a network failure, the Foxboro System will store the information and then send it to the appropriate locations once network connectivity and operations are restored.

The data storage feature of the Foxboro System is vitally important to Sanofi Pasteur operations,” Colin said. “If the company was to lose the process data due to a hiccup in the connectivity of their network, they would be looking at a tremendous loss in revenue because production batch could potentially be thrown away and they would have to start all over again. The savings in production cost and production time is an invaluable feature of the Foxboro System.”



Reduction in Operating Costs Ensures High ROI

The System Platform technology built into the Foxboro System provides Sanofi Pasteur the ability to create custom objects that can be quickly replicated at other plant sites. This feature has resulted in more than a 15 percent decrease in engineering costs.

“Sanofi Pasteur’s selection of the comprehensive Foxboro solution has met all expectations by providing an easy migration path with the existing system, native high availability and a secure architecture to store and manage all the technical data across the manufacturing operation,” Colin said. “The power of the Foxboro System has been a key element in the success of the company’s strategy to revamp its vaccines manufacturing operations.”

Schneider Electric Helps Make Vaccines Available to Everyone

Working closely with Sanofi Pasteur, Schneider Electric is assisting the company to ensure that everyone has access to vaccines to prevent disease no matter where they live. An important element in the pharmaceutical business is the ability to anticipate specific vaccines and quantities that will be needed by the world’s population.

With the use of the Foxboro System, Sanofi Pasteur is able to better manage production at its facility in France to effectively meet these ever-changing requirements and world demand. Not only can the company better monitor and adjust quantity production, Sanofi Pasteur can now address quality control issues with use of the Foxboro System.

“To constantly improve their customer satisfaction and meet regulatory demands, while keeping the business highly competitive, the Sanofi Pasteur quality teams work closely with operations managers at its manufacturing facilities,” Colin said. “Together they define quality policies and guidelines to ensure that processes correspond to good manufacturing practices. Use of the comprehensive Foxboro System enables Sanofi Pasteur to effectively meet these business objectives.”

With more than 50 percent of its staff dedicated to the company’s industrial operations, Sanofi Pasteur is focused on ensuring that its manufacturing processes employ the most advanced technology that enables the company to continue to be the leading supplier of vaccines in the world. Schneider Electric is making a significant impact on Sanofi Pasteur’s ability to protect the world from deadly diseases that can impact the world’s population.

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Schneider
Electric

Schneider Electric

Schneider Electric SE
35 rue Joseph Monier
92500 Rueil Malmaison - France
Phone: +33 (0) 1 41 29 70 00
Fax: +33 (0) 1 41 29 71 00

www.schneider-electric.com

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