Making milk's paths visible

SIMATIC WinCC V7 enables transparent production at the Bechtel dairy

siemens.com/wincc-v7

Customer:
Bechtel private dairy

City, country:
Schwarzenfeld, Germany

Industry:
Dairy industry

Products used:
SIMATIC WinCC V7, WinCC / IDB,
WinCC / WebUX,
SIMATIC Process Historian,
SIMATIC Information Server

Milk is the lifeblood of the Bechtel private dairy in Schwarzenfeld, Germany. Some 1.5 million kilograms of "white gold" flow through its pipes and vats – day after day. The company can look back on more than 100 years of tradition, and it continues to grow. However, as its factory has expanded, the variety of systems in the control and automation technology has also increased. The company therefore decided to modernize production with an integrated and standardized control system.

Keeping an eye on production

The goal: a user-friendly solution that allows employees to keep an eye on all production lines – and to control them as well. Bechtel aimed to achieve its self-imposed "zero-defect production"

even more easily and quickly in the future. The company also intended to retain its recently installed Manufacturing Execution System (MES) – which records and maps all actual data live.

"We do not want duplicate master data storage or interfaces because we can thus use resources more efficiently and maintain greater flexibility, ultimately allowing us to work much more efficiently."
Martin Miller, Business Unit Manager for Quality and Process Management at Bechtel in Schwarzenfeld, Germany

Flexible control system

The control system solution was implemented by planemos GmbH, a Siemens Solution Partner. After extensive comparisons, the automation specialist opted for an integrated SCADA solution based on SIMATIC WinCC V7 – because this made it possible to integrate SIMATIC WinCC / Industrial DataBridge. A decisive point: This software has standard interfaces – and thus makes it possible to seamlessly integrate the existing MES database into the new system.

"With SIMATIC WinCC as the basis, we implemented an integrated solution that ensures simple networking of all relevant information: from process and plant data to information on batches, consumption data, inventories, and maintenance measures in the MES, all the way to the enterprise resource planning system. This means, we can make an important contribution to greater quality and efficiency for our customer."

Thomas Bux, Managing Director at planemos GmbH

WinCC V7 achieves the following

- Optimize production
- Make data visible
- Locate production errors
- Retrieve information regardless of location
- Respond to production events efficiently
- Increase productivity and quality
- Simple expansion of the homogeneous control system landscape

Visible processes

A key benefit of the new solution: greater transparency. This is ensured by the WinCC V7 HMI system. It visualizes all processes, making it possible to control and optimize them – and thus forms the basis for more efficiency. In this way, WinCC V7 displays all relevant values in real time, analyzes them in trend displays, and creates alarm messages on request.

Immortal data

With SIMATIC WinCC V7, data is virtually immortal: With the integrated SIMATIC Process Historian, Bechtel can archive its process data even for a long time. Both this data and the information in the SIMATIC Information Server can be stored for up to five years. This means it is still possible years later to completely and seamlessly trace the production. A decisive factor for Bechtel's quality assurance.

Open system

In addition, the new visualization system is open to a variety of end devices. This means that the information can be permanently made available via SIMATIC WinCC / WebUX – both on the monitor and on mobile devices. In this way, Bechtel has full access to the information from production. At any time.

Conclusion: Thanks to uniform user interfaces, production at Bechtel can be controlled much more easily and intuitively. In turn, Bechtel has managed to increase production availability and to reduce downtime. The fast, mobile access to management data also helps managers in decision-making. This means: Bechtel can now react to new requirements faster, more purposefully, and more flexibly.