SUCCES STORY

atvise®

WATER TREATMENT SECTOR

Optimization of the Water Treatment System in the Pharmaceutical Industry

Implementation of an advanced SCADA solution for the monitoring and control of cisterns, hot water tanks, and deaerators in a leading pharmaceutical company in Mexico.

INTEGRATOR: BENKU AUTOMATION

Vester Business

Project

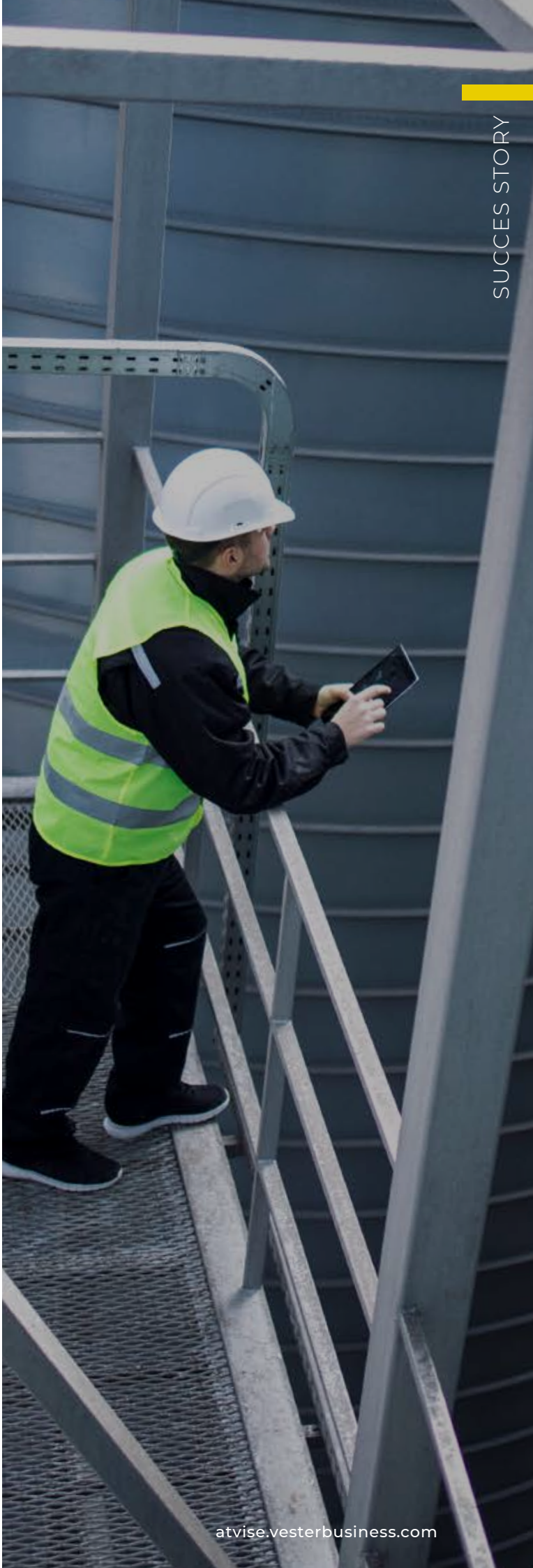
This project aimed to transform the monitoring and control system at Promeco, a major pharmaceutical product manufacturer with global operations, to optimize its water treatment processes and mitigate risks. Promeco, a leading pharmaceutical company in Mexico, needed to modernize its water treatment system, including cisterns, hot water tanks, and deaerators, to minimize risks associated with manual monitoring processes.

Solution

With the implementation of this advanced SCADA solution using atvise®, Promeco successfully centralized and automated real-time monitoring, eliminating the need for manual records and improving data capture accuracy. The solution also enabled the generation of automated reports for audits and real-time alerts, optimizing decision-making and enhancing the efficiency and safety of their water treatment operations.

Integrator Partner

Benku Automation is a Mexican company with over 10 years of industry experience, offering comprehensive solutions to enhance client productivity. Their services range from specialized consulting and training to the design of automated systems, mechanical and electrical installations, and technical support. With a highly skilled team, Benku Automation specializes in tailoring its services to the specific needs of each project, ensuring comprehensive and specialized support to improve industrial operations' efficiency and performance.



Goals

- Eliminate manual data collection processes to improve accuracy and reduce human errors.
- Implement a remote monitoring system enabling real-time access and secure data storage.
- Facilitate audit and validation processes with an Audit Trail feature.
- Develop a user-friendly interface to simplify the operation and optimization of the water treatment system.
- Enhance operational decision-making with real-time data access and custom graphs for visualizing tank and cistern performance.

Main Challenges

- **Automation of the Monitoring Process:** Transitioning from a manual to a centralized, automated SCADA system capable of real-time visualization of all variables, eliminating reliance on Excel records, and reducing human error.
- **Integration with Existing Systems:** Achieving seamless integration with the Siemens S7-1500 PLC to ensure reliable communication between sensors, valves, and the SCADA syste
- **User-Friendly and Customized Interface:** Developing intuitive and visually appealing graphics and visualizations in atvise for operators to easily interpret and interact with.
- **Real-Time Alerts and Notifications:** Configuring an alarm system to automatically notify critical or out-of-parameter events, ensuring rapid and effective responses.

Results

Short-Term Benefits

- **Reduced Time for Data Acquisition and Processing:** Eliminating manual processes enabled real-time information gathering and processing, optimizing tank and cistern monitoring.
- **Improved Operational Decision-Making:** Real-time access and graphical system visualization allowed agile and accurate decisions.
- **Minimized Risk of Human Error:** Centralized and automated processes reduced error risks and enhanced operational safety.
- **Increased Customer Satisfaction:** Promeco appreciated the tailored atvise graphical interface, which improved system operability and monitoring.

Long-Term Benefits

- **Enhanced Audit Performance and Regulatory Compliance:** Automatic data recording and Audit Trail reporting enabled efficient regulatory audit compliance.
- **Improved Performance Analysis:** Historical data analysis capabilities allowed Promeco to identify trends and areas for improvement, optimizing long-term water treatment system performance.

Background

Promeco faced numerous challenges in its water treatment processes, including monitoring cisterns and hot water tanks.

The previous system lacked automated data storage and report generation, requiring a manual and time-consuming process where operators had to photograph tank statuses, record data in Excel, and create charts and reports.

This inefficient process posed a high risk of errors, affecting data accuracy and complicating regulatory audit and validation compliance.

Faced with these challenges, Promeco sought a robust and reliable SCADA monitoring solution to improve its water treatment system and optimize operations.

Solution

To address these challenges, a cutting-edge SCADA platform was implemented, integrating all necessary elements into the water treatment system.

The solution included:

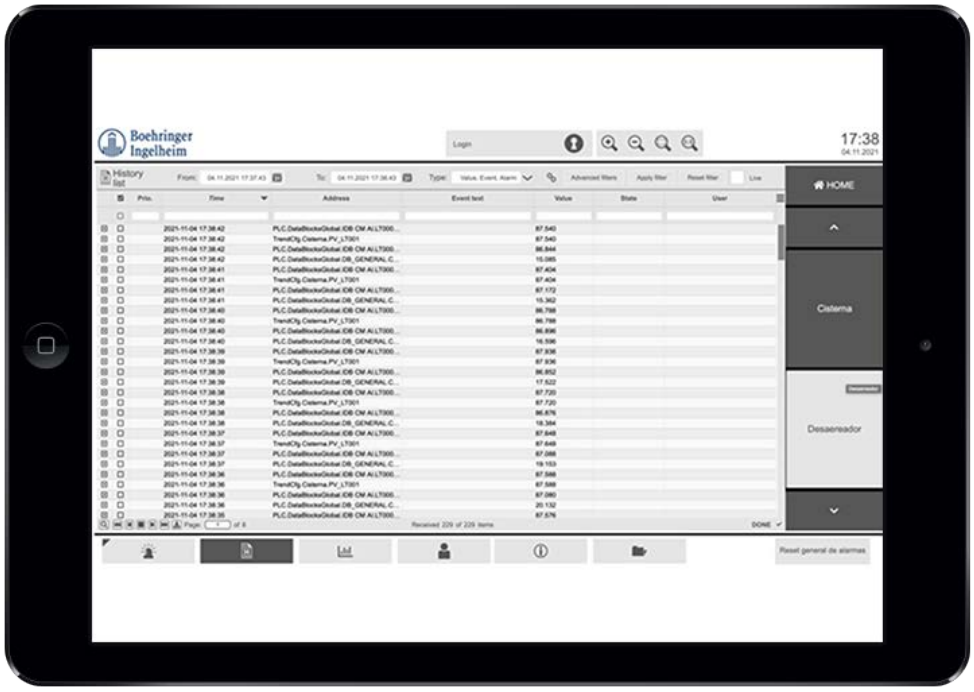
- Connectivity and Real-Time Monitoring: Seamless integration with the Siemens S7-1500 PLC, enabling continuous and precise visualization of cisterns, hot water tanks, and deaerators, with future boiler integration capabilities.
- Automated Level Control: Installation of continuous level sensors and 4-20 mA modulating valves, with adjustable control parameters tailored to Promeco's needs.
- Customized Graphical Interface: A user-friendly atvise graphical interface for remote access, allowing operators to easily visualize tank statuses and adjust configurations. The interface provides real-time graphics and is accessible from any network-connected device.
- Configurable Alert System: Real-time notifications for critical events or deviations, aiding timely decision-making and ensuring safe and efficient operation processes.

“

The versatility of atvise® and Vester's continuous technical support facilitated a seamless implementation and ensured the solution was perfectly tailored to the specific needs. We appreciated the intuitive interface and the ease of access to data, which is now available in real time.

”

Promeco Manager



Conclusion

The successful implementation at Promeco demonstrated how atvise® technology can optimize critical processes, adapt to the needs of regulated industries such as pharmaceuticals, reduce risks, and enhance decision-making, establishing itself as a reliable solution for future integrations within Promeco's water treatment system.

atvise® SCADA

SCADA SOFTWARE FOR INDUSTRY 4.0

The first HMI SCADA software built on Industry 4.0 fundamental basis: Pure Web Technology and OPC UA.

FREE DOWNLOAD atvise® SCADA

Highest Security

Responsive Design

Pure Web Technology

OPC UA

Multiplatform

Contact

info@vestersl.com
www.atvise.vesterbusiness.com

Vester Business Spain

Av Cerdanyola 92, 2da Planta Of 27, 08173, Sant Cugat del Valles, Spain
(+34) 93 572 10 07

Vester Business France

672 Rue du Mas de Verchant, 34967, Montpellier CEDEX 2, France
+33 (0)4 13 68 01 06

Vester Business LATAM

Ofimall 3er Piso, Oficina #57, San Pedro de Montes de Oca, San José, Costa Rica
(+506) 2225 2344