



- Do you need data accuracy and consistency between manufacturers, retailers, and consumers to generate trust and transparency?
- Do you need upstream ingredient information, raw material tracking and certification, and supplier mapping?
- Do you need plant traceability solutions including product information, serialization, and aggregation?
- Do you need downstream track and trace, quality assurance, and enhanced support for food safety recalls?



End-to-end traceability

Solution architecture







ProLeiT Plant iT & brewmaxx



AVEVA Manufacturing Execution System

Connecting, collecting siloed data and checking data accuracy and integrity with smart applications along your supply chain from incoming raw materials to point of sales

Why it matters?

- Provide mapping of all suppliers and sub-suppliers, to collect information such as origin of ingredients and to check certificate of compliance
- Enables track and trace of each item as it moves along the supply chain
- Enables transparency, providing visibility of information related to finished goods
- Essential for food investigations, crucial in global food trade and to maintain trust of end-consumers
- Mandatory to build a credible supply chain and to differentiate brand



Fruit and dairy processor End-to-end traceability

Customer benefits

With over 5,000 products, this customer required a consistent way to manage product references between different entities across 24 countries.

They needed to efficiently share product information across multiple retailers in a multichannel environment.

The solution

Schneider Electric Product Information Management (PIM) was centrally deployed across 24 countries.

Results

- 20% increase in data accuracy
- 50% reduction in labor costs
- Reduced costs and errors linked to product data management
- Reduced time to market
- A centralized source of truth and trust for global product data

- Do you need to streamline order flow and production?
- Do you want to be able to evaluate and analyse yield, quality and plant resource use?
- Do you need to track products from raw materials to finished goods?
- Do you want to optimize operations by improving asset usage, quality, uptime, and compliance of manufacturing operations?



Manufacturing execution system solution

Solution architecture

ProLeiT.
by Schneider Electric















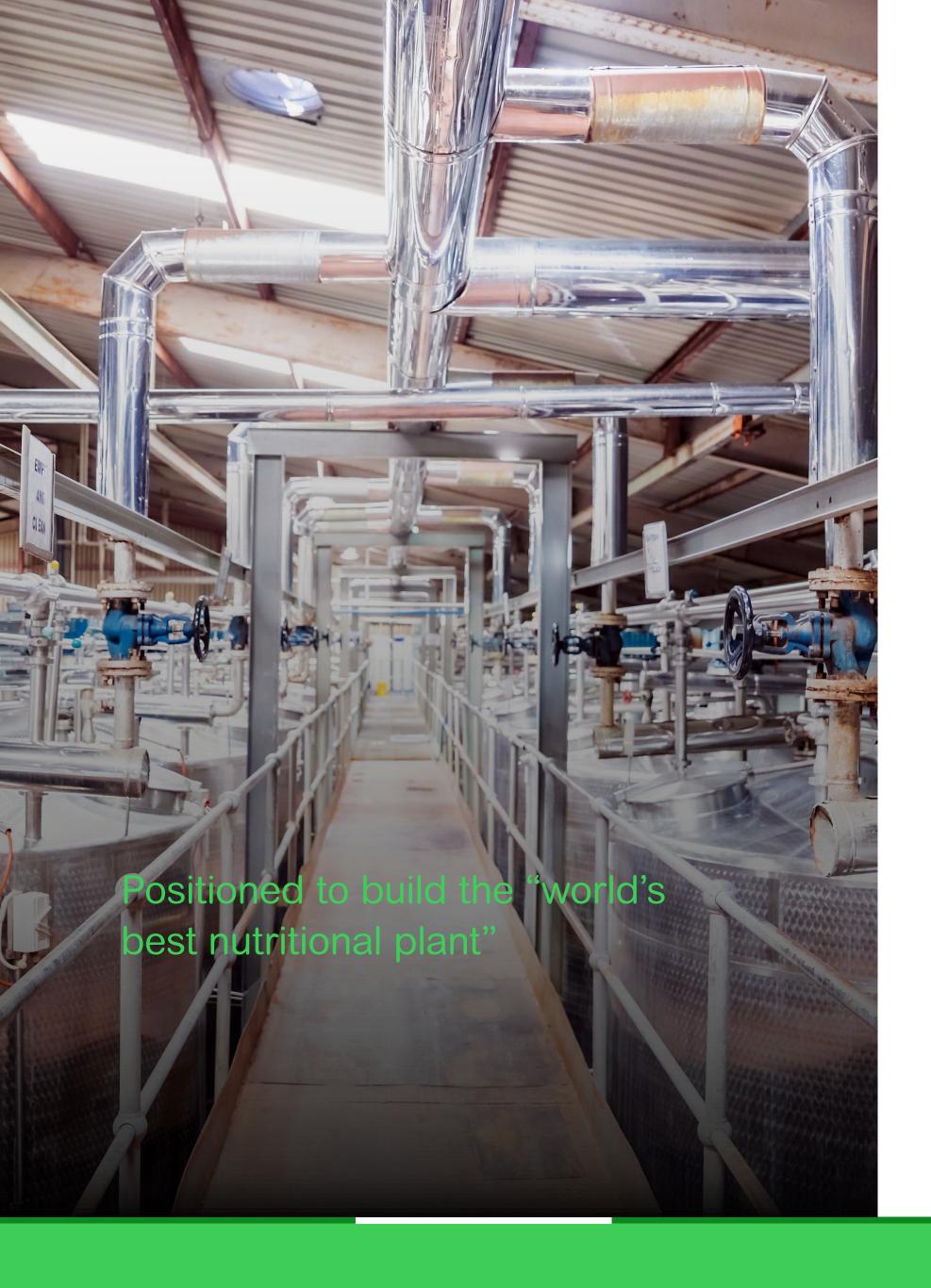


AVEVA

Effectively manage operations, track material movement, consumption, asset and resource utilization, with embedded manufacturing execution, reporting and analysis

Why it matters?

- Maximize asset usage, quality, uptime, cost and compliance of manufacturing operations
- Proven fast ROI



Mataura Valley Dairy Manufacturing execution system

Customer challenge

The \$240 million plant in New Zealand is designed to produce 140 tonnes of nutritional powder a day for infant formula and other nutritional needs. They required product traceability, batch management capabilities, and electrical power supply integrity to maintain reliable production.

The solution

A full EcoStruxure solution including AVEVA System Platform, Batch Management, Manufacturing Execution System, expert services, Modicon M580 & M340 PLCs, Drives, filters, iMCC, Switchgear, powermetering and TeSys U. Our partner had extensive knowledge of Mataura Valley's complex manufacturing processes and understood how to meet their batching, traceability, and seamless dataflow requirements.

The customer drilled under the Mataura River to feed the power distribution system, which contained 14 AccuSine harmonic filters. This ensured power quality, minimized power factor correction and air circuit breakers to reliably protect plant staff and equipment.

Results

- 20% faster time to market
- Reduced OPEX budgets compared to conventional systems
- Cleaner, reliable and more cost-effective power
- Flexibility to increase product portfolio and volume

- Do you need automated batch processes, with complete batch history, material traceability, and reporting?
- Do you need to be ISA-88 compatible?
- Do you want coordination of control system phases facilitating the flexibility in recipe procedure changes?
- Do you need to make the most of your assets with sophisticated equipment arbitration and concurrent batch management capabilities?



Recipe and batch management

Solution architecture





Plant iT: MES, Recipe, Batch, Sequencing, Historian, Libraries







Modicon M580

EcoStruxure Control Expert

Plant iT: Process Control System

Batch management solution that offers extensive batch management capabilities, including recipe management, batch execution management, material tracking and genealogy, electronic batch records, stringent security, etc.

Why it matters?

- Reduces cost of compliance with FDA 21 CFR Part 11
- Lowers the cost of new or changed recipe validation in regulated industries
- Improves product quality
- Customers reported average improvements of 20% in quality and productivity and 10% improvements in equipment utilization and new product introduction
- Maximize asset use and throughput in multi-product and multi-stream plant environments



Casa Granado Recipe and batch management

Customer challenge

Brazil's oldest cosmetics brand, Casa Granado, needed to reduce time to market and production bottlenecks and improve integration between their two production lines.

The solution

An automation system based on EcoStruxure Plant, with EcoStuxure Hybrid DCS (now known as EcoStruxure Process Expert) and Modicon M580, was installed to help manage Granado plant's complete automation life cycle, from engineering to operation and maintenance. The system also provided the enhanced reporting and traceability required by today's companies.

Results

- Improved quality and consistency of output
- Less need to train operations and maintenance personnel
- Reduced downtime
- 10-15% increase in production
- Better control integration and more valuable business insights
- Empowered workforce through high-performance HMI concept
- Reduced unplanned downtime

- Do you need real time reporting and KPI calculation?
- Do you need to monitor performance to make faster operational decisions?
- Do you need active leakage and water pressure calculations and control?
- Do you want to minimize the impact of leakages on consumers and reduce related costs?



Integrated water loss management

Instrumentation

Solution architecture

EcoStruxure Water Loss AVEVA **EcoStruxure AVEVA System** GeoSCADA Expert **Platform SCADAPack** Modicon M580 RTU **Universal Automation** Controller (dPAC) **Altivar Process** Altivar dPAC ATV6x

An integrated solution to manage all activities related to water loss detection, intervention, and reporting at both operational and enterprise levels, based on the International Water Association (IWA) framework

Why it matters?

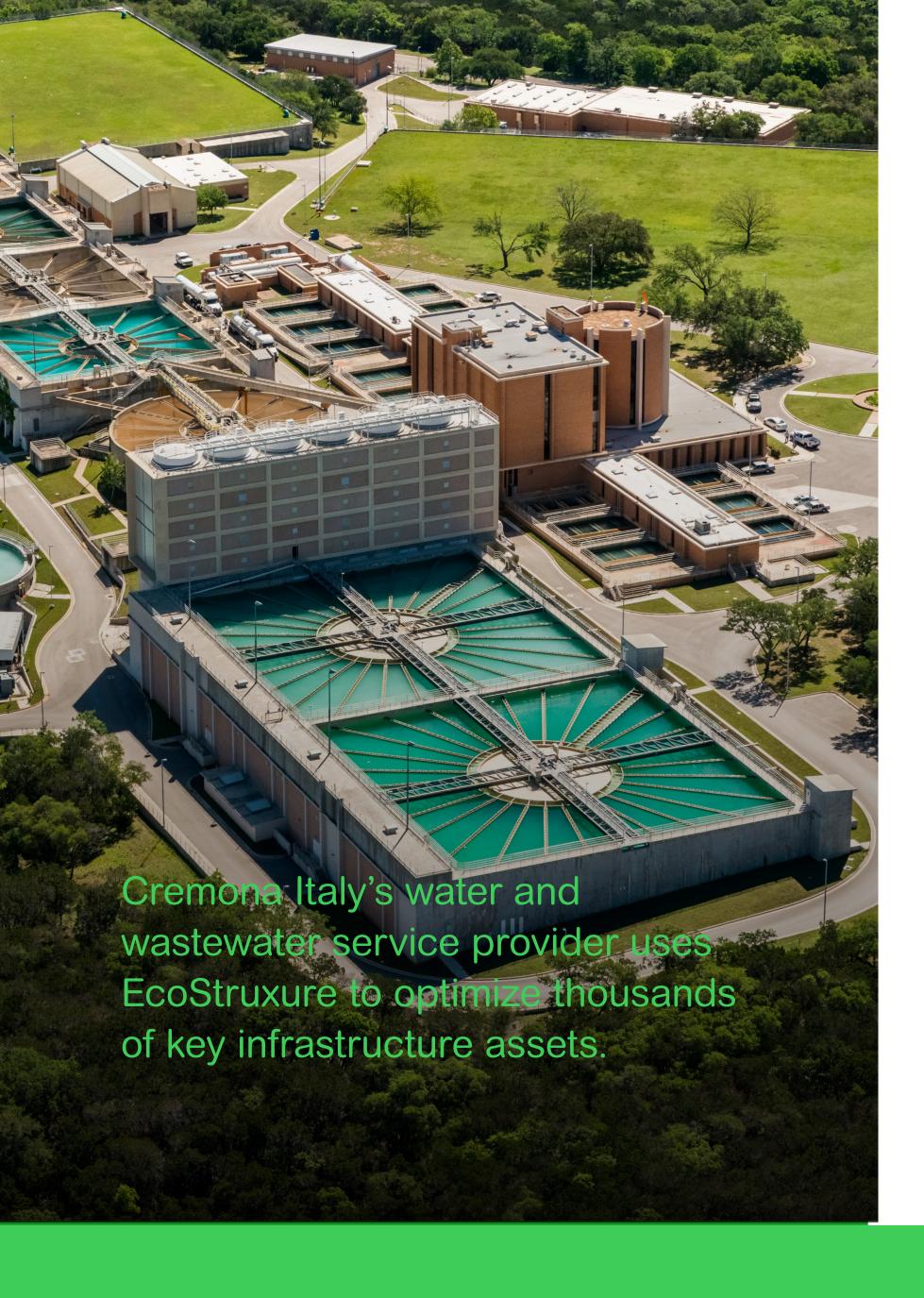
Up to 20% leakage reduction

- Reduced awareness time
- Real-time detection of anomalies
- Reduced cost of leak detection
- Minimized impact on consumers

Help to comply with regulations

Up to 15% water network operating cost reduction

- Identification of critical geographic zones and business processes
- Faster decision making at the operational and planning levels



Padania Acque Integrated water loss management

Customer challenge

Padania Acque needed to create a centralized control room, reduce water losses in critical aqueducts via advanced leak detection and extend remote control to over 100 aqueducts, sewage, and purification plants.

The solution

EcoStruxure Plant and Water Management Suite enabled Padania Acque to better manage thousands of key infrastructure assets geographically distributed across the province of Cremona in Italy. Improved control of energy-intensive assets such as pumps coupled with advanced leak detection improved sustainability and operational effectiveness.

Results

- Energy consumption reduced by at least 5%
- 20% operational improvement

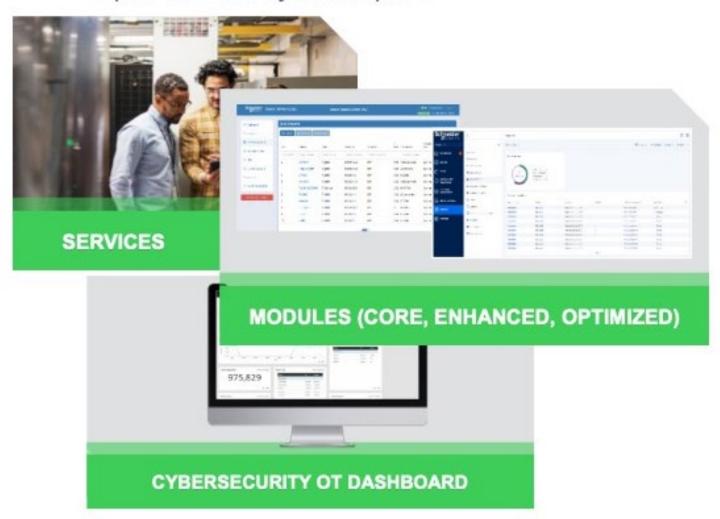
- Do you need to develop a timeline to comply with cyber regulatory requirements?
- Would you like to take a routine, standardized, uniform approach to implementation of cybersecurity controls?
- Do you need a single place to manage security for improved traceability and system management?
- Do you need to reduce maintenance tasks and infrastructure cost?



Cybersecurity Application Platform (CAP) packages

Solution

- Cybersecurity OT dashboard
- Packages (Core, Enhanced, Optimized)
- Expert Services by subscription



This integrated cybersecurity solution provides operations teams with visibility of key cybersecurity data so they can take action to manage/maintain cybersecurity control points. Modules and service levels can be customized to meet specific needs.

Why it matters?

System security to protect data and assets

- Help ensure business continuity
- Reduce the risk of cybersecurity attacks
- Help secure plant operations

Built in security features

 CAP packages structured to align to IEC 62443 requirements, providing a roadmap and solution to help customers improve their security year over year

One platform used to monitor and maintain cybersecurity controls



To learn more about meeting applicable regulations with compliant processes and products which are 100% traceable for life visit

se.com/industrial-automation-solutions













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