Panorama E2

PROFILE

- Subject :
  SCADA
- Process :
  Seed production
- Client :
  Euralis
- Integrator :
  SPIE
- Date :
  2010
- Installed base :
  - Panorama E²
  - 2 Servers
  - 1 mobile maintenance console
  - 14 PLC's
  - Modbus TCP/IP communication
  - Fibre optic

Euralis Semences Lescar plant

Packaging lines Euralis Semences. Bag up to 100,000 doses per week.

AIMS

monitor and control the seed manufacturing process.

OEE : Measure the performance of production tools.

BENEFITS

Trace production for quality control.

Easy use for operators.

Euralis Semences has installed Panorama supervision at its Lescar plant in southwestern France in order to monitor and control its seed production processes as well as to ensure batch traceability. The equipment in the plant dated from when the factory was created in 1971 and had become obsolete. The Euralis Group worked with systems integrator SPIE Pau to determine how best to renovate the plant. They chose the Panorama E² SCADA solution for its advanced object-oriented programming technology.

The Euralis Group, a co-operative of 15,000 farmers, has organized its agricultural and agri-food activities around four divisions, each centered on its core business:
- Agricultural Products and Distribution
- Gastronomy
- Catering
- Seeds

Seeds division

The Euralis Seeds Division has acquired Panorama to supervise and control the handling, storage, sorting and packaging of seeds, as well as to ensure traceability of batches across all these processes.

This is the start of a

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Dismantling of the LV room

Renovated LV room

Of the 1.7 million doses produced, around 1.2 million are sold. The plant bases its production on an estimate for the year, not on confirmed orders, so as to meet customer demands concerning varieties, earliness, treatments, delivery dates, etc. The sales team submits packaging orders so as to sell a given variety in a given country under a given brand, for instance. Unsold inventory is recovered and, after quality control checks, is resold the following year.

The project

The Lescar plant opened in 1971. Equipment obsolescence as well as risks concerning fire and lost earnings led the technical team to consider upgrading the plant equipment.

The renovation project had the following objectives in 2000 :
• Eliminate the risk of mixing varieties and species,
• Reduce operator training time (up to two years in some cases),
• Secure and trace cleaning between batches (replace the previous paper-based manual method),

" The Panorama E^2 solution meets all requirements, including the ability to develop programs using an object-oriented language with an open, scalable and maintainable system. It integrates agricultural production parameters. "

long journey for the tiny seeds. The plant, based in Lescar, receives semi-finished products: dried, hulled and cleaned seeds. They are first transferred to one of the 108 storage bins and one of the several thousand containers. The next stop is one of three calibration lines which sort 13 tons per hour during three 8-hour shifts from October to February. The seeds are then moved to three packaging lines which bag up to 100,000 doses per week. These lines run either two or three 8-hour shifts from October to April.

Euralis employees speak in terms of doses. A dose represents one seed bag or 50,000 grains of maize. The Lescar plant produces 1.8 million doses each year, or 2,500 batches of 250 varieties representing four different species. The plant can store up to 30,000 tons of grain. "Calibration, packaging and storage operations must juggle over 250 varieties, and mixing them is out of the question. This entire procedure is supervised by the Panorama software package which performs a reliable, accurate quality control. There are over 40,000 quality control analyses each year," said Mr. Guillaume Schraauwers, Industrial Manager at the Lescar plant.

- Automatically measure the performance of production tools (instead of the manual Overall, Equipment Efficiency (OEE) for two workshops)
- Trace production for quality control.

Preliminary specifications were drafted in 2006, and Group management approved the necessary investment of over €600,000.

Specifications were finalized in 2008, along with the supervision screens and objects, operating rules, extension of the scope (OEE and bar codes), etc. "This project involved extensive employee training. Some of our staff have been with us for over 30 years and had never used a computer. The OEE was copied by hand in a notebook. In order to facilitate the transition, we kept the same color coding (raw products in blue, calibrated seeds in pink, and so forth," said Mr. Schraauwers.

After analysis and preparation, the plant closed between June and July 2009 in order to enable SPIE Pau, the system integrator, to refit the entire technical installation: IT architecture, PLCs, communication net-works, electrical cabinets, laying of fiber optic cable, etc.

The former manual control room was automated and the technical team was reinforced in order to perform maintenance and enable the application to evolve autonomously.

Why choose Panorama?

The choice of the SCADA tool was based on a fundamental principle: object-oriented programming. In order to confirm its choice, Euralis visited three plants in production using different technical and software solutions addressing similar needs. One of those plants was run by a customer of Codra, publisher of the Panorama SCADA program.
Codra is a French company providing local and highly responsive technical support, and offering a reasonably priced solution for exchanging data directly with SAP (without the prohibitive costs of SAP certification). These were the key factors which led the Euralis Group to choose Panorama E^2.
The Panorama E^2 solution meets all Euralis' requirements, including the ability to develop programs using an object-oriented language with an open, scalable and maintainable system. It integrates production parameters and ensures traceability by recording the latest possible varieties which improves reliability due to frequent quality controls.
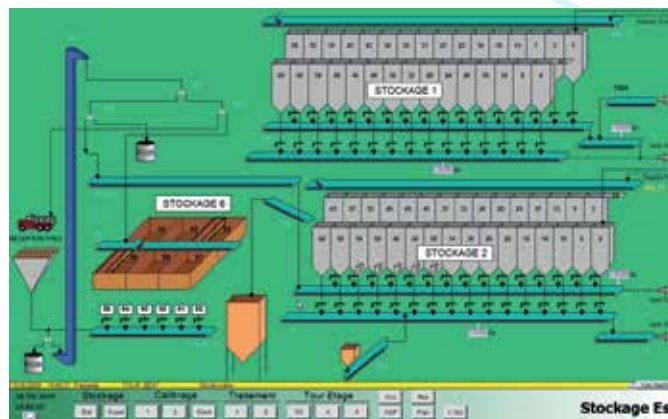
A year after the go-live date, the entire team is satisfied with Panorama. The multi-purpose staff has been trained in supervision. Euralis is now autonomous concerning the project—pre-

Process Viewer screen: Storage

CÖDRA

viously only two people were able to use the mimic panel.

Euralis has already defined the next enhancements: analyze control tasks and hardware failures in order to improve productivity, and work with the IT Department in order to delegate IT problems as they occur.

Following this success, the Euralis Agricultural Products and Distribution Division chose the Panorama SCADA solution for a cereal plant, and recommended it for the renovation of the centralized technical management system at the head office, also based in Lescar.

Former manual control room

New remote control room

EURALIS GROUP

The Euralis Group, created in 1936, is a co-operative of 15,000 farmers (including 12,000 members) and 5,000 employees with €1.32 billion annual turnover. Euralis is one of the leader in agricultural and food markets. The cooperative is a trusted partner for professionals in agriculture and food trade.

At the origin producer in corn, the group has diversified its agricultural production and services before investing in the food industry.

The Euralis group is now :
- 1st wordwild producer of "foie gras"
- 1st catering distribution network in France
- A major European operator in the corn market
- One of the European leader in seed.

From industrial SCADA to a global information system

Panorama E2

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