



## SUCCESS STORY

### PROFILE

- Subject : SCADA
- Process : Silos
- Client : IDF Sud
- Integrator : Ineo Centre Chartres
- Date : 2015
- Installed base :
  - Panorama E<sup>2</sup> v6  
1500 variables
  - 1 M340 Schneider process PLC
  - Modbus protocol

# Cereal silo monitoring & control



The Angerville silos, IDF Sud France

### AIMS

To operate and manage the process

To have a user-friendly, modern user interface

### BENEFITS

Increased productivity

User comfort & safety

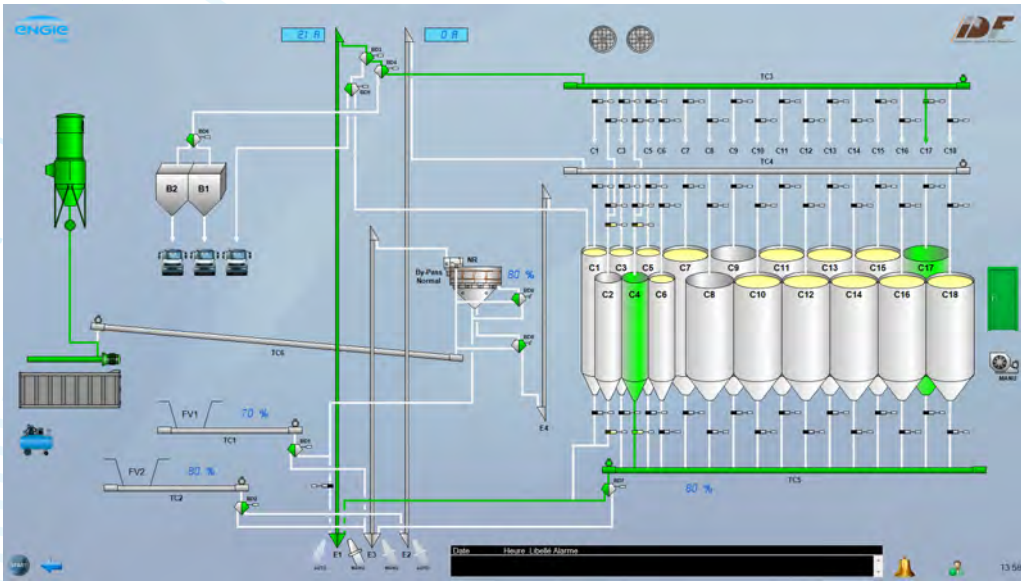
The Ile-de-France Sud cooperative specializes in collecting, storing and conditioning cereals. It has equipped its new Angerville site in France with a monitoring and control system implemented by Ineo Centre Chartres. As silos are subject to increasingly stringent regulations, Ineo Centre Chartres selected the Panorama E<sup>2</sup> SCADA software suite, developed by Codra, for its reliability, open design and sustainability.

The Ile-de-France Sud cereal cooperative makes grain collections and delivers supplies all over the south Parisian area. It works on 20 sites in the areas of Essonne, Yvelines, Seine-et-Marne and as far as Eure-et-Loir. The cooperative's operations extend to collecting, storing and conditioning cereals and protein-oil crops before selling more

than 300,000T per annum to the food-processing industry.

The new IDF Sud site, which opened in September 2015, is equipped with the latest-generation of Panorama E<sup>2</sup> SCADA software. For the purposes of this project, Ineo Centre Chartres implemented a global solution that would cover





Grain turning operation

everything from design to maintenance. IDF Sud commissioned Ineo because of its impressive track record experience in the silo business. Ineo has built a network of partners around it and hired qualified personnel. It can be relied on as responsive integrator for managing all aspects of cereal storage building construction projects and for providing suitable solutions to its customers' issues such as:

- Electrical equipment
- Communications network
- Nebulization
- Pneumatics (compressed air circuit)
- Automation and control via SCADA

### Choosing the Panorama solution

Ineo Centre Chartres had engaged on expanding its Automation

Engineering Office and decided that for future silo projects it would replace Ordinal's COOX software with Codra's Panorama E<sup>2</sup>, on the basis that E<sup>2</sup> is a more open, configurable and easier solution to implement.

"We have built up a specific library to offer our clients a turnkey business solution" explains Philippe Nguyen, Automation Business Manager at Ineo Centre Chartres. "Our development time is shorter using Panorama E<sup>2</sup>'s object technology. Our specialist, and ready-to-use user equipment library gradually amasses data and should become Ineo's very own proprietary food-processing solution".

Panorama E<sup>2</sup> is known in the market as a reliable, stable tool. It offers many features such as

traceability and data security. It is important to choose software that will offer the end user total security in the food-processing area, because certain applications require compliance with standards such as the CSA charter or universal certifications such as ISO 9001. This is a relevant consideration for IDF Sud, as it is ISO 9001-certified.

### Specific Turnkey solution

The Angerville site has two circuits that can operate simultaneously and supply 18 units at a flow rate of 400T per hour. The cooperative needs to store the grain during the harvesting period and condition it as detailed in its customers' specifications.

The Panorama E<sup>2</sup> software completely manages both of these circuits, while its animated mimic diagrams keep the users informed about equipment status in real time. "As they can view the plant in real-time, they can trigger a rapid action if needs be" claims Hervé Courte, IDF Sud's Director. Thus the site's performance is optimized and enhanced at every step of the process: calibration, treatment, disinfection pumping, drying/cooling, storage, etc..

The SCADA software enables the operators to save pre-programmed circuits or alternatively allocate specific equipment to each operation. " For example, grain turning can be scheduled from one silo to the next. The grains calibrated upstream are sorted by quality. If the quality of the grain is too high or too low, it will be unusable. An even blend will make the output marketable " explains Philippe Nguyen.

Two to three operators run the Angerville site 5/7 during normal times of the year, but the head count doubles during the peak harvest period to keep it running 7/7. Having been trained on the SCADA application by Ineo, the users have considerable independence. " Remote control offers the personnel additional safety " Hervé Courte explains. All the commands have to be entered into the operator log, which provides traceability in the Panorama historical journal. Thus Panorama E2 provides invaluable help with production and maintenance operation traceability.

**A worthwhile investment**

The IDF Sud cooperative

is satisfied with its investment. Hervé Courte confided, " We wanted the SCADA to be simple, modifiable and easy-to-use, a back-up to manual control. Furthermore it has to be used by operators who are unaccustomed to software tools" ... "In our line of business increasingly high staff turnover presents us with knowledge transfer problems. SCADA combined with automation now safeguards the process and capitalizes on the acquired know-how " As the grain handling and possible conveying circuits have been predefined and configured prior to harvest

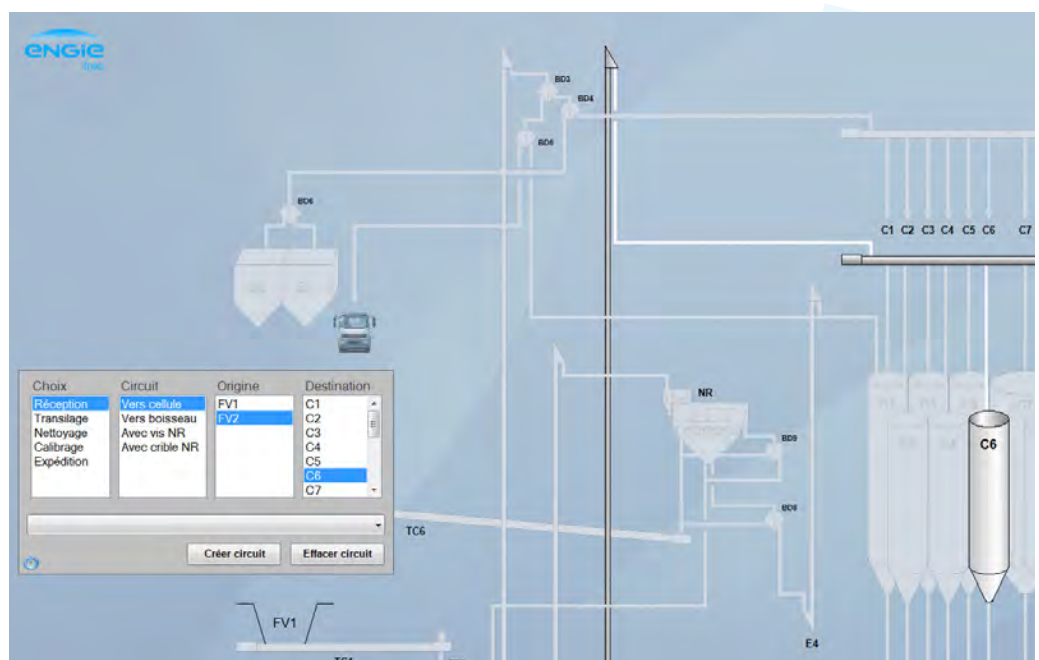
time, the seasonal workers find it easier to start working with the installation and soon become operational. Everyone is in a win-win situation – the users really appreciate this new convenience and productivity has significantly improved. The data entry support offered by Panorama E2 safeguards the process and

**" The Panorama E2 SCADA solution safeguards the process and optimizes production "**

optimizes production.

The open structure of Panorama E2 ensures that the SCADA application is not set in stone, for as the needs of IDF Sud evolve, it will be expected

Close-up on circuit configuration





to take them in its stride. Several improvements are being considered such as assistance with control through preconfigured scenarios or printing reports that supply meaningful indicators to maintenance or management when taking strategic decisions about the installation.

Having been convinced by this first installation managed by the Panorama E<sup>2</sup> software,

the cooperative intends to equip a second site at Corbreuse. Ineo is currently developing this and it is scheduled to be ready for the 2016 harvest.

IDF Sud aims to eventually equip all 20 of its sites.

### Spotlight on ... Ineo Centre Chartres

The Champhol work centre, specializing in the Service and Industrial sectors, is one of 13 sites of INEO CENTRE, a subsidiary of ENGIE INEO, in turn an ENGIE Group company.

This centre, which has a staff of 42, provides its clients with acclaimed primary service sector expertise to:  
make buildings smart, connected and energy-efficient,

optimize electricity grids,  
guarantee more safety and comfort,  
and in industry to:  
improve energy efficiency,  
ensure secure electricity distribution,  
optimize processes,  
guarantee safety and service continuity,  
improve the energy efficiency and guarantee the sustainability of facilities.

Ineo Centre Chartres, a fully-fledged Codra partner, has development teams trained on the latest versions of the Panorama solutions. In recent years they have completed many projects including the Verizon Datacenter, Strasbourg Gas distribution network and IDF Sud, just to mention a few.



From industrial SCADA to a global information system

