



Safety Integrated @ cable manufacturing site

Nexans is a worldwide leader in the cable industry. The site in Charle-roi produces medium and high-voltage cables (6 to 500 kV) with synthetic insulation (XLPE). Production lines do consist of ever growing heterogenous machinery. Moving to uniformity, including applying to latest safety regulations was defined as the next big step in their innovation track.

Challenge

Business Challenge :

Responding fastly to new business segments and changing cable industry requirements is for Nexans a necessity to keep up their leading positioning today & tomorrow. To be able to manage these requirements Nexans decided to innovate their production facilities.

Production lines should be improved in terms of:

- flexibility to change
- availability
- structural lifecycle costs

Technical Challenge :

- introduce enhanced modular production line concept
- easy integration and ability to change machinery in the production process
- the modular concept must apply to the latest EU safety regulations no matter the origin of the machines (in or outside EU).

Solution

Defining standards for electrical and automation equipment and systems was step 1. This standard should allow fast and flexible redesign of production lines, taking into

Results at a glance

- Flexible and fast redesign of production lines
- Applying to new safety regulations @ any time with minimum engineering effort
- Less lifecycle & inventory costs



TECHNORD is an industrial integrator of electrical engineering, process control and industrial data processing, bringing together all the necessary skills in the design, manufacture, commissioning and maintenance of industrial equipment.

We work with builders, research centres and sector-based federations to develop innovative quality solutions that meet the demands of highly regulated sectors.

Certificates

Industry PHARMACEUTICAL

Specialist

Process Control System SIMATIC PCS 7

Human Machine Interface SIMATIC HMI

Manufacturing Exec. System SIMATIC IT

Solution Partner

Automation System SIMATIC

Process Control System SIMATIC PCS 7

Human Machine Interface SIMATIC HMI

Industrial Communication SIMATIC NET

Manufacturing Execution System SIMATIC IT

account that machine cells are coming from various suppliers around the world. At any time, the latest safety EU-directives and regulations must be applied and ensured with a minimum of (re)engineering effort.

A Simatic based automation concept is the cornerstone of the solution featuring:

- one engineering environment for both standard and safety tasks (Step 7)
- both standard and safety equipment are based on 1 hardware platform: Simatic S7 PLC & ET200S decentralized IO

Industrial communication backbone is PROFINET, allowing the transmission of both standard and safety related data and vertical integration towards the WinCC supervision level. A production line is subdivided in different safety zones running several safety scenarios. Emergency stops are introduced at the zone level as well as at the on line level.

Sales Order

- Branche: Cabling
- End-Customer: Nexans
- Location: Charleroi

Project Roll-out

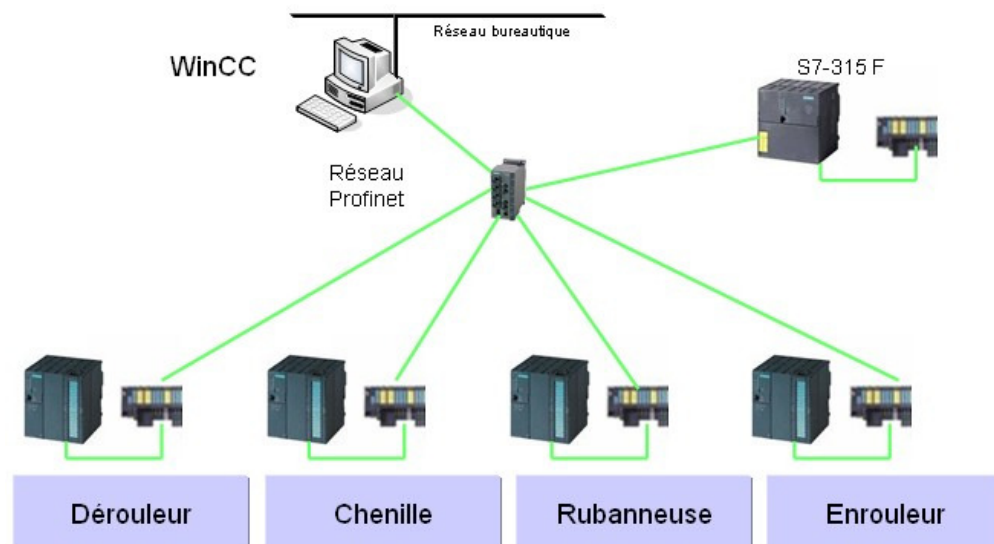
- **Project kick-off** : 09.2008
- **Development** : 10.2008 -> 02.2009
- **Project End of Commissioning** : Go live 03.2009

Sales Team

- Jean-Philippe Vermeulen (Sales Engineer - TECHNORD)
- Michel Noerens (Account Manager - Siemens)

Project overview

- PLC Controllers : 1 x S7-315 F PN + 4 x S7-315 PN
- Decentralized IO : ET 200S – both standard and F IO
- Industrial Network : PROFINET – both standard and safety data
- Industrial Switches : 10 x Scalance X200
- SCADA level : WinCC V7
- Engineering soft : Step 7 V5.4, incl. Distributed Safety



Information about the Siemens Solution Partner Program

Under the Siemens Solution Partner Automation and Power Distribution Program, we join forces with our Solution Partner. By merging our product and systems expertise with the application and industry knowledge of our partners, we have created a common basis for the fast, smooth and highly efficient implementation of your requirement –customized solutions for your competitive advantage.

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