



Efficient connectivity management - the key to success for digitalization

As part of its efforts toward continuous improvement and following a review of its cybersecurity systems, Cables RCT carried out a risk analysis in the spring of 2018, identifying an opportunity to improve its connectivity infrastructure to its OT network. Working via Araelec, the company's trusted partner in industrial solutions, this potential for improvement led Cables RCT to contact Siemens to find a solution that would bring both the quick and easy integration of existing machines into the connectivity infrastructure and a suitable segmentation of the network, providing secure remote access to all machines.

Cables RCT is a Spanish manufacturer of low voltage electrical cables founded in Zaragoza in 1965. The company's values are long-term commitment, safety and trust, and it aims to be a supplier of cables for both general purposes and for specific industry needs. Cables RCT has strategically decided to adapt its facilities, machinery and production processes to develop alongside new technologies and comply

with any changes in legislation. As a result of its development prospects, a project was set up aiming to create an industrial network infrastructure to protect Cables RCT facilities and machinery, which occupy an area of 30,000 square meters and help to maintain market competitiveness for the company.

Ángel Ventura, director of engineering at Cables RCT, says "One of the biggest challenges we faced in the project was the segmentation of the network to guarantee secure access to our machines both internally within the plant and from the outside. We had to make sure that the system was reliable and at the same time that no interruptions were imposed on the production process."

"Another important aspect from our standpoint is the long-term continuity of the project, since Siemens guarantees the availability of components for spare parts and for future expansions if necessary. This is something we don't always see with other suppliers in the market," explains Carlos Bazán, technical director of Araelec.

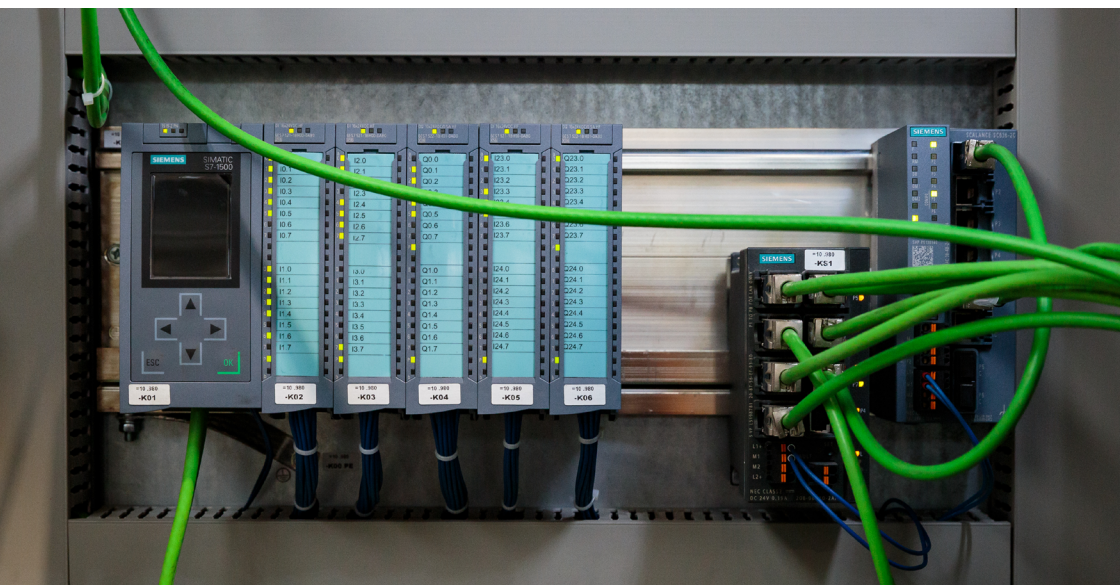
Effective and long-lasting integration in automation and industrial network management

Together with Cables RCT's partner, Araelec, a specialist in industrial solutions, Siemens came up with a proposed solution with a stress on the quick and easy implementation of the designed solution on existing machines of different ages and originating from different suppliers, with an open and

Advantages and Benefits for Cables RCT

- Higher level of security in OT
- Cost savings by reducing time and eliminating machine servicing trips
- Process and product quality improvement
- Continuity of production protected
- Secure connectivity to all machines, even older ones
- Standardization of a scalable solution that allows for future scalability
- Immediate access to machines for in-house maintenance personnel
- Excellent collaboration between IT and OT teams
- Digitalization of processes by having full connectivity to machines

constant collaboration between the IT and OT teams at Cables RCT. Siemens' ability to understand both sides of this equation helped bring them together, resulting in a successful collaboration between the two working groups and ensuring the success of the project as a whole.



Here we can see the classic SCALANCE X200 family connected via SCALANCE SC600.

The secure integration of the OT infrastructure with the IT infrastructure has enabled Cables RCT to capture and analyze production data more efficiently, leading to improvements in its processes. Siemens'



Secure remote access without causing production downtime is a must. Angel Ventura, Director of Engineering together with Javier Mallor, Head of Automation

ability to offer high-level, easy-to-implement solutions has also enabled the plant to be modernized without needing to call a halt to production. The cybersecurity-centric approach taken by Siemens has enabled Cables RCT to mitigate existing risks and ensure continuity of production.

Improving Security and Reliability with Integrated Solutions

Using its extensive catalog of products and solutions, Siemens helped Cables RCT overcome its cybersecurity challenges and improve its infrastructure. One of the key elements in the solution was the SINEMA Remote Connect connectivity management platform. "This software, designed for remote access management and connectivity in the plant, provides a secure and scalable solution that guarantees access to machines, mitigating cybersecurity risks," says Edgar



The Cables RCT production system has the most up-to-date equipment for the manufacture of insulated electrical cables for low voltage. Cables RCT is a supplier of cables for everyday use and cables for all industries.



Cables RCT maintenance personnel using the SINEMA Remote Connect tool. Thanks to the solution chosen, machines can now be accessed from both inside and outside the factory.

Romeo, Director of Information Technology at Cables RCT. "This system enables the safe and efficient management of connections, regardless of their location, making it possible to remotely monitor and service the plant."

SCALANCE XC216-4C and SCALANCE XC208 industrial switches were used to improve network management and communication between different devices. These managed switches are very important for the flow of data within the plant infrastructure. The SCALANCE XC216-4C SFP, an industrial switch with fiber-to-Gigabit Ethernet connections, provides high speed and performance, facilitating efficient data transmission in the industrial backbone ring. With the SCALANCE XC208, we have an industrial switch with Fast Ethernet copper connections, ensures stable and reliable communication between the devices of the machine itself, minimizing interruptions and maximizing productivity.

The SCALANCE SC636-2C was also included in the solution. This device is a router with security functionality that adds an extra layer of protection to the Cables RCT network. It is designed to segment automation cells, in this case machines, while providing secure communications managed from the SINEMA Remote Connect tool. This router is crucial to maintaining network integrity. Its inclusion

in the solution has provided Cables RCT with a more secure and reliable network.

Finally, to ensure continuous and reliable power supply to all these devices, Siemens provided the SITOP PSU100S, an industrial power supply. This power supply ensures that all devices and machines in the plant are always operational, with zero downtime caused by power issues. SITOP PSU100S therefore guarantees the operational continuity of the plant, contributing to its efficiency and productivity.

With all these products forming a joint solution, Siemens has enabled Cables RCT to significantly improve its industrial connec-



Guaranteed success of the project: the excellent collaboration between Cables RCT and its partners Siemens and Araelec. "Siemens became a true partner for us during the planning and execution phases of the project." Edgar Romeo together with Carlos Bazán and Angel Ventura.

tivity infrastructure in terms of OT, adequately responding to its needs.

Results exceed expectations

The assistance provided by Siemens, working alongside Araelec in this Cables RCT project, went beyond technical consultancy work.

"Siemens became a true technology partner for us during the planning and execution phases of the project. In addition to providing world-class technical automation solutions, Siemens has worked closely with both us and Araelec in order to understand our long-term needs and goals," says Edgar Romeo. Siemens has worked closely with Cables RCT to develop a customized solution that addresses the specific challenges faced by the company on a daily basis, such as the segmentation of its industrial network to ensure system security, making it possible to access machines remotely in a secure way and thereby allowing the necessary connectivity to enable the digitalization of all the company's processes.

"In some cases, this meant we had to work directly in the field in the factory to better understand how the machines are being used and how they can be improved to increase efficiency and safety," recalls Angel Ventura. Siemens has also helped Cables RCT develop new strategies and processes that enable greater safety and reliability, all of which stand to contribute to the company's sustainability and long-term success.

In summary, the solution that Siemens has supplied to Cables RCT has mainly improved the level of security in the industrial network

Siemens Product List

- SINEMA Remote Connect
- SCALANCE XC216-4C
- SCALANCE XC208
- SCALANCE SC636-2C
- SITOP PSU100S

and the security and reliability of remote access to machines. The result of this work is a scalable standard reference architecture that will allow the company to continue adding machines to the existing infrastructure. On top of all this, the solution has improved machine access for internal maintenance personnel, leading to significant cost savings in terms of time and travel for machinery suppliers and has also enabled the digitalization of plant processes.

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