

FAST UPGRADE OF OUTDATED AUTOMATION SYSTEM FOR CEMENTOS PORTLAND VALDERRIVAS

Easy and safe control of the production line, fast training and commissioning, and a system that is now prepared for further digitalization. Those are among the benefits of the upgrade of the automation system at the Spanish Olazagutfa Cement Plant owned by Cementos Portland Valderrivas and Fuller Technologies (previously FLSmidth Cement)

A great thing about automation equipment and systems is that it runs for decades. The bad thing about that is that once it gets that old, you risk that there is no one left on site who know the details about how the system actually works.

Olazagutra Cement Plant in Navarra, Spain, found itself in exactly that situation. It was running on an old POLCID system from Polysius, today a subsidiary of ThyssenKrupp. Failures were becoming more frequent and resulting in downtime and loss of production. The automation engineer who knew the system by heart had left the company, making failures hard and timely to fix for the remaining crew. A replacement of the old controller function and industrial PC's was urgent.

Fast forward to today. Olazagutia is now running smoothly on ECS/ControlCenter™ from Fuller following an upgrade that not only solved the problem with failures and downtime, but also has provided Olazagutia with richer HMI information aligned with the ISA 101 standard recommendations, remote access and a service agreement securing support.

A differentiating factor of ECS/ControlCenter™ versus POLCID is the process trends. Its construction is fast and facilitates process parameters with great precision. This is a fundamental factor in the study and improvement of the process

NIEVES LACERA
Production Manager, Olazagutfa

Reverse engineering at high speed

To keep costs to a minimum, Fuller and Cementos Portland Valderrivas agreed to keep all the existing I/O's and build the new system on top. This basically meant that all functions from the old system had to be copied into the new. An additional challenge was that the annual maintenance stop of the plant was coming up, and installation and commissioning of the new solution had to be done during those three weeks. The ability to complete the project within this timeframe was a deciding factor for the customer.

„As the documentation of the existing system was neither updated nor complete, we worked closely onsite with the plant Maintenance Manager, Victor Bernal, while our own teams did a reverse engineering on the old system. Once we had a complete understanding of the functions, Fuller's teams programmed the new controllers using our ACESYS Cement library. It was a showcase of dedicated teamwork collaboration,“ says Oscar Tabuyo, Project Manager in Fuller.

While the existing I/O's were kept in place, new buses were added, replacing coaxial industrial buses with Ethernet buses. As the I/O's were from Rockwell, the same brand was chosen for controllers. Furthermore, Fuller supplied new PC hardware and new network switches.

„We take pride in being able to work with and upgrade many existing controller brands. It is important for us that our customers get a reliable solution that increases productivity, and with our Process Control solution based on Fuller's ECS/ControlCenter“ we can do that with the major vendors.

That gives us the flexibility to analyse the customers' challenge and only replace the worn-out parts of the system rather than also ditch equipment that can function for years to come - like the I/O's in this case,“ says Oscar Tabuyo

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And even when we are not on site, it is easy to access all the data we
need to make sure that everything is running according to plan.**

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Production Manager, Olazagutfa



Olazagutfa's automation staff benefits from remote viewing access to all relevant parts of the system.

Prepared for further digital initiatives

With the Ethernet solution now in place, the infrastructure is prepared for future benefits from Fuller's digital portfolio. Initially, Olazagutra's automation staff benefits from remote viewing access to all relevant parts of the system.

One man can operate the system faster and safer than before. And even when we are not on site, it is easy to access all the data we need to make sure that everything is running according to plan," says Nieves Lacera.

Another thing that ran according to plan was the installation, commissioning and training. To secure that everything could be done within the short window, thorough FAT tests were conducted, and to avoid unnecessary travel expenses, some of these tests were performed using remote online collaboration tools.

Within the three weeks scheduled maintenance of the plant, hardware was replaced, software installed, test conducted to ensure the communication between new PC's and controllers on existing 10 modules on the new Ethernet based networks worked perfectly.

Fuller's technicians provided good training to all shifts over a period two weeks. In addition, they also prepared a manual customised to the installation of Olazagutra. All of this meant that the operators achieved optimum training in process management with ECS/ControlCenter

NIEVES LACERA

Production Manager, Olazagutfa



The control room at Olazagutla is now running smoothly on ECS/ControlCenter™ following an upgrade that solved issues with failures and downtime as well as provided the plant with richer HMI information aligned with the ISA 101 standard recommendations, remote access and a service agreement securing support.

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