Olsa produces more sophisticated and flexible vacuum mixer homogenizers thanks to Rockwell Automation PlantPAx solution

PlantPAx Process Automation System provides maximum flexibility in managing recipes, while minimising training and start-up time

Solutions

A Rockwell Automation PlantPAx solution was installed, which comprised:

- Allen-Bradley ControlLogix PAC
- EtherNet/IP
- FactoryTalk View SE
- FactoryTalk Batch
- Allen-Bradley PowerFlex 70 drives
- PCs and Allen-Bradley industrial Servers
- Electromechanical components

Results

- Line of vacuum mixers suitable for integration with a Process Control system
- Compliance with S88 and the U.S. NEMA standards
- Reduction of training time due to ease of use of the system
- Process visibility and real time reporting

Background

Olsa, an Italian company based in Milan, which operates both locally and internationally, specialises in the design and manufacture of equipment for the pharmaceutical, cosmetic and chemical industries.

Its extensive knowledge spanning 60 years, allows Olsa to successfully respond to customers needs with a complete range of standard machines and equipment designed to meet specific needs.

Know-how and flexibility together with three lines of processing equipment for liquid, semi-solid and solid products are features that make the company unique in the competitive landscape.

In order to meet the specific needs of a customer, OLSA engaged Rockwell Automation for the delivery of a new machine for the production of soft gelatine capsules.
**Challenge**

Mixer homogenizers are predominantly used in pharmaceutical and cosmetic industries for the production of creams, ointments and similar products.

To successfully meet the project requirements – which had higher technical and quality prerequisites than usual – Olsa selected Rockwell Automation to provide and deliver the customer with more complex equipment than standard mixers, enriched with an innovative technical solution.

The aim of the project was to provide advanced automation features, together with the standard Olsa mechanical and production equipment, such as the contra-rotating mixing group and the high-speed homogenizer.

The mixer homogenizer also had to comply to NEMA and to ISA S88 standards in Batch systems management and production.

**Solution**

With the complexity of the scope of work required with this project, Olsa’s first choice to manage this, led it back to Rockwell Automation. Another supporting factor was the depth of the Rockwell Automation offering, extending from single components to a complete integrated automation system that would allow project management from a single supplier.

The Rockwell Automation Global Solutions Division in Italy, known for its deep industry knowledge, ability to provide strong support during the project design and development and worldwide on-site service assistance, was also a key factor in the choice.

Based on Olsa requirements, Rockwell Automation developed detailed functional specifications of both hardware and software and supplied the machine with PlantPAx, the process automation system compliant with S88 standard that allows the machine to operate stand-alone or integrated into complex production environment.

This process automation system, with the integration of Allen-Bradley ControlLogix programmable automation controllers (PACs) and FactoryTalk Batch software, combines automatic sequences using recipes, allowing customers to be immediately independent in their own configuration of the system.

The solution includes a comprehensive electrical, command and control panel utilising Allen-Bradley electromechanical components compliant to CSA /UL standards.

The FactoryTalk View SE HMI supervisory software is based on Server/Client technology with two operating panels installed on the machine for production management. Rockwell Automation also supplied the panels, monitors and industrial PCs.

The use of appropriate HMI graphics libraries integrated with add-on Instruction in the PAC GEMS Library allows the alignment of recipe management to the S88 standard, making it more flexible and easier to manage by operators.

The heart of the batch system is based on FactoryTalk Batch software. Thanks to its user-friendly interface, it offers easier management of production through the build and management of recipes.

The ControlLogix PAC is connected via EtherNet/IP to local I/O and also to Allen-Bradley PowerFlex AC drives and third-party equipment, such as weighing systems and pneumatic valve batteries. Furthermore, an integral part of the system is the Batch Reporting, with the option of printing or saving production parameters as PDF files for archiving.

In addition to a comprehensive solution, Rockwell Automation also gave full support across all project phases: from development, implementation, documentation management to the final testing (SAT).

**Results**

Olsa now has a solution fully capable of fulfilling the needs of multinational pharmaceutical and cosmetic companies. The flexibility and compatibility of PlantPAx allows the machine to operate either stand alone or to seamlessly integrate into complex production environments, while being compatible with process systems.

Another important result for Olsa is the chance to offer its customers a tool that offers data
archiving and reporting, printed and digital – critical to Batch System management in the pharmaceutical field.

“Rockwell Automation supplied us with a compact, highly adaptable and flexible system, fully capable of responding to customer needs,” explains Claudio Franchina, Instrument Automation Engineer at Olsa. “The flexibility and the ease of use of the system led our customer to independently use the machine in just a few days after its implementation; this convinced us to offer the same solution developed with Rockwell Automation to other clients.”

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“The collaboration with Rockwell Automation has proved very successful. Since our first meeting, we have been able to offer the best solutions to meet the specific needs of our customer. The real differentiators compared to other suppliers lies in the experience, flexibility, participation and commitment from the Rockwell Automation team. These are certainly the key factors to our success,” states Roberto Vassena, Director of Operations at Olsa.

Additional Information
www.rockwellautomation.com

The results mentioned above are specific to Olsa’s use of Rockwell Automation products and services in conjunction with other products. Specific results may vary for other customers.