Cantine Riunite & CIV uses Emerson SCADA software to improve monitoring and control of wine production lines

RESULTS
- Obtained greater productivity and efficiency
- Able to identify areas of improvement
- Improved decision-making and prompt intervention
- Scalability enables future expansion

APPLICATION
Monitor and control wine production lines.

CUSTOMER
Cantine Riunite & CIV – Province of Reggio Emilia, Italy.
One of Italy’s leading wine companies, selling 128 million bottles in 2018/19.

CHALLENGE
Cantine Riunite deploys modern tools aligned with traditional production techniques to produce excellent wine reflecting the passion and effort of the Reggiani winemakers. The company’s Reggiano Campegine plant has three production lines, with the capacity to produce more than 300,000 bottles of wine a day. To help increase productivity and efficiency, and supporting both production and maintenance departments, the Cantine Riunite technical team developed a new application to manage services and technical rooms, and monitor and control the status of three production lines.

SOLUTION
Emerson’s Movicon software was selected for the new supervisory control and data acquisition (SCADA) system, managing a range of equipment, including internal and external cooling systems, air compressors, central water supply, heating system, purifier, vapor filtration and oil-free air systems. Operators are provided with alarms and malfunction notifications immediately, such as minimum or maximum levels of water in tanks allowing prompt action to be taken to ensure product quality. With real-time information and historical trending, it is possible to analyze events and probable causes of alarms or thresholds being exceeded. The system enables operating times of compressors and other devices to be monitored and controlled. Operators can also view periods of inactivity, calculate averages and manage maintenance. The system also allows the cellar lights to be controlled manually or automatically according to a predefined schedule.

“Emerson’s Movicon software is very intuitive and simple to use. Having very efficient and competent local support was a great advantage when dealing with this type of application.”
Gianluca Torelli
Technical manager, Cantine Riunite & CIV
The SCADA system provides the status and production efficiency of the three bottling lines, displayed in pie charts. Simple and effective graphics help operators monitor how the depalletizer, filling machine, pasteurizer, labelling machine, packaging machine and palletizer are performing, with production line values revealing the efficiency of machines. Operators can view real-time and historical production charts, set specific parameters such as the conveyor belt speed, temperatures, margin of error, alarms and anomalies, and then manage alarms if they occur.

The system has improved maintenance efficiency and management of alarms and anomalies, with prompt intervention, when required. Real-time production quality control with historical data consultation is allowing prompt intervention to manage machine parameters accurately and with traceability. In addition, the ability to analyze and compare historical data is helping to identify areas that need improvement. Cantine Riunite & CIV now plans to expand the system, simplified thanks to the scalability of the Movicon software.

“Thanks to the integrated functions of the Emerson Movicon software, we have been able to achieve everything we planned and more. This type of overall supervision is a highly reliable way to obtain production efficiency that would otherwise be impossible to achieve with a normal control system.”

Gianluca Torelli
Technical manager, Cantine Riunite & CIV

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