Industry: Process Technology, Chemical Industry

Products Used: Compact PLCs, Frequency Inverters, HMI

Full Transparency Without a Central Process Control System

The medium-scale company Follmann & Co. recently installed a highly-flexible cooling, storage and filling plant for adhesives that be reconfigured, expanded and relocated at any time. Instead of an expensive centralised process control system, Follmann & Co. decided to use versatile standard components for the automation systems in the new plant – compact modular controllers and HMI control terminals from Mitsubishi Electric, combining outstanding flexibility with full transparency.



Axel Schuschies has no doubts about the reasons for the growth of the company since ites establishment in 1977. "Our key strength is our ability to respond quickly and flexibly to the needs of our customers," says the works manager of the chemicals manufacturer Follmann & Co. in the Westphalian town of Minden. This recipe for success is also reflected in the company's manufacturing technology. Medium-scale firms like Follmann know that they must be innovative and flexible to remain competitive. And investments must pay for themselves within a short period.

After considering the specifications, the wide range of products and the widely-fluctuating batch and order sizes, the project team opted for an automation system controlled via

a field bus for the product process paths, which run from the reaction tanks to the cooling and storage tanks and the bottling plant.

The use of pipeline pigs was central to the design of the entire plant. Pigging is now used in many branches of industry, enabling residue-free cleaning of the pipelines during transport for fast batch changes even with high-viscosity products like adhesives. A pig is like a free-moving piston with sealing elements that is inserted in the pipeline to clear the current product out.

Follmann selected a combination of compact programmable logic controllers and HMI control panels from Mitsubishi Electric to control the entire upgraded plant. Frequency inverter drives from the same manufacturer were also chosen to operate all the pumps at the optimum speeds. The excellent experience that Follmann had already gained with the Japanese company's automation components were a not unimportant factor driving this choice, along with the desire to standardise the technologies used to further increase the efficiency of operations.

Our key strength is our ability to respond quickly and flexibly to the needs of our customers.

Axel Schuschies Works manager, Follmann & Co

11

The next stage is already planned: The company is continuing its expansion, and this year more components are going to be added, including an automated tanker truck filling system.

Application story first released in August 2005

