

Chemical Manufacturing (Europe)

*Team Chemistry
and Expertise
Overcome Complexity*

Time to Update



A European chemical company knew its existing control system was being phased out. After working productively with the Emerson team, management saw the benefit of migrating to Emerson's DeltaV™ distributed control system (DCS).

The facility employs a complex batch process to manufacture plastic additives used in products such as PVC. To maintain production, timing of the cutover and DCS migration was critical.

As the project team began considering how to reverse engineer the system design and migrate, they were up against a very tight 15-month project schedule and a shutdown period of 2.5 weeks for installation, SAT, and start-up. They also needed to redesign the batch implementation to be ISA-S88 compliant.

Familiarity Breeds Ease



Thanks to past successes and good chemistry between the two project teams, Emerson was the organization's choice to partner with in this migration. Management trusted Emerson to use its expertise to assist in taming the project complexity and in optimizing the batch strategy.

The project would include full configuration standardization with DCS reverse engineering, configuration, virtual FAT, start-up and commissioning, plus using DeltaV Batch Analytics for process optimization for recipes and transitions.

Emerson's expertise made the project less complex and met the goal of an optimized batch strategy.

Local and Remote Expertise



The Emerson engineering work cell, fully dedicated to the project, based enhancements of the complex batch recipes on the Emerson standards library to streamline the work and assure the use of best practices. Expertise combined with the library delivered a complex batch design that complied with S88.

Because the facility and Emerson teams had to work tightly together, they needed a way to share files and communicate effectively. Reducing the complexity of communication, Emerson's Remote Virtual Office (RVO) collaboration platform provided secure, reliable, distributed engineering of automation projects on a common infrastructure that reduced overall project schedule, cost, and risk. Project stakeholders from both companies could look at the configuration — facilitating adoption and reducing training.

The RVO environment was also used to complete a virtual FAT. The project team was able to stay at the plant and continue to manage production during the FAT. The results included reduced travel, expert Emerson guidance, and less time away from the operating plant for personnel. Testing was completed in segments; while Emerson was working on the next segment of configuration, plant personnel were testing the completed configuration. This helped ensure consistency and maintained the pace of progress.

Expert partnering and teamwork delivered the successful project on time.

