

SUCCESS STORY

Productivity Improvements by Replacing a Control Panel with DCS / Adisseo in France

Location: St Clair du Rhone, France

Order Date: 2001

Completion: 2002

Industry: Chemical



Replacing a traditional control panel with a DCS poses special challenges. The successful outcome of such projects depends on the commitment of the users. Adisseo's project MADRID, in St Clair du Rhône, is a good example of what can be achieved.

Adisseo is a leader in nutritional food additives. Its headquarters are in Antony (France) with four main production plants: Commeny and Les Roches-Roussillon (France), Burgos (Spain), and Institute (West Virginia, USA).

Adisseo creates, manufactures and sells food additives under the following trade marks: Microvit (vitamins), Rhodimet (methionine), Smartamine (methionine for ruminants) and Rovabio (enzymes).

At Les Roches-Roussillon, semi-finished products and finished goods (Méthionine, Acroléine and Méthyl Mercaptan) are processed on a CENTUM CS in Roussillon and on a CS 3000 in Les Roches. In the MADRID project, two process units including two pre-heating lines with reaction and distillation phase were supplied.

The main difficulties in these processes came from handling inflammable and toxic substances: acroleïne, MSH, and H₂S. ProSafe PLCs were provided to protect both people and the environment.

As a former member of the Rhône-Poulenc group, Adisseo has expertise in process control and in applications of this technology.

One of the main difficulties we met in the MADRID project was the transfer of safety functions performed by Soprano cards to the ProSafe safety system, which was connected to the CENTUM CS 3000 via two MULCOM modules. The engineering functions of the CENTUM CS 3000 and the ProSafe safety system were built by the plant's engineering and design departments. The use of safety matrix blocks as a programming method was among the functions required of the security system.

Special attention was given to operator training. Personnel were appointed to the interface between the engineering department and production. Training was in two steps, with operators first learning how to use the CENTUM CS 3000 with Yokogawa staff, then working on their own application with people from the plant.

Traceability was a must for Adisseo. CENTUM CS 3000 data are exported through an Exaopc server which proved remarkably easy to commission.

"The reasons why we selected the CENTUM CS 3000 and the ProSafe safety system were the rugged hardware, safety integrity architecture, easy commissioning and maintenance," says Patrick Bernisson, who is in charge of the Electricity-Instrumentation Department at Adisseo.

The first part of the project was successfully completed in just ten days in September 2001 as everything had been planned out in advance. "Operators appreciate the system's flexibility and availability. The second part of the project was successfully completed as planned in October 2002," says André Dubois, site manager.

Adisseo is our first customer to install a ProSafe safety system combined with a CENTUM CS 3000.

System: CENTUM CS 3000 and ProSafe safety system
System Configuration: CS 3000 : 2 EWS , 5 HIS dual CRT , 1 Exaopc server , 4 FCS
ProSafe : 2 EWS , 2 Mulcom , 3 ProSafe AK6 redundant