Accord Installation – Fast Plant Upgrade

A large Cream Liquer blending plant in Ireland required an upgrade to their Waste Water Treatment, and we carried out the installation, from electrical works to full scada, in 3 days using Accord.

The legacy control panel was old and semi-manual and required constant presence and manual intervention. The panel was to be rewired with new terminals and components and some items were to be removed from it. The client required a modern system, capable of controlling the plant safely, with data logging and reporting facilities.

The client required that the upgrade would be minimal, so that their manufacturing would not be affected by having no route for their waste water.

Logicon were contracted to carry out the upgrade and the plant and panel was surveyed. A list of devices and corresponding wiring terminals was compiled, as well as notes on items to be removed and replaced. The new system was to contain 15 instruments, 25 switches, 29 Valves and Motors, with 114 I/O points.

It was arranged for panel works and installation to start on a Friday, and to have the upgraded plant returned in time for production on Monday.

Project Installation in 3 days

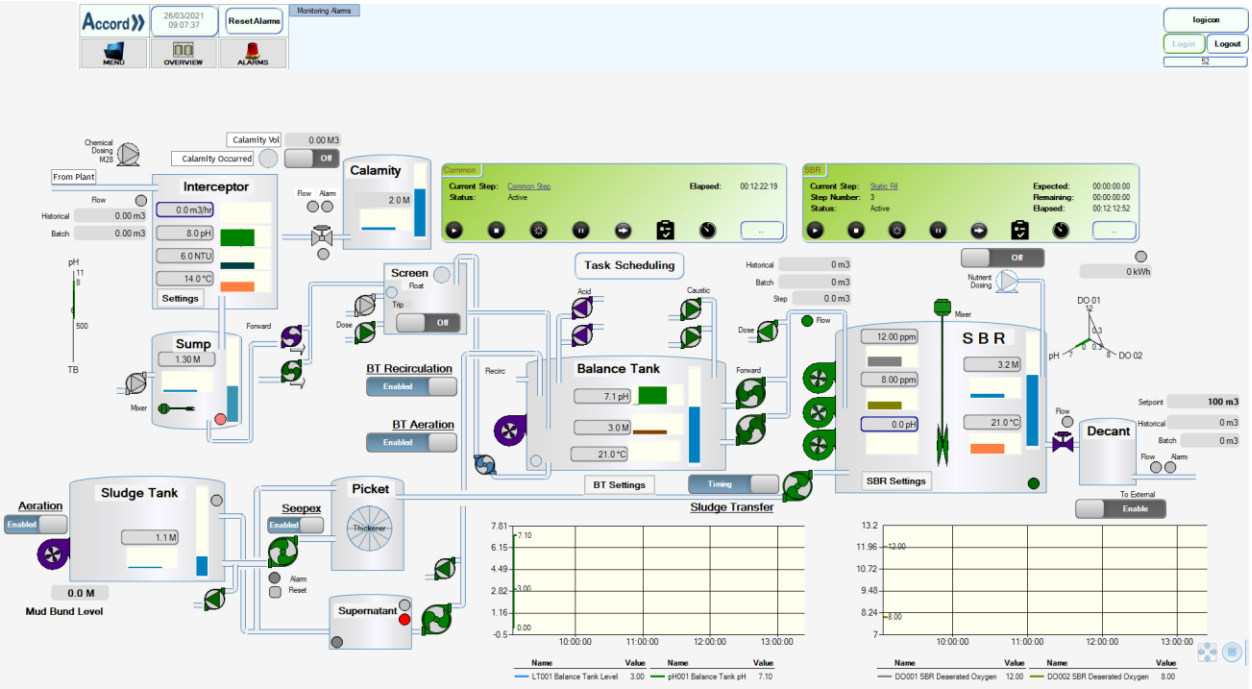
The PLC was assembled and installed on the morning of the first day. The electrical components were wired to terminals and the I/O designations were listed. A PC was installed in a control room and connected to the PLC via Cat5 cable. Accord and an OPC server were installed on the PC. As the electrical work continued the equipment was configured in the Accord Model.

In the afternoon the plant engineer explained the desired operation of the plant and the Continuous Operation and Sequenced Operation for the SBR were built. As Accord is object oriented the plant engineer was able to view and assist with building the process Model. Modifications such as additional steps as installed during the conversation. The initial model was finished during the day.

The graphic Mimic was drawn in the morning of the 2nd day, with the assistance and direction of the plant engineer. The graphic was populated with objects for the Valves, Pumps, Switches and Instruments. Objects were placed on the screen for the two programs; Continuous and SBR Sequencing. Scheduler objects for Timed operation of Aerators and other Motors were added to the Scada, to allow Plant personnel full control over the timed operation of these items.
The I/O wiring was finished and in the afternoon the I/O was tested, and instrument readings were agreed with the engineer.

We tested the plant was tested in operation during the 3rd day and any further modifications to Model or Graphics were implemented. Following this the Process description was generated from Accord and this was used, along with live Graphic to write an Operations Manual.

Mimic of System:



Result:

The quick project turnover and installation was very satisfactory for the client. The plant has been in continuous operation since installation. Plant Engineering personnel have access to all settings and schedule timers. All relevant data is logged and reports for correct operation for Environmental Agents are produced by plant engineering personnel.

Contact:

Logicon Ltd.
Donovan House, Adelphi Court, Dundalk, Co Louth, Ireland A91 PD27
+353 42 9329374 *admin@logicon-automation.com*