



GAW - Sappi Nijmegen

Scope of project	Changeover of the coating colour preparation plant from PCS7 to automationX
Special features	Complete system exchange (retrofit) during a short halt in production; production management, material tracking and communication with Mill Wide Information System
Location of plant	Nijmegen / The Netherlands
Client	GAW technologies GmbH

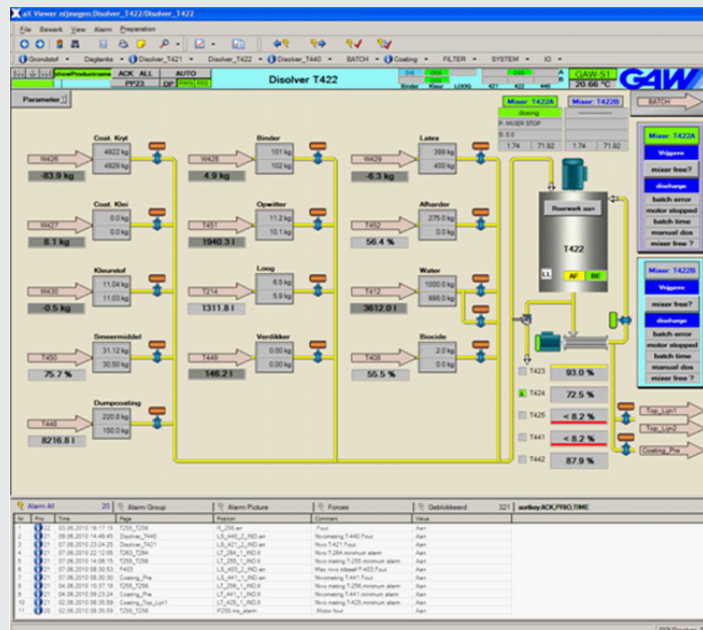
KEY FACTS

aX software	automationX
aX hardware	aXlink100 / aXpbc1
aX server	2 servers
aX client	3 operator stations
I/O's	2.000
Interfaces	Communication with the paper machine (ISOonTCP) Profibus DP networking OPC Server to PI System TCP to MICS
Network	Control technology: Ethernet Field: Profibus, Ethernet

OUR PARTNER

Sappi is one of the world's largest manufacturers of paper and pulp, producing top quality materials on which high-grade catalogues, magazines, brochures, business reports and illustrated books are printed on three continents.

The factory in Nijmegen (the Netherlands) is one of Europe's largest suppliers of fine coated paper on rolls, in particular for heat-set web offset printing, as well as of fine paper for digital printing applications



THE CHALLENGE

Reason for the changeover to automationX

The coating colour preparation plant produces coating colours using batch processes. The coating colours are spread on the base paper by a coater. It is especially demanding to quickly produce coating colour of uniform quality. This means that the automation system must be able to carry out the dispensing processes flexibly and precisely. In addition, it is necessary to manage different recipes and in the case of the project at Sappi to integrate a superimposed mill information and control system (MICS) homogeneously. The MICS sends basic recipes and raw material data to the automationX system of the coating colour preparation plant; from these recipes and data, automationX generates and calculates control recipes and controls all processes fully automatically. The MICS acknowledges all products used.

Consequently, GAW Graz commissioned AutomationX to completely retrofit and optimize the existing Siemens control system. Due to numerous references in the SAPPi group, established standards were adopted for the plant in Nijmegen and the control strategies and project structures were agreed on in coordination with the operating team.

THE SOLUTION

The entire automation runs on two redundant servers. Three Thin-Clients, each with two monitors, are used for visualization. Profibus (aXlink100 from AutomationX) is used to connect to the decentralized periphery. Counter modules (aXpbc1 from AutomationX) are used for the flow rate counters. The order list is a central part of production control and was adapted by request.



Adherence to schedules is valued

All in all, it was necessary to keep to a very tight schedule. The challenge was to retrofit the entire facility within the period of the shutdown (48 hours) in order to be able to resume production afterwards without any limitations. This task was achieved by the automationX team without a hitch.

