

Industry: Food & Drink

Products Used: FX PLCs /// SCADA

Mitsubishi automation keeps tabs on Virgin Cola

Virgin Trading's new Cola Concentrate processing facility in County Monaghan has been built and equipped to be one of the most efficient in the world. Charles Wait (process plant) Ltd, appointed by Virgin to build their first ever dedicated facility of this type, specified Mitsubishi automation equipment to monitor the performance and maintenance requirements of the plant.



The site has been designed specifically for the production of concentrate sufficient for the subsequent bottling of 2 billion litres per year of Virgin Cola. A high degree of automation ensures that the plant can be run extremely efficiently by only 6 people. A Mitsubishi Electric AnS series modular PLC is used together with a Mitsubishi MX32 SCADA (Supervisory Control And Data Acquisition) software on an industrial PC to monitor both the operating processes in the plant and the maintenance requirements.

Flexibility is key to the production of concentrate. Virgin produces many different components that vary in volume, and recipes for different bottling plants are varied to match local tastes. This and other data can be accessed from other production sites from around the world via a dedicated modem which helps to continually develop the production processes.

The Mitsubishi MX32 SCADA system monitors the operating condition of every valve (including opening and closing times) in conjunction with the AnS PLC, and displays this information in an intuitive easy to understand graphical format. The major benefit of the SCADA system is that one operator can control the entire process via the mouse on the panel-mounted industrial PC, accessing data ranging from plant status and batch control to maintenance schedules.

The AnS rack mounted PLC effectively controls and oversees the whole plant. The PLC receives feedback from all pumps enabling them to be monitored for overload and contactor status. All tank levels are also checked by the AnS via ultrasonic level sensors and load cells, which are connected directly to the PLCs high resolution 32 bit analogue inputs.

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Rod Golightly
Charles Wait

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According to Rod Golightly, Senior Project Engineer with Charles Wait, "We have the production facilities and highly skilled staff necessary to design, build and test all equipment fully before delivery to our customers around the world. We chose Mitsubishi automation equipment because of their reputation for reliability and worldwide support, particularly in the food and beverage industry."

Application story first released April 1998 by Mitsubishi Electric UK