



# Case Study: INTELLIGENT MCC FOR PZ CUSSONS

The sweet smell of success drives PZ Cussons forward by choosing an Intelligent MCC designed and manufactured by W H Good Automation.

**Leading personal wash company, PZ Cussons, has invested in a new high-speed liquids manufacturing facility, significantly increasing capacity as well as benefiting from a more efficient process.**



Its old site, which had grown organically over a long period of time, was unable to deliver the production volumes to meet the demands of the business. It also experienced too much operator intervention at virtually all stages of manufacturing, which often introduced unwanted levels of product variability.

The company knew that significant cost savings could be made by its production operations and recognised that only a modern process plant would help it to realise these.

As part of a complete overhaul and modernisation of its UK supply chain, PZ Cussons decided to take advantage of the control and visibility capabilities offered by a modern process-capable automation infrastructure.

While establishing the justification for a new UK manufacturing facility, the company realised that much of its existing process equipment at its old site was not up to the demands of a modern manufacturing environment. This is one of the reasons why it chose to employ the very latest technology available from Rockwell Automation and W H Good Automation, a Recognised Systems Integrator partner.

The solution was based on the ISA S-88 standard, utilising networked instrumentation and routing valves and utilised Rockwell Automations Integrated Architecture™ and Intelligent Motor Control infrastructure. This allowed the use of a common software environment and scalable solution which made installation and cross-line migration incredibly straightforward.

Starting with a 'clean sheet of paper', PZ Cussons recognised many areas where savings could be made and unnecessary costs removed. It also wanted to adopt leaner manufacturing procedures making further savings in stock holding and deliveries.

The primary challenge was to obtain visibility of all steps of the process and to keep all parameters within operational tolerances. This required extremely accurate batching, mixing and metering systems, which could not only communicate with each other, but also with the master control system within the offices and external suppliers via a secure extranet.

The new approach is helping PZ Cussons to attain many of the savings it envisaged, while also removing many of the process variables which introduced unwanted costs.

By measuring and automating virtually every step of the recipe creation, mixing, processing and packaging lines, the total solution supplied by Rockwell Automation and W H Good Automation has had a significant impact.



The savings have been such that the company is vindicated in its decision not to move manufacturing to alternative locations outside of the UK.

An entirely new processing and production operation was developed, controlled by equipment engineered, supplied and improved by services from Rockwell Automation and Recognised System Integrator W H Good Automation.

The implementation of the project made full use of the flexibility, the improved process and diagnostic data that the networked devices provide. This has given PZ Cussons a level of process visibility and control far beyond what it had in its older plant.

The flexibility of the Intelligent Motor Control concept allowed the software system to be developed in parallel with the panel construction by W H Good Automation; which helped reduce the implementation time.



According to Neil Thompson, Control Systems Engineer at W H Good Automation:

"Network connection allowed us to develop standardised modules for VSDs (Variable Speed Drives) and DOLs (Direct Online Starters) and use these repeatedly. This speeded the design process significantly and provided PZ Cussons with a system that was both easy to understand and maintain."

E3 electronic overloads are also used to control and monitor all fixed-speed motors. DeviceNet connectivity helped significantly reduce wiring time and allowed for monitoring of conditions such as overload, under-load, jam, stall and phase-loss.

The DeviceNet controlled starters can also be accessed seamlessly from any ethernet connection.

