

Semi-automated batch control system in the Pharmaceutical industry

Client: Pharmaceutical manufacturer

Industry: Life Sciences

Location: Rhydymney, UK

Challenges:

- Move from manual to automated system while minimising production disruption
- Reduce waste from operator error

Solutions:

- Rockwell Automation ControlLogix
- FT Batch
- FT View
- FT Historian
- FT VantagePoint



Background

The client manufactures medical products and technologies focused on therapies for the management of chronic conditions, including advanced wound care, ostomy care, continence and critical care, and infusion devices.

They were building a new manufacturing facility for the batch manufacture of wound dressing product, and Actemium Automation was brought in to design, build, test and commission the batch control system.

Challenges

The existing process was highly manual: batch numbering was being done via manual entry, and all data was being recorded manually onto batch sheets. A new batch control system needed to be developed and implemented while minimising any disruption to production. ConvaTec were also looking to reduce waste caused by operator error.



Solution

Our Actemium Automation Nottingham team created a batch control system that manages three identical process streams, each with two main process units and with each unit having approximately 10 phases per unit. Recipe management comprises a hard-coded master recipe for each stream since the client has limited product variety.

To avoid disrupting production, we took a highly phased approach to full automation. We first took the manual process to semi-automatic by use of automated phases triggered by operators. Once that was successfully implemented, we introduced automatic running of the phases to more fully automate the batch production.

Results

Actemium Automation successfully implemented the semi-automated batch control system while minimising plant disruption. Future plans include: introducing batch and recipe tracking systems; batch reporting based on electronic batch records and electronic signatures for signoff; and, recipe management linked to the production database.