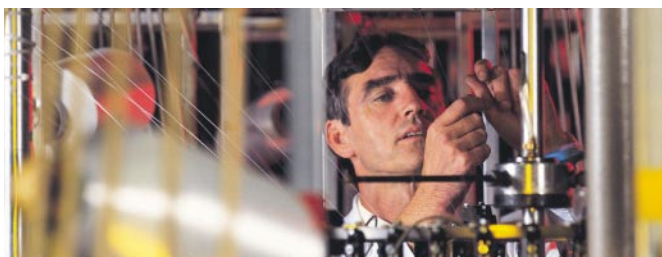


Industry: Animal Feeds

Products Used: Modular PLCs /// Networks

Total integration of plant control at Joseph Stewart and Co.

The Directors of Joseph Stewart and Co have awarded Mitsubishi Alliance Integration Partner company, Datastor Ltd, a contract to supply an integrated plant control system for the company's feed mill at Boyle, Ireland. The system will replace two existing control systems at the multi-species feed mill.



A complex system design integrates real-time operational control on an Intel Multibus platform, with 8 Mitsubishi Electric AnS modular PLCs distributed throughout the plant. Areas covered by individual controllers are intake, main blending, downstream routing, three press lines and the micronising plant. Datastor's comprehensive software also caters for the dispensary and cross contamination protection. The press lines incorporate the latest technology long barrel expanders and fats coating control.

The control system real-time engine is linked to a networked graphics package running under Windows NT, and incorporates a database that provides comprehensive management information as well as full control. Features include: production scheduling, batch and press run reports, raw materials database, raw materials traceability, base and additive formulations, spread sheets, archiving of data, back-up and restoration of the database and a link to the corporate business computer system. Multi-function operator VDUs on the plant provide additional control to the PC stations.

All the AnS PLCs will be linked together with Mitsubishi Electric's MELSECNET network. This cost effective solution allows for I/O and data transaction to be disseminated on a simple to setup, high speed network. The fast CPU processing speed of the A1SCPU combined with its expandability to accommodate up to 256 I/O allows for any future expandability of any local station.

The new system will provide traceability of critical materials and optimisation of production throughput and quality. A modem is also included to enable Datastor to provide remote diagnostic and maintenance support, and to transfer software updates from their headquarters in Congleton, Cheshire.

Application story first released April 1995 by Mitsubishi Electric UK