New filling machine uses Mitsubishi Electric MxCC PC based control

A new filling machine developed by Premier Labellers and Fillers (UK) Ltd (PLF) uses Mitsubishi Electric's MELSOFT Mx Computer Control (MxCC) PC based control software, and FX series intelligent I/O modules connected together via a Profibus DP network.

The real-time PC based control package is protected from the effects of badly behaved Windows applications to guarantee deterministic operation under all conditions. MxCC connects directly to the cost effective FX Series I/O modules using an interface unit that provides Profibus communications to the I/O modules without the need for a host PLC.

All the customised operator screens for the Premier 2000 filler were designed by Modern Systems (Electronics) Ltd who worked with PLF to design the electronic control system. With MxCC operator screen and report design is made simple and quick by powerful graphic design tools supported by extensive symbol libraries and import filters for common graphic formats such as AutoCAD or TIFF files.

The main operator screen is a graphical representation of the filling machine and associated conveyors. From this screen the machine is started and stopped. The filling speed can be set and any faults are displayed, indicating why the machine has stopped. In addition current filling information is shown including net weight, overall average weight, standard deviation and filling speed. If a fault does occur the operator simply clicks onto the fault bar to bring up a second screen which displays a photograph of the faulty part with instructions for corrective action and machine reset.

Remote access to MxCC is provided by a modem connection which allows anyone with the appropriate password clearance to change parameters and check fault screens for remote maintenance.

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Ian Stones
Modern Systems

Ian Stones of Modern Systems says "I knew from past experience that we would get good technical support from Mitsubishi on the development and this has proved to be the case."