Industry: Tobacco
Products Used: Modular PLCs, Networks, HMIs

Cigar rolling PLCs at Imperial Tobacco

The Cigar Division of Imperial Tobacco Ltd at Bristol required a Management Information System that provided them with live data from the machines to enable them to take strategic decisions. The engineers in Bristol were given the task of collecting real-time data from the factory floor. They decided to accomplish this by installing a Mitsubishi Electric PLC network.

Displaying process data from cigar rolling to final packing is critical to the tobacco business. In the cigar rolling section, 26 Bobbin Unwinding Devices (BUDs) and 6 High Speed Overrollers (HSOs) wrap tobacco leaves around previously formed cigar rods to produce 7 million cigars a week. As Ray Found, one of Cigar Division's technical specialists states, "When we were installing the system, we asked the Managers and Section Leaders what information they wanted and programmed this into the new system. Now they can monitor on a real-time basis the efficiency of a machine, its output, the number of leaves and rods used, its running time, the number of times it has stopped and the reasons for stopping." 

The engineers at Bristol knew what PLCs could do and thought a network would provide a simple and versatile way of controlling the complex cigar manufacturing process and packaging. Stratford Industrial Controls, experts in industrial automation systems, were approached to supply a PLC network. This consisted of nine Mitsubishi A2A PLCs connected together by Ethernet, with sixteen Mitsubishi A1S PLCs connected to each A2A via a Mitsubishi network, and a Mitsubishi MAC 50 Operator Interface linked to every A1S to give operators local interaction and information.

"The Mitsubishi system appealed to us as it was the most powerful and versatile system in the price range and also probably the fastest. Together with the MAC 50s the package was very attractive. The MAC 50s are easy to use, tough enough to operate in dusty environments and display all the information we need", comments Ray Found.

Improving production efficiency has always been a role of Mitsubishi's PLCs, but at Imperial Tobacco the combination of A Series PLCs and MAC 50 Operator Terminals, has kept production rolling even under the toughest conditions.

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Cigar Division - Imperial Tobacco Ltd

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