Elmach Packages is backing integration from a single source – and wins

Innovative manufacturer of integrated Motion Control System SIMOTION in new blister packaging machine

Maximum hygiene and absolute protection against negative external influences are fundamental requirements in the packaging of pharmaceutical products – optimum solution with blister packaging. The corresponding machinery is developed by Elmach Packages India Pvt. Ltd. – a manufacturer based in Mumbai, India, and one of the world’s leading vendors of innovative packaging solutions, with 1,800 blister-pack machines in 88 countries. In the development of its latest machine, Elmach is backing integrated automation engineering from a single source. The result: the blister machine EPI 3020, with convincing maximum performance, optimum functionality and maximum flexibility, thanks to the integrated Motion Control System from Siemens.

The beginning of a strategic partnership

Due to the use of components from different manufacturers, Elmach’s previous solutions were as problematic as they were heterogeneous: from costly coordination, through high engineering costs, right up to compromises in functionality. That is why Elmach set out to find a modular and scalable controller, both for the motion program and the logic program. They found the desired homogeneous system solution in the unique SIMOTION® Motion Control System and the coordinated, modular SINAMICS® S120 drive system. SIMOTION combines the advantages of logic with Motion Control and technology functions in one and the same controller, and thus offers higher performance levels. All the components for the electrical engineering and electronics of the EPI 3020, henceforth offered by Siemens as a complete solution, are integrated on a shared platform based on Totally Integrated Automation – in other words, all the components are integrated into a standardized product and communications structure. One of the essential benefits of this solution is the significant reduction in engineering costs.

Coordinated control with every motion

With speeds of up to 600 blisters per minute, the EPI 3020 guarantees precise execution of the motion sequences. All the strands come together in the virtual master of SIMOTION.
The highlights of the solution:

• SIMOTION – a single controller combines logic, Motion Control and technology packages such as temperature and pressure control
• Independent axis with servo drive – implemented by SINAMICS S120 – offers maximum flexibility for the work steps closing/opening, forming, sealing and transport
• User-friendly touch screen MP 277 with recipe setting and product library
• RFID equipment to detect tool changes, with high-speed switchover of the process parameters
• SCOUT is a standardized engineering tool for Motion Control, PLC and technology, combined with drive configuration and start-up.

Complex tasks – simple engineering

SIMOTION in conjunction with SINAMICS drive technology is easy to install, and approved for both CE and UL. In addition, the SCOUT engineering system offers seamless integration between SIMOTION and SINAMICS. The tool reduces not only the engineering costs here: it also has a powerful trace function for tracking variables such as actual value and set point, alongside a host of functions for supporting tests and fault diagnostics on SIMOTION applications. The DRIVECLiQ digital system bus represents perfect communications and simplified wiring of the drive components. Simple maintenance is guaranteed thanks to the electronic rating plate function that forwards the data direct to the controller.

The convincing summary of a successful partnership:

“In the course of working with Siemens, we have enjoyed outstanding technical and product-related support. This is the start of our partnership. We hope to be able to produce even better and faster machines in the coming years by combining our synergies with those of Siemens.”
(Sudish Sukumaran, Technical Director, Elmach)

Special features:

• The significant benefits from cooperation with Siemens include one shared supplier for all components, one-stop shopping with a shared contact, and a standardized product and communications structure for smooth integration.
• The new Motion Control solution meets requirements for maximum performance and transparency. Error sources and standstill times are reduced, and higher plant availability is guaranteed.
• As one of the world’s leading manufacturers of blister packaging, Elmach applies its unique innovative power to secure a reliable technical advantage for its customers, and to guarantee support and machine availability.

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