



Technology for wrap-around case packaging

Sturdy packages

When it comes to beverage packaging cases, switching quickly from one pack format to another is essential. The automatic LWP Ergon packers from Italian company SMI are promising an easy and fast changeover for packing containers in corrugated cardboard cases and/or trays without film. Depending on the product handled and on the packing pattern, the wraparound packers run at up to 30 packs per minute.



For the design of the new LWP Ergon case-packer, SMI engineers have built on the solutions introduced by the Ergon platform, applied two years ago for the first time to the automatic packers of the SK series and then to the other primary and tertiary packaging machines manufactured by SMI. The features of the platform include a compact structure and ergonomic design, intended to simplify general operations such as cleaning and machine maintenance and ensuring space saving within the packaging line. The machine guards have a curved design to enable the external mounting of the motors to the mechanical groups, facilitating easy access for maintenance. Sliding doors are equipped with a slow-down hydraulic closer, avoiding any sort of hazards when closing the doors and preventing any structural damage



of the machine. In addition, the new secondary packaging machines are equipped with almost exclusively brush-less motors.

Sturdy and elegant packages

The automatic LWP 30 wrap-around case-packers are suitable for production speeds of up to 30 packs per minute. Machine adjustments in these systems are made by means of convenient cranks and useful numeric counters, which allow the operator to switch from one pack format to another simply, quickly and accurately without having to use any tools.

At the machine infeed, a group of guides lines up loose containers along a conveyor belt featuring low-friction chains made of thermoplastic material. Afterwards products are grouped

in the pack-forming unit in the chosen packing pattern by means of an alternate-motion pneumatic device.

Then, a sheet of corrugated cardboard is picked from the blank magazine by an alternate-motion picker with vacuum suction cups that ensures precise synchronisation with the other operations performed by the packaging machine. The cardboard blank is then carried up along the blank ramp and positioned under the incoming pack collation with short leading side. The box/tray former operates in continuous motion with wrap-around system.



Subsequently, flap-folding devices fold first side flaps and then upper/lower flaps on both the front and the back of the pack. A gun sprays a thin layer of hotmelt glue on the flaps to ensure a perfect adhesion of the box/tray.

At the machine outlet the case walls are pressed by special guides to ensure durable pack squaring.

SMI's LWP Ergon series' new wrap-around casepackers have a compact and robust frame, capable of adapting easily to any logistic condition, and are equipped with brushless motors to drive machine axes and reduce energy consumption.

The new LWP 30 Ergon will be exhibited at BrauBeviale in Nuremberg (hall 7A booth 503). The machine on display will be packing 0.33l beer bottles in 3x4 wrap-around cardboard cases.

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