

Project example Inhaler



For a number of years, the manufacturer of the inhalers has placed its trust in IPS and uses IPS lines to ensure the safe, reliable packaging of its inhalers.

The drawing on the right illustrates the complete line used to package the assembled inhalers ready for dispatch. A TLM-F2 cell is used to store both loaded and empty product carriers, so guaranteeing a continuous assembly process.

At an output of 80 inhalers per minute, the line has a storage capacity of over 10 minutes. This is followed by labelling systems from Weller, USA, which print and apply round labels to the outside of the inhaler with millimetre precision. Another Schubert TLM-F2 standard cell loads the product chain of the flow wrapping machine and "sends" the unloaded product carriers back to the cassette circuit. The flow wrapping machine ZERO 5 from Cavanna processes the aluminized film, guaranteeing an air tight seal.

The primary cartoning machine – another compact solution from Schubert – works with pre-glued folded boxes, which are removed from the magazine, opened and presented to the robot.

Atypically, the robot pushes the products into the machine instead of inserting them using the "top loading" method. The folded boxes are closed by another TLM-F2 unit.

This cartoning machine demonstrates the outstanding flexibility of TLM systems. If the packaging insert slip currently integrated in the pre-glued folded boxes has to be eliminated in the future, this cartoning machine is also capable of processing flat blanks. The subsequent end packaging station encompasses not only a TLM-F2 case

packer, but also a carton closing unit from Knecht and a labelling system from Bluhm Geset. Risk-based planning and execution of process qualification for the complete line were performed by IPS, with an instrumental role being played by the reliable line management system from Systech – including data archiving.

1.



The Schubert TLM cell guarantees a continuous supply of products from the upstream assembly process.

2.



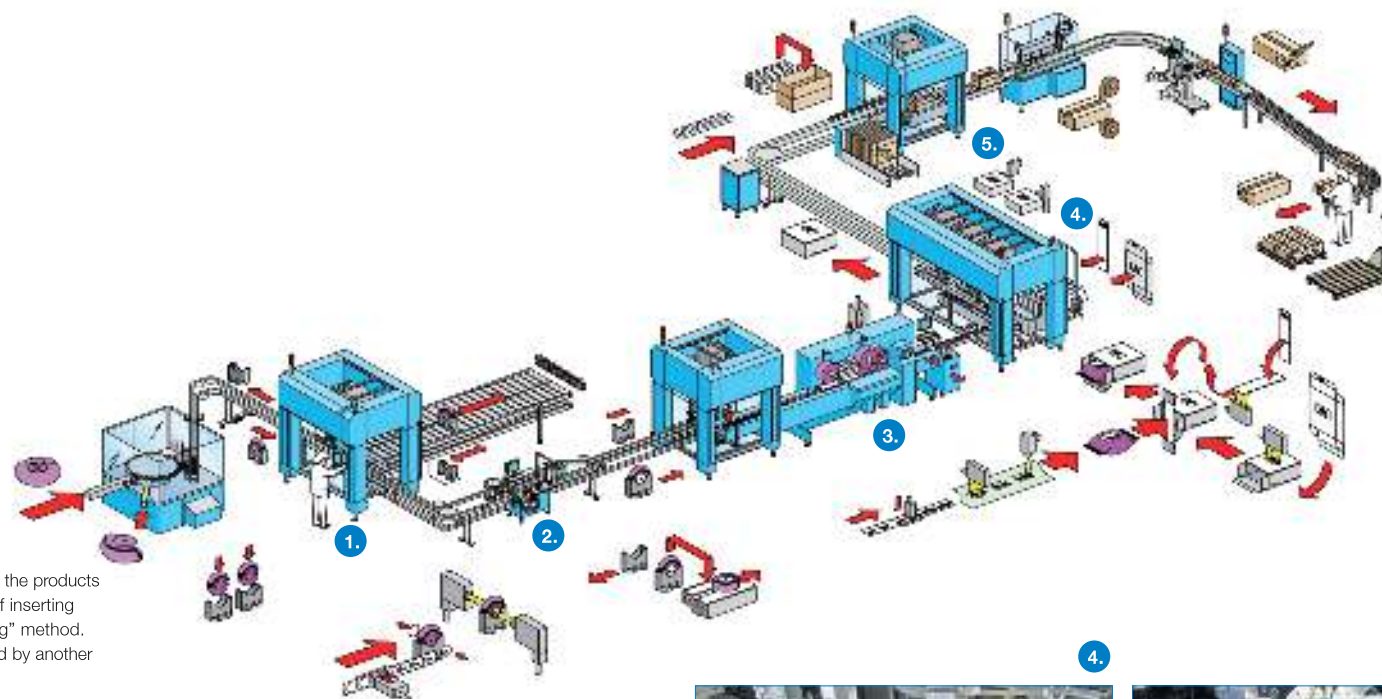
The round labels are positioned with millimetre accuracy. The labelling system from Weller prints the labels using the thermal transfer method and verifies them directly after the labelling process.

3.



The primary packaging of the inhaler is labelled prior to the actual flow wrapping process in order to guarantee a crease-free label.

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TLM system components (blank magazine, transfer unit and the TLM-F2 robot) remove four pre-glued blanks at a time and transfer them to the TLM conveying system.



A Schubert TLM-F2 robot produces a complete layer of primary cartons and places them in the previously opened folded box.