

New: MultiplePick™ grippers for order picking of dairy packages



The MultiPick system, developed for the order picking of full crates of products delivered in plastic crates, has been joined by MultiplePick, which can help to automate the majority of dairy product picking. As well as complete product crates, an automatically picked dispatch unit can now be just one or several rows within a complete crate.

Order picking of individual products and making up a crate have been the most labour-intensive stages in dairy picking. Furthermore, the working environment is tough, because picking must be done in the cold as temperatures of +2 °C are needed to keep the products fresh.

Cimcorp has developed a new gripper, which is suitable for order picking of gable-tops by row. Gable-tops are used for consumer packaging of dairy products, milk, sour milk, cream and yogurts. MultiplePick grippers are also able to pick products sold in tubs (yogurts and soured whole milk) that are delivered in trays.

The patented MultiplePick completes Cimcorp's solution offerings for automated order picking. The MultiplePick gripper supplied to Valio can hold four rows at a time and can pick either one, two or three rows at one time. Successful handling of gable-tops of different heights (1 l, 0.75 l, 0.5 l

and 0.2 l) can be done with the same gripper. MultiplePick transfers the picked rows to a plastic crate, which becomes a customer-specific mixed crate.

The same MultiplePick gripper can also pick yogurts and soured whole milk that are delivered in trays. The smallest dispatch unit is a single tray. The gripper can hold two trays at a time. MultiplePick picks the tray from plastic crates, in which two trays lie side by side and transfers the picked trays to a customer-specific plastic crate, which also holds two trays side by side.

MultiplePick only works with the MultiPick system, as the MultiPick replenishes the storage area and removes the picked crates to combine them with complete crate orders picked by MultiPick.

The whole order picking system, both the row-picking MultiplePick and the crate-picking MultiPick, are controlled by the Cimcorp OPS order picking control system.

Development work in the manufacture of LCD displays

Cimcorp has started a research and development project for a glass substrate robot to be used in the manufacture of LCD displays. The handling and moving of seventh-generation 2200-mm-long and 1870-mm-wide, thin glass substrates at high speed is a real challenge. It is made even more challenging by the requirements set for cleanliness class 10 (FED STD 209 E).

Cimcorp aims to develop a device that is light in structure, fast, reliable and maintenance-free at a competitive price. Particular attention must be paid to the lightness of the device: the objective of the project is to investigate possible lightweight structures in the robot under development for example the use of carbon fibre composites and honeycomb structures.

The idea of the prototype is based on a modular construction. Handling capacity will be increased with special "sandwich"-style grippers, which allow the handling of two substrates simultaneously. The device should have a repeatability accuracy of at least +/- 0.5 mm.