

Goofy, Daisy and Pluto

First-Class-Packaging: Steirerfleisch has put a highly automated plant for production, packaging, labelling and storage into operation south of Graz in order to better meet international requirements and reduce the consumption of resources.

The name Goofy fits well with the slim, yellow monster that has recently started work at Steirerfleisch. Like the famous comic dog, the robot is always in action. Unlike in Walt Disney's stories, however, nothing ever goes wrong here; the robot does its work meticulously. Packs are depalletized and transported to the intended production line via the conveyor system.

"We have commissioned three robots in our new plant in Wolfsberg and, to make things easier internally, we have given them names," explains Christian Hackl, who is accompanying the project together with two colleagues. Besides Goofy, the two robots Daisy and Pluto move pallets on a large scale. To make sure that the three do their job, Steirerfleisch is working together with the software house Winweb near Aachen. Communication between the machines and the ERP system winweb-food is carried out via the server-side extension software winweb-food Automation, which was specially designed for Steirerfleisch. "We work with our own database for communication between merchandise management, machines and intralogistics," says Winweb-authorized signatory Dominik Rothert, who manages the project at the software house.

High degree of automation

In the new "packing plant", raw materials from the company's own cutting plants are transported almost fully automatically with state-of-the-art conveyor technology to one of four production lines, where they are processed accordingly and, depending on the customer's wishes, packed and



Quite futuristic: the new packing plant of Steirerfleisch in Styria.

labelled customer-specifically or neutrally. The articles are automatically palletised and stored in the RFID-guided deep-freeze warehouse. "One hundred percent traceability along the entire value-added chain is guaranteed via NVE-based single item identification," says Dominik Rothert. In order to get Goofy & Co. up and running, line planning must first be created for the production day, which specifies the target quantity of items per production line.

900 crates per hour

On this basis, the production process begins at the i-point: an employee opens the line plan in winweb-food and scans the NVE pallets. The system then identifies the appropriate production line and Goofy

comes into play: the robot depalletises the packs and transports them to two conveyor lines on which 900 crates are moved per hour. When the E2 crates reach one of the two scales, they are weighed and the system sends the position and the DSU to winweb-food Automation. Here the weight is registered, a print job is triggered and the packs are transported further. From here, the products continue on four different routes. The products either go to a plate freezer, to a multihead weigher or to one of two differently configured packaging lines. The plate freezer consists of two storage containers, each with a capacity of one ton. Line and position are released at the i-point, order and article number as batch and metal detector parameters are trans-



What the yellow robot Goofy can do is controlled by the two production managers Florian Mandl (l.) and Michael Marbler.

mitted via interface. Now the contents of the E2 crates transported there are automatically dumped while the software adds up the quantity and supplies new crates until the storage container has reached its maximum filling level. Then the storage container is emptied into the freezing chambers by a crane device and the transmitted parameters are transferred to the freezing chamber. The material is deep-frozen for several hours and then stacked in individual blocks on a pallet.

Fotos: Steirerfleisch

Weighing and cartoning

The multihead weigher weighs the delivered raw materials in smaller partial quantities until the desired weight is reached and then immediately packs them into cartons. To do this, the scale is loaded with the production specifications of the current article by releasing the line planning item. "The program now defines the filling quantity per batch, for example batches of ten kilograms for small meat of 10 kg carton," explains the project manager. The cartons

filled by the multihead weigher are conveyed to the Pluto palletizing robot and booked into the appropriate warehouse. The software controls the distribution to the packing station. Finally, Daisy takes the cartons and accordingly stacks them on target pallets. "We are pleased with the modern automation in our new packing station," says Christian Hackl. "Thanks to the interaction of the Winweb software with our systems, we can now control production even more precisely." Isabel Melahn



As an owner-managed, medium-sized company, Winweb Informationstechnologie GmbH has been developing and selling industry-specific ERP software for the food industry since 1997. User-oriented innovations and short reaction times to individual industry requirements are the focus of their work. More than 200 companies trust in the high specialization and solution competence of Winweb. www.winweb.de

The owner-managed Steirerfleisch Group is one of the leading Austrian producers of pork. At two locations in the south of Austria, articles are produced for domestic and foreign markets. The product range extends from pork articles of various cuts to convenience products.

www.steirerfleisch.at