

El-Exis SP – incredibly fast

## Thin-walled packaging with 4.0 s cycle time

In the production of thin-walled packaging such as yoghurt cups with or without in-mould labelling, El-Exis SP shows all its advantages: the particularly high injection dynamics and axle speed will help you realise any required filling time with low cycle times.





DAIRY

## 16 Yoghurt Cups in 4.0 Seconds!

njection moulding machines from Sumitomo (SHI) Demag have enabled Bavarian food producer, Zott, to produce its decorated yoghurt cups onsite.



Finished IML cups before transport

Sumitomo (SHI) Demag has supplied 14 injection moulding machines to Zott. These machines are currently in operation at the group's cup plant helping to package popular brands including Zott Sahne-Joghurt, Monte, Jogobella and Zottarella.

This independent, family-owned enterprise, which was formed in 1926, has made innovation and an enthusiasm for research a top priority, a mission it has fulfilled by building its own yoghurt tub factory on its own premises. The yogurt cup production



started in 1987 and the dairy produces some of the containers that Zott needs for its products.

The injection moulding machines, which include Sumitomo (SHI) Demag's EL-EXIS 250-1450, produce the plastic cups, known as 'goblets', 24 hours a day using the inmould labelling (IML) technique. "At the same time, machines of the same type produce the Zott Jogole cups," explains Theodor Hosp, Production Manager of the cup plant.

Zott has decided in favour of several identical machines from Sumitomo (SHI) Demag, all with identical features, in order to simplify the general technical conditions for production. "The combination of several machines for one product, and the high output this entails, guarantee a cost-effective production process. Producing our own cups gives us an economical delivery situation at the filling stations," he adds.



View of one of the production halls at the Zott yoghurt cup factory.

The handling systems on both machines stack the cups before they are transported onto the packing station. A sensor detects the label during the quality assurance phase and picks out any cups that have been left undecorated. The cups are then checked for holes at a turning station by applying a voltage. The cups with no flaws are packed in the plant's own cardboard packaging system.

The dairy in Mertingen has launched a new product for the Zott Jogobella line supplied to the market of Central Europe. For this Sumitomo (SHI) Demag supplied an El-Exis S 350-2300 with an 8+8-cavity stack mould producing in a cycle of 4.0 seconds. "We chose the El-Exis due to its low energy consumption, an aspect that is very important for us," explains Theodor Hosp. "We have also integrated the IML paper technique into the new machine."

Depending on requirements, the system produces labels with two different motifs



Removal position on the 6-cavity moulds: The handling system removes the finished cups (left of the mould) and inserts new IML labels for the following cycle (right of the mould).

simultaneously. They can also be exchanged during production - due to 32 integrated change systems. Quality control combines a sensor that checks the position and the presence of the label, and a hole test is carried out using high voltage.

The company is confident about its new manufacturing concept. "We not only have a very high output, but also a new transport system to the packaging machines. Thanks to the latest technology, this runs on little electricity, and the version used by Zott is the first of its kind to be used in the production areas."



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