

Multivac presented its innovations at Interpack 2014



MULTIVAC was present at interpack 2014 with two exhibition stands. A wide range of innovations were presented in Hall 5, covering every aspect of the packaging of food and industrial products. Live demonstrations and the MULTIVAC Academy took place there. MULTIVAC also presented packaging solutions for the life science and healthcare industries on the second stand in Hall 17.

MULTIVAC displayed a wide range of innovations at interpack 2014. Regarding the area of thermoforming packaging solutions, an innovative manufacturing process for portion packs of viscous products were presented.

MULTIVAC also showed a R 245, which is equipped with a die changing system, ensuring short conversion times and a high level of flexibility. The range of machines on display was rounded off by a R 145, the smallest model which can be fully configured, and by the new R 085 entry-level model.

For the tray sealers there was a T 300 as well as an automatic T 700 packaging line, which is equipped with the MULTIVAC Tray Carrier™ system, and a T 600 line for the automatic packing of convenience products.

MULTIVAC also presented its complete product range of chamber

machines, as well as the new B 210 chamber belt machine. The exhibition also highlighted the new generation of labeling systems. This new conveyor belt labeling system will demonstrate the innovative label dispensers produced by MULTIVAC.

Another focus of MULTIVAC's presence at the exhibition was solutions for packing non-food products, in which different requirements of the retail trade, such as anti-theft security, were featured. MULTIVAC showcased packaging solutions for the life science and healthcare industries on the stand in Hall 17. The main exhibit was a thermoforming

packaging machine in the MULTIVAC Clean Design™, which is characterized particularly by its high level of variety and flexibility. Visitors were also shown a number of special chamber machines for packing sterile medical products in film pouches, as well as a folding carton labeler, which meets the requirements of serialization regulations.

Guido Spix talks about Multivac's Innovation Strategy

Guido Spix, Managing director and CTO of Multivac said that they have primarily concentrated in recent years on closing strategic gaps in their product range. They have since become the only supplier worldwide of thermoforming packaging machines, tray sealers and chamber machines, which can offer such a complete and extensive product range in these sectors. A further focus of their innovation strategy has been, and will continue to be the development of peripheral solutions. Among these are solutions for process automation or solutions for handling such as the infeed and discharge of products. He added that since 2005 MULTIVAC has virtually doubled the number of their products.

He further added that they are convinced that the efficiency of their customers' packaging procedures depends primarily on the dimensioning of their packaging solution. This should not be oversized nor undersized. This inevitably means that we have the task of developing an equipment range, that all the different output requirements of our customers can be covered. This applies not only to the packaging procedure, but also to automation solutions, labeling, marking and quality inspection.

He said that being a leading manufacturer of packaging solutions, they must have answers available. One of these is the demand for packaging concepts, which ensure a high level of packaging material efficiency. Suitable concepts are not only important for reasons of resource saving, but also to contribute to the efficiency of these technologies for our customers.

They are also noticing a rise in demand for energy-efficient concepts. A further important trend is the demand for

packaging solutions, which are characterized by a high degree of flexibility in their use. These include solutions for simple conversion of the machines to different pack formats, for example. However, greater demand is faced with regard to the traceability of processes and to quality inspection.

Regarding the distinguishing factor of Multivac in the industry Guido Spix told that Some 100 employees work at MULTIVAC on the development of new products. They not only concentrate on the development of packaging solutions for our traditional markets in the food area, but they also develop solutions for the packaging of medical items and industrial products. This year they will again invest 10 million euros in new product development. Their innovation strategy is supported by systematic patent management, which we have established in their company over recent years. The number of patents, which have been filed since 2002, is approximately 250. Last year they invested approximately 1 million euros in the protection of their intellectual property.

He further updated that Multivac had acquired the Trimaster Company in Finland two years ago. Through this acquisition, they have developed, among other things, the palletizing sector and this has complemented their product range. But the strong growth, which their company has been able to record in recent years, rests largely on organic growth, that is to say, on growth from the

strength of their own resources. Even the development of automation solutions over recent years has, to a large extent, been effected through their own resources. Acquisitions are, in themselves, not necessary as a matter of urgency, since there is no longer much missing from the automation product range.

Success Stories of Multivac

Goodman Fielder relies on MULTIVAC

Goodman Fielder, which has a turnover of 2.23 billion Australian dollars, is the largest food group quoted on the Australian Stock Exchange. The company, which was founded in 1986 through the merger of "Allied Mills Ltd" and "Goodman Group Ltd", has 28 brands with over 1,000 products in its range. Goodman Fielder also produces and distributes primarily bread and bakery products, which include well-known brands for Australians and New Zealanders such as Helga's, Nature's Fresh, Wonder White, Country Life Bakery and Vogel's. It packs the pre-sliced bread loaves on a fully automated thermoforming packaging line from MULTIVAC.

The food group wanted to achieve further aims by switching to another packaging procedure in the form of the thermoformed MAP pack: the main drivers for the project were firstly the constantly increasing production quantity, which could no longer be met by the manual filling of the tubular pouches, and secondly the hygienic disadvan-



tages, which were associated with the manual handling. The food group therefore focused from the start on a completely automated thermoforming packaging line and on the right project partner, MULTIVAC Australia.

In conjunction with the customer, MULTIVAC developed an automation concept, which took into account all the special requirements of the product. Jason Gledhill, Project Manager at MULTIVAC Australia, explains: "The real challenge was transporting the sliced bread to the gripper position. Unlike the 'toast bread', which is widespread throughout Germany, the somewhat smaller end slices of the bread loaves are not left off. The grippers therefore have to hold the entire bread including the domed ends. In order for the end slices to not get lost or fall off, they have to be guided and taken with the rest of the loaf, until it is securely gripped." The fact, that the product dimensions of the sliced bread loaves could vary in subtle degrees also played a large role in the development of the infeed and handling systems. The grippers can only move their clamping plates to a limited extent. If the bread is too large, it does not fit in the gripper. If it is too small, it falls out.

In the summer of 2012 MULTIVAC installed a turnkey end-to-end thermoforming packaging line at the Goodman Fielder production site in Dandenong, on which the sliced bread loaves are packed fully automatically. The heart of the line is the R 245 thermoforming packaging line. A slicer from United Bakery Equipment (UBE) is used for slicing the gluten-free bread. After the slicing processes the MULTIVAC Race Track Conveyor (RTC) takes the sliced bread loaves and transports them to the thermoforming packaging machine. Unlike continuously operating flowrap machines, these machines operate in cycles and they remain stationary between the advances. It is for this reason that the bread loaves, which are "delivered for loading", are pre-grouped in groups of three.

There was a further reason in favor of using the MULTIVAC Race Track Conveyor: bread cannot be conveyed with a belt conveyor due to hygiene. The



belt of the conveyor would also quickly be damaged by the bread loaves, which have sharp edges directly after baking. The bread is therefore pushed over a smooth stainless steel surface by means of rods. The rods of the RTC can be individually controlled and moved. In order to efficiently and hygienically automate the loading process, which had up to then been manual, MULTIVAC combined the R 245 with the high performance H 240 handling module. The efficient multi-robot has a 2-axis robot of the HR 225 type, which was equipped with clamping plates for the project at Goodman Fielder. "Thanks to the modular construction of the H 240, we were able to precisely match the housing to the application and in this way build a compact solution", says Hans-Jürgen Heinrich from MULTIVAC. The gripper system takes two times three pre-grouped bread loaves and loads them into the thermoformed pack cavities. The R 245 packs six bread loaves simultaneously in one packaging cycle. An output of 48 packs per minute is achieved at eight cycles per minute.

Naseem Al Barari Co.: Dubai dried fruit specialist relies on MULTIVAC

With its subsidiary Naseem Al Barari Co., the Group is one of the leading providers of pre-packed dried dates, a popular fruit snack in many places from the USA to India. Currently the company is represented in over 30 countries, and the range includes both dates of different varieties as well as refined date products.

As dates are a comparatively difficult product to handle, and Naseem Al Barari offers a wide variety of types, this was a major challenge. The various date varieties differ in texture, moisture content and size. Depending on date variety, a shelf life of at least one year also needed to be ensured.

After an intensive discussions with MULTIVAC Middle East, Naseem Al Barari CEO Khaldoun Asmar quickly determined that he would opt for an automated packaging solution from MULTIVAC. Since June 2013 a MULTIVAC R 225 is packing 20 tons of dates of different varieties at the production facility in Dubai. The thermoforming packaging machine R 225 is designed for the packaging of medium-sized and large batches. Thanks to its modular design, the machine can be quickly and easily adapted to individual requirements and applications.

Automatic weighing of the dates and filling of the packs is provided by a multi-head weigher of the German manufacturer HASTAMAT. The necessary adjustments and specifications – after all, it was the first time a HASTAMAT solution was used for dates – were carried out in a timely manner with the full cooperation of MULTIVAC technicians and representatives of the scale manufacturer. Thus it was possible to precisely adjust the system to the various characteristics of different date varieties and ensure smooth weighing and filling at all times. As part of extensive test runs, the system was able to be designed for maximum speed. For printing of the packs with the necessary product information, the direct web printer MR292 TT was attached to the R 225.

With the change to the fully automatic MULTIVAC packaging solution, Naseem Al Barari benefited from a variety of advantages. The desired higher standard of hygiene was solely provided by the elimination of manual packaging of dates, which is carried out completely by machine now, thus excluding many possible contaminants.

True competitive advantages are provided by the automation of the packaging process and the associated increase in the discharge rate. In this way, the company can better respond to the world's increasing demand for dates and realize its current expansion plans. With 20 tons of daily output, production is already well above the previous level. In the meantime, a second line of the solution has already been installed. ♦