



Photos: aps/vmz

VMZ produces butter in different packing sizes (10 g/20 g portion butter; piece-goods of 125 g/250 g and 10 kg/25 kg blocks), buttermilk, concentrated butter milk, yoghurt with different fat content and Ayran.

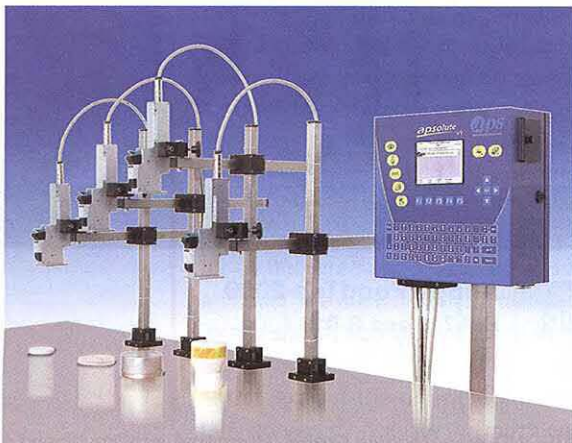
Butter with detailed code

COMPREHENSIVE MARKING OF DAIRY PRODUCTS TAKES ONLY A SECOND To satisfy the increasing demand for dairy products as well as legal requirements, the company, Vereinigte Molkereizentralen GmbH & Co. KG has introduced a thermal ink jet printer made by APS. Due to the reliability of the device, the Berlin-based dairy company was able to reduce breakdown time to zero. Nowadays, packaging coding takes only a second.

“The milk does it” has been an advertising slogan as seen on television. However, this credo is well suited to the leading position of the German milk and dairy industry with-

in the food manufacturing sector. The dairy industry is the strongest sector within this segment, showing an annual turnover of almost 21 billion Euro in 2006 and employing approx. 32,700 employees. The share in exports amount to 21 percent of total sales and this means the top position as well. “We see a positive development here”, so Hans-Joachim Finke, work manager at the Vereinigte Molkereizentralen GmbH & Co. KG (VMZ). “Since processing 27,000 tons in 2005, we have gone to 34,000 tons of butter in 2007. That is a share of approx. eight percent of the entire butter production in Germany.” However, the increasing demand for dairy products presents some challenges for the Berlin-based German dairy company, which has been certified according to the International

Food Standard (IFS). This is due to the fact, that every single product must be completely traceable. Finke: “Since the dairy industry must comply with legal requirements for cleanliness, severe security measures and controls as to quality, hygiene and ingredients apply. For that purpose more information is required to be printed on the packaging than ever before.” Nowadays, printing the expiration date is not sufficient to comply with the legal regulations. Unique and clear tracing of all packaged butter, yoghurt and cream requires information about batch numbers, machine number and processing time. To give an example: A customer in the supermarket takes butter which has past its expiration date out of the refrigerated shelves and later complains at the cash register. In this



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case, the sales assistant can identify the supplier of the butter due to the printed indication of source. Using the expiration date, the VMZ is also able to identify the producer of the product as well as product status and delivery date. Batch number, machine number and processing time are used to trace back the employee at the packing machine. The cause of failure is then quickly identified in most cases, if this additional information has been printed onto the product. Nevertheless, the dot matrix printers used so far haven't been equipped for such comprehensive packaging marking. "Our dot matrix printers were only able to code the expiration date. Any tracing of the products to comply with the law was therefore quite time-consuming", adds Finke.



Hans-Joachim Finke.

with support in every respect", says the VMZ work manager.

A team of APS was already on site during the testing and implementation phase, thus ensuring smooth project implementation. VMZ was able to convert its marking process to the thermal ink jet printer. In the butter sector, a device with four print heads was installed. The dairy company is therefore able to mark products simultaneously at two production lines with two print positions, which are independent from each other. The butter may be packaged on one line for a discount chain, for example, and coded at the other line for a supermarket chain. Print text and font sizes are said to be set individually.

One of the surfaces requiring coding is aluminum foil. So far, non-porous materials could only be marked by VMZ with a somewhat reduced qual-

ity of appearance. The dot matrix printing has resulted in a print layout which appeared dotted and looked like a raster. With the new thermal inkjet printer, all information is printed in high-quality resolution. "That is another reason, why we have decided to use this type of equipment", says Finke.

From the start, acceptance and satisfaction level among the employees have been high. The printer is controlled easily using a graphic interface, which reduces labor. The unit is controlled by software, which can be operated intuitively and is immediately operable after switch-on. Product marking takes only a second. Finke: "Thanks to the reduced time requirements and lower costs we now have more capacities to fulfill the increasing demand for dairy products in the market. In this way, everything is fine for us." ■

Thermal ink jet printers are moisture proof

In order to comply with the legal requirements, VMZ introduced the thermal ink jet printer made by APS GmbH in December 2007. The requirements for the new printer specified by VMZ were quite high. Finke: "Our factory environment is relatively wet. That means, we clean our machines and halls regularly with water. Therefore, the printer must be moisture-proof." Another important factor for the decision of what device to purchase, is reliability. The thermal ink printer is not subject to malfunction due to its use of cartridges and absence of any movable parts. As a result, neither down time occurred nor maintenance was required since the printer has been used. Accordingly, as the manufacturer stresses there are no costs for maintenance and repairs. Actually, only the ink represent a cost factor, since additional supplies such as cleaners, make-ups as well as replacement and wear and tear parts are said to be not required. The ink is purchased by the dairy company from the marking specialist in Herrenberg. "We see it as a great advantage to get all services from one supplier. We have a dedicated contact person providing us

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