

The healing power of nature modern packaged

Klosterfrau benefits from Bosch's flexible line for bottling its medicines



The name Klosterfrau is associated with tradition. Founded almost 200 years ago in Cologne, Germany, the Klosterfrau Healthcare Group is today one of Germany's major pharmaceutical producers with over 1000 employees. Known for its popular natural medicine 'Klosterfrau Melissengeist', the company markets more than 220 products across Europe from its headquarters in Cologne.

With its medicines, Klosterfrau is striving to improve the health of its customers, increase their well-being and offer them the best and most sound natural medicines available. At Klosterfrau, entering new markets also means constantly expanding the entire range with new, innovative products and finding the latest technical solutions to optimize the production process. In all of these efforts, the

company demands the highest quality from both its products and its services. As Klosterfrau will consolidate most of its production at its plant in Berlin, it was looking for a flexible filling and capping line to bottle various liquid and viscous medicines in glass bottles ready for oral consumption.

Flexible bottling

The volumetric filling system from Bosch handles a wide range of products from liquid to high-viscous with different product characteristics, achieving maximum filling accuracy and output.

“Given the diversity of the products, the two key requirements of a filling technology are flexibility and a reliable

cleaning system. The taste and smell of the various products processed on the same machine can vary tremendously. The problem here is that the differing smells and tastes might mix with one another, altering the intended end product and ultimately taking away from the end consumer experience. In this respect, the innovative cleaning system from Bosch provided the perfect solution,” sums up Lutz Müller, head of the department ‘Liquida’ at the production site in Berlin.

Validated cleaning

The integrated Cleaning-In-Place (CIP) Plus system of the filling machines ensures residue-free and reliable cleaning, thereby preventing any potential cross-contamination when processing different products at the same machine. With the CIP Plus system, Klosterfrau can set an individual cleaning program for each product. This allows the cleaning process to be repeated and validated, despite the diverse range of filled products. Particularly with products containing no preservatives, it is important that CIP Plus is integrated to guarantee the shelf life and the quality of the product. Since cleaning occurs within a closed process, there is no need to disassemble the machine, which in turn reduces downtime.

Variable capping

Klosterfrau also demanded high flexibility in terms of the different caps available. After the filling machine, the containers pass through capping machines, which hold several capping stations. Based on the end consumer use of the particular product, individual pouring spouts are attached to the bottles at the first machine. The caps are then fitted



at the second machine. Thanks to servo technology, it is possible at this stage to attach a wide variety of caps, with the torque and position being adjusted to suit the respective cap format. Klosterfrau also has the option of placing a measuring cup on top of the cap. The modular configuration of the lines enables the processing of different packaging materials. This ensures a high level of flexibility for future applications.

Efficient production

The entire line, from filling to capping, is protected by a laminar flow hood. This stops any foreign particles from getting in. Having benefited from this protection, the bottles, in pharmaceutical-grade packaging, reach the feeding table at the start of the production process, ensuring a clean and continuous production process. Due to the large size of the feeding table, the production line can run uninterrupted for 20 to 30 minutes.

The continuous operating principle of the rotating filling machine allows high output levels. All production steps are performed in the same flow rate without any breakpoints. This enables Klosterfrau to fill up to 160 bottles per minute, depending on the product. The number of filling points in the modular rotary system has been adapted accordingly to reflect Klosterfrau's preferred capacity level. Tobias Pabst, project manager at Klosterfrau, is delighted: "Compared to an intermittent linear filling system, we can

process our products much quicker on a continuous rotary system. Thanks to the higher capacity of the new system, we are now able to more than double our production speeds."

A convincing long-term solution

Bosch's long lasting experience, in terms of designing and building top-class filling and capping lines, was the deciding factor for Klosterfrau: "Bosch has put together the optimal solution for our individual needs. The machines are both reliable and user-friendly. The reproducibility in terms of both operating and cleaning modes – as well as format changes – creates a much easier and smoother operation. We are also really flexible when it comes to our products," explains Pabst. "While conventional machines can only work with a limited range of products, the Bosch line in Berlin is currently handling ten different formats." Pabst is also deeply impressed by the service provided: "Help is available immediately – either by phone or on site – for any issues relating to the new technology, which creates a very pleasant working relationship. I am sure that other projects will run just as smoothly." A very promising future!

For more information please contact:

Pasquale Giunta

Phone: +49 2162 248-389

E-mail: pasquale.giunta@bosch.com



Watch our video:
<http://bit.ly/1VUX8Sd>



Left: Lutz Müller, head of departement 'Liquida'; middle: Angelika Scholtz, assistant of Lutz Müller; right: Tobias Pabst, project manager