

PRESS RELEASE

Reliable services

Precision, reliability, product quality: KHS conversion at Brökelmann Oelmühle proves convincing

- Packer converted to palletizer in record time
- Performance boosted by line modernization
- Further new investment underlines customer satisfaction

Dortmund, June 4, 2024 – Convincing all-round service from KHS: Brökelmann + Co – Oelmühle GmbH + Co from Hamm in Germany's North Rhine-Westphalia has recently successively renewed its production shop. The Dortmund systems provider played a major role in the undertaking, not least in the complex conversion of a large tray packer to an Innopal RK palletizer. Modernizing the machine park has brought the mill further benefits in the form of energy savings, improved product quality and higher palletizing capacities. The biggest challenge of the project was the tight schedule.

The experts from KHS had just three weeks in which to carry out the ambitious conversion. This was the time frame specified by Brökelmann Oelmühle, a cooking oil bottler founded way back in 1845 that primarily distributes to discounters and produces own brands for supermarkets. In anticipation of the period needed to modernize its dry section, the company had specifically built up stock so that it could continue to cater for existing demands just in time.

“A break in production would severely disrupt our tight schedule and logistic processes. Reliability and availability thus always play a significant role for us,” explains Uwe Barthel, head of Filling at Brökelmann Oelmühle, referring to both the machine technology and service with regard to the availability of parts, for instance. In both areas KHS was once again able to prove convincing with its wealth of expertise.

Close cooperation with KHS Service

The oil mill had originally planned to procure a new palletizer. The existing competitor machine built in 1994 was showing its age and proving deficient in the accuracy of layer formation on the pallet, for example. An increasing number of boxes were also being damaged during conveying onto the palletizer. In short, the quality was no longer satisfactory. In close cooperation with KHS' service personnel, Brökelmann eventually decided to follow their recommendation and have an efficient palletizing system engineered that made use of existing KHS equipment. The cooking oil producer has namely relied on KHS machinery for decades now, both for its stretch blow molding technology and with its wrap-around packer for boxes and large trays. Until very recently, it was still using the latter to pack 1.0-liter PET bottles onto trays for one of its customers. Since removing this packing formation from its portfolio, the large tray packer has been idle, however. “The machine gave us great performance and was extremely reliable – and thus convincing. We were very satisfied with it up to the end and greatly appreciate KHS' durable systems and solutions,” says Barthel.

Recommissioning and setup in just over two weeks

This was one of the reasons why those responsible decided to again place their trust in the experts from Dortmund and ultimately agreed to have their large tray packer converted into a palletizer. This sustainable solution met two challenges at the same time: firstly, their old and rather temperamental

palletizer was replaced by the now redundant, converted large tray packer. A joint concept was drawn up and setup planned so that dismantling and reinstallation of the various components and robots could be completed within the given time frame. As a result, production was quickly resumed within just over two weeks. Modernization centered on the KUKA robots that were converted for palletizing applications. Thanks to its system of proactive discontinuation management, as a second measure KHS was also able to replace the control units. “As a turnkey supplier, we find it very important to provide our customers with close support and work with them in partnership. We thus also take suitable steps well in advance in our conversion program, allowing us to continue to install operationally reliable machines with comparable components,” states Olaf Schütt, who supervised the project as local service manager for KHS.

Improved palletizer performance

Furthermore, first and foremost KHS has improved the quality of the bottler’s palletizing operations. To this end, an Innopal RG grouping robot was installed at the infeed. This forms packs for palletizing robot Innopal RK into the respective layers needed on the pallet. “With the optimized gripper head, the customer can now palletize and position packs with much greater precision. Conversion has also optimized the dimensional stability of the pallets in general,” Schütt claims. More flexible positioning is also possible. This provides benefits at the point of sale, for the containers are placed on the pallet as they are to be ultimately presented in the supermarket. Optimized interlocking of the layers is another plus that makes them easier to transport. “The pallets are now much more stable and can’t fall over, which increases safety,” Schütt emphasizes Barthel confirms this. “The quality of the layer patterns has greatly improved. The boxes are exactly positioned on the pallets and can no longer shift out of place.”

Besides keeping to the tight schedule, boosting the palletizer capacity was a further criterion that had to be met. In the course of the full modernization of the PET line, an older filler was first replaced. With the focus on the 1.0-liter bottle format, the entire system and thus also the performance of the dry section had to be increased. The previous array output up to 2,900 packs an hour; this has now been raised to a maximum of 3,300 packs per hour and can be expanded up to 3,500 packs by adding an extra grouping robot.

Additional investment in a KHS stretch blow molder

Brökelmann was so pleased with its new technology, the cooperation between all those involved and the implementation of the project in general that on completion of the line modernization it decided to invest in a new KHS stretch blow molder as well: the InnoPET Blomax Series V. As with the converted palletizer, no official performance test was run and the machine was started up immediately. “Everything went perfectly without any problems,” smiles Barthel. Customer satisfaction was further increased by the lower energy consumption throughout the entire line, which according to head of Filling Barthel has been cut by up to 30% – chiefly thanks to KHS’ cutting-edge stretch blow molding technology. Full of praise, he concludes that “all specifications were met for both projects and even surpassed. The planning, support and personal cooperation were unique; all work was geared towards meeting objectives and getting results. We also profited from round-the-clock support during commissioning – something not every engineering company provides.”

For more information go to:

www.khs.com/en/media

Pictures and captions

(Sources: Brökelmann + Co – Oelmühle GmbH + Co; KHS GmbH; private)

Image download: <https://KHS.dphoto.com/album/mx96zc>

Palletizer (source: Brökelmann + Co – Oelmühle GmbH + Co)

More precise palletizing and pack positioning, improved dimensional stability and layer pattern quality: Brökelmann + Co – Oelmühle GmbH + Co from Hamm in Germany's North Rhine-Westphalia now relies on state-of-the-art palletizing technology from KHS.

Old large tray packer (source: KHS GmbH)

The cooking oil bottler has recently successively renewed its production shop. The Dortmund systems provider played a major role in the undertaking, not least in the complex conversion of a large tray packer to a palletizer.

Robot before conversion (source: KHS GmbH)

Modernization centered on the KUKA robots that were converted for palletizing applications.

Olaf Schütt (source: private)

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About the KHS Group

The KHS Group is one of the world's leading manufacturers of filling and packaging systems for the beverage and liquid food industries. Besides the parent company (KHS GmbH) the group includes various subsidiaries outside Germany, with production sites in Ahmedabad (India), Waukesha (USA), Zinacantepec (Mexico), São Paulo (Brazil) and Kunshan (China). It also operates numerous sales and service centers worldwide. KHS manufactures modern filling and packaging systems for the high-capacity range at its headquarters in Dortmund, Germany, and at its factories in Bad Kreuznach, Kleve, Worms and Hamburg. The KHS Group is a wholly owned subsidiary of the SDAX-listed Salzgitter AG corporation. In 2023 the KHS Group and its 5,400 employees achieved a turnover of around €1.517 billion.

PR contact

KHS GmbH
Sebastian Deppe
(external PR consultant)
Phone: +49 251 6255 61243
Fax: +49 251 6255 6119
Email: presse@khs.com
Website: <https://www.khs.com>

Media contact

KHS GmbH
Eileen Rossmann
(external media consultant)
Phone: +49 711 26877 656
Fax: +49 711 26877 699
Email: eileen.rossmann@mmb-media.de
Website: <https://www.khs.com>