



Product News

BEUMER Group introduces a Modular System for its Palletizers

Edited by on 29. Jun. 2023

Beckum, Germany -

The BEUMER Group has completely redesigned and overhauled its paletpac range of robust palletizers. The modular machines now have identical or similar components and modules and - wherever possible - are based on the same design. The total number of components has been reduced and faster deliveries are possible. If replacement parts are later needed, this will also go faster. BEUMER configures the modules according to each customer's requirements, tests them in-house and installs them on the customer's premises, saving time and money.



The BEUMER paletpac series is keyed to the characteristics of the packaged goods and complies with the customers' requirements for packing patterns and pallet dimensions. (Pictures: ©BEUMER Group

GmbH & Co. KG)

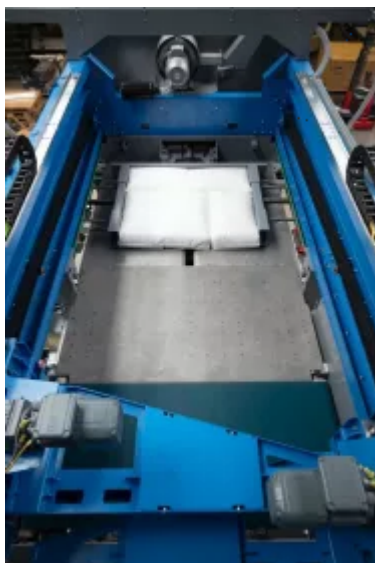
The BEUMER Group, a full-service provider of palletizing and packaging lines, offers highly efficient palletizers that deliver many years of service even under tough conditions. “Our paletpac series is keyed to the characteristics of the packaged goods and complies with the customers’ requirements for packing patterns and pallet dimensions,” says Kay Wieczorek, Divisional Director of Product Business at BEUMER. The systems gently handle packaging units of all kinds.

“We’ve redesigned our BEUMER paletpac and given it a modular structure,” says Wieczorek. “This has a number of big advantages for our customers.” For example, the performance of the machines can be modified at a later time if necessary, and if there is ever a need for retrofitting or repairs, the new design saves a lot of time.

Simpler Installation

The new model range not only makes configuration easier, it also simplifies installation. “Previously, it was necessary to use forklifts with a capacity of up to eight tons,” says Wieczorek. “Now a capacity of five tons is sufficient.” The modules are designed so that they can be picked up from two different sides. This simplifies assembly in confined spaces. Customers formerly received two large modules; now they get three that are more compact, which makes handling simpler. “We now only need standard shipping containers,” says Wieczorek. In view of the container crisis caused by the pandemic, this is a real advantage.

Optimized Components



The new BEUMER paletpac with undercarriage for a single or double pusher. Layers with dimensions up to 1500 x 1300 millimeters can be prepared and pushed to the deposit table.

BEUMER has redesigned all the modules in its paletpac series in terms of function and utility. It has optimized the motors and drives in the belts and streamlined the design at transfer points, making transport processes much gentler. The size of the assemblies has also been modified for greater efficiency, boosting the performance of certain modules.

The new BEUMER paletpac has been equipped with a larger deposit table. With maximum layer dimensions of 1,500 x 1,300 millimeters, it can accept bags filled with bulk materials on euro pallets or pallets with other formats.

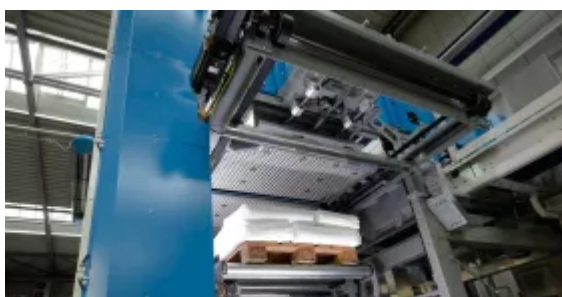
The developers have also redesigned the pusher, which is used in all BEUMER paletpac models. The undercarriage is the same for both single and double pushers, enabling users to increase the performance of the system at a later time without making big adjustments to the modules.

“Different packing patterns are also possible,” says Wieczorek. “This starts at the layer preparation level. The machine places the bags on the lifting gear in alternation. If the material in the goods is nevertheless unevenly distributed and cannot be equalized when the bags are fed, the BEUMER paletpac can be supplied with a turning device in the lifting gear. Rotation of the bags by 180° prevents uneven stacking.

Control System adapted to the available Space

When they modernized the paletpac, BEUMER’s developers also improved its footprint. The control cabinet bays have a standard configuration, but a space-saving offset arrangement is also possible if required by the customer. The enclosure for the lifting gear also saves space. “We gave this series a slim design,” explains Wieczorek. The Human Machine Interface (HMI) is located on the maintenance platform at the layer preparation level. If the operator needs to make adjustments, he or she can see the whole machine at once. Additional control units, for example in the area of the lifting gear, can optionally be installed for even greater convenience.

Focus on energy Efficiency



The lifting gear of the BEUMER paletpac in action. With cement, for example, the machines can achieve a throughput of up to 6,000 bags per hour.

For drive technology, the BEUMER paletpac relies on the MOVI-C modular automation system from SEW. This centralized approach requires less space in the control cabinet and reduces the number of components in the bay. Energy savings of 20 to 30 percent can be achieved by means of a common DC link in the frequency converters and optimized motion sequences. Energy storage units are another option: “These are an efficient means of eliminating peak loads. They also cut operating costs for users and reduce the carbon footprint,” says Wieczorek.

BEUMER has gone to great lengths to ensure reliable operation of the new paletpac generation. One such measure was to subject the palletizers to tough endurance tests. Service technicians now have it much easier if modules have to be serviced or components replaced. For example, belt changes take much less time thanks to better accessibility.

The BEUMER paletpac range continues to offer a wide range of models at different capacity levels. Machines in the low-throughput range stack up to 1,800 bags per hour. Those in the medium and high-throughput ranges stack up to 3,200 and 6,000 bags per hour respectively.