



INNOVATIVE SOLUTIONS FOR THE CHEMICAL INDUSTRY

SENSITIVE MATERIALS, COMPLEX HANDLING AND TRANSPORT



As a world-leading system solutions provider, BEUMER Group knows the chemical industry inside out. We provide our customers with a complete portfolio from integrated warehouse management, material handling, and conveying and packaging technology to individually tailored customer care programmes. Our deep insight into the complex working processes in the logistics area makes us a perfect partner for service and support for your company.

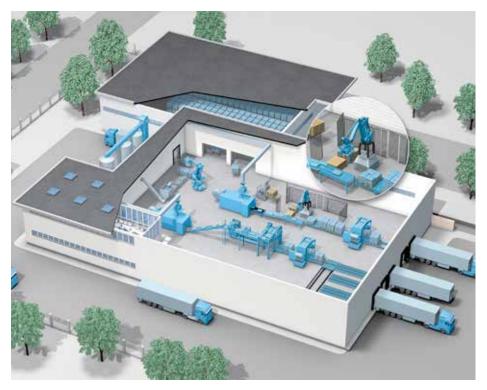
BEUMER GROUP – YOUR PARTNER IN CHEMICAL LOGISTICS

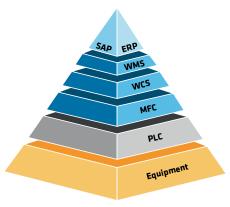
Chemical products with their special characteristics have been our business for decades and every day we are happy to meet their challenges.

BEUMER Group knows the risks when dealing with sensitive materials and the complexities involved in their handling and transportation – and what it takes to organise the entire process from end-to-end. Even the smallest disruptions can have far-reaching consequences for you and your customers

BEUMER Group knows the processes, is familiar with your products and knows how to handle them responsibly - with innovative thinking and system integration around the clock.

System integration is more than just management software: It requires optimising processes – continually end-to-end. The BEUMER warehouse management system is configured exactly according to customer specifications. After in-depth analyses of the initial situation and considering the specific product requirements, our system solutions fit seamlessly into the existing overall concept





DEMANDING WAREHOUSE MANAGEMENT SYSTEMS

BEUMER Group's user-friendly warehouse management systems were specifically designed for control of complex logistics processes. Powerful and flexible, these systems can easily be tailored to suit different business segments, no matter what the requirements, size, or specifications.

Our software solutions provide an overview of all your processes at any time, and with the help of numerous specific parameters, they support optimisation of the following areas:

WAREHOUSE MANAGEMENT SYSTEM

The BEUMER warehouse management system (WMS) is the intelligence behind the entire material management. The handling of your products, the packaging and warehousing processes as well as the coordination of the transport systems are completely coordinated and controlled by the WMS. This ensures a smooth flow of goods. The full potential of the WMS is achieved in combination with our BG Fusion for digital machine monitoring. Of course, the respective individual components can also be used independently or integrated into an existing IT infrastructure.

- Flexible software that suits your needs
- Numerous additional functions
- Intuitive operation
- Better coordination and control of processes
- Clear presentation of the components, also from third-party suppliers

PRECISE AND GENTLE HANDLING RIGHT AT THE START





COMPREHENSIVE FORM FILL SEAL SOLUTION

The precise and gentle filling is the basis for optimum palletising of your products and the first step in ensuring that they arrive safely and efficiently at their final destination. Our innovation, the newly developed fully automated filling system for the chemical sector, exceeds today's market requirements in terms of quality, availability, and sustainability.

BEUMER FILLPAC® FFS

Our newly developed form fill seal system BEUMER fillpac® FFS enables you to form, fill, and seal up to 2,800 bags per hour.

The industrially produced PE gusseted film tube used as the starting material is guided through the machine in our system without any swinging movement. This is very gentle on the components and minimises wear and tear. The weighing unit integrated into our system corresponds to the latest standards and ensures fast, gentle, and highly economical filling thanks to its precision. Not only the robust design and easy access for maintenance work, but also the clear operating concept with numerous options distinguish the BEUMER fillpac® FFS and increase its flexibility and reliability.

- Precise and gentle filling
- Integrated weighing unit
- > Up to 2,800 bags per hour
- Easy handling
- High flexibility
- > Easy maintenance

FLEXIBLE ROBOTIC PALLETISERS FOR VARIOUS TASKS





STATE-OF-THE-ART-TECHNOLOGY BEUMER ROBOTPAC®

With our specially developed gripper elements for the BEUMER robotpac®, it is possible to handle packages from a wide range of product sectors. Here the system impresses with maximum accuracy and absolute reliability. Above all, however, what makes the BEUMER robotpac® stand out is its flexibility and energy efficiency, as it can, for example, also palletise products from two filling machines (batch processing) according to type. Of course, this system also features the clear operating concept with many options which guarantee a smooth, efficient process when palletising and depalletising.

BEUMER robotpac® systems suitable for bagged products and can be reconfigured very easily for frequent product changes.

BEUMER robotpac® systems can be equipped with different grippers. This ensures high flexibility. You can palletise different sized load units on the same pallet using gripping systems that can stack packages from above into available gaps.

- High flexibility for various tasks
- Little floor space required due to compact design
- Exchangeable grippers for picking up various packaged goods
- Simple change of the packing pattern – at the touch of a button or fully automatic through barcode recognition
- Up to 1,900 units per hour, depending on the model
- Reliable, even under extreme conditions

RELIABLE PALLETISING OF SENSITIVE GOODS



BEUMER PALETPAC®

BEUMER paletpac® systems provide excellent stack quality and reliability and can be individually adapted to various demands in the chemical industry.

The BEUMER palletising systems are particularly suited for sensitive bagged goods such as granulated material and pulverized or micronized chemical products. Their special design with a ventilated stacking table and special coatings reduces friction. The stateof- the-art drive system minimises noise and wear. With energy-saving IE3 motors and uthat save energy due to frequency controls and servo technology, product-specific turning devices, and optimal electric control systems ensure efficient, safe and precise palletising. With a wide range of models, the new modularised BEUMER paletpac® series provides the perfect blend of performance and precision.

CLAMP-TYPE TURNING DEVICE

The clamp-type turning device aligns bagged goods using a specific clamp. This gentle procedure is available for all BEUMER paletpac® systems up to a performance class of 2,500 bags per hour.

TWIN-BELT TURNING DEVICE

The twin-belt turning device of the BEUMER paletpac® system is particularly gentle when turning the packages. The gentle handling is possible due to different speeds of two separately driven belt conveyors, which makes it particularly suitable for the building materials, cement, chemical and food industries.

- Gentle handling of bags
- Precise stack formation
- Programs for all common packing patterns
- Intuitive adjustment of the parameters for variable bag and pallet sizes
- > Simple handling
- Low-noise and low-wear drive systems
- Compact, container-optimised
- Easy maintenance due to improved accessibility

FLEXIBLE PACKAGING SOLUTIONS



COMPLETE PACKAGING PORTFOLIO

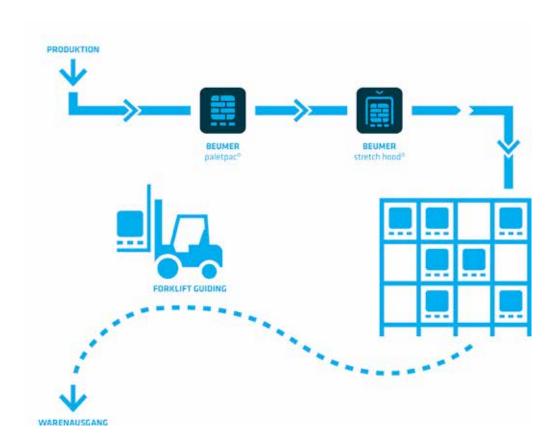
End-of-line packaging plays a critical role in protecting your products. That is why BEUMER's full range of packaging systems has been designed for high quality end-of-line packaging results, cost control, and operational predictability. Our powerful packaging systems combine the latest technology, highly advanced functional modules, and a unique film handling system that efficiently meets the diverse demands that packaging products for shipment entails.

BEUMER STRETCH HOOD® A

Whether plastic granulates, fertiliser, powders, or other chemical substances – the high-capacity packaging system BEUMER stretch hood® A efficiently brings everything under the film hood within the smallest possible space: the footprint is only 13.7 m². The innovative film transport system ensures a safe and fast exchange of film roll directly from the floor. Optimised sequences increase the system's availability and reduce the intervals between the film roll exchanges

- High load stability
- Excellent display of packaged goods
- > Weather and tamper protection
- Minimal energy and film consumption
- Fully automatic pallet and package detection
- Automatic ultrasound calculation of film length

PALLETISING SYSTEMS END-OF-LINE LOGISTICS



WITH A PERFECT WCS YOUR GOODS ARRIVE SAFELY

To ensure that the goods arrive at the right place in the desired time within a production site, the BEUMER warehouse control system (WCS) controls the various systems, machines, and plants centrally and depending on the respective utilisation. This way, picking, packaging, and shipping are coordinated, throughput is optimised, and costs are reduced. The BEUMER warehouse control system controls the flow of goods in the logistics centre in real time and supports processes such as complaint handling, quality assurance, and inventory.

- Low number of interfaces
- Comprehensive interface know-how
- > Quick implementation
- Cost savings
- Error reduction and risk minimisation
- > Product-related software
- Single point of contact
- Optimised throughput
- Integration of third-party components
- Simulation/emulation and realisation from a single source

MINIMISE THE NEED FOR ENGINEER CALL-OUTS WITH BEUMER SMART GLASSES



MINIMISE THE NEED FOR ENGINEER CALL-OUTS

Malfunctions and standstills that occur during operational processes may become expensive for your company. BEUMER Smart Glasses are a cutting-edge product providing fast and easy support. We receive a real-time video of your situation enabling us to identify and solve the problem together. This solution provides a cost-effective and efficient approach to maintenance issues, minimising the need for time-consuming and expensive engineer call-outs.

HOW DO THEY WORK?

The BEUMER Smart Glasses facilitate customer support through visual connection at any location because our service experts and you are shown the current situation of your employees on site.

Wear the BEUMER Smart Glasses and start your support app by voice command. After entering your service code, the audio and video connection is established. This way, we are always at your side to help you quickly and efficiently. Our experts' direct instructions help to quickly find a solution.

- > Audio-visual support
- Live contact with service partner
- Fast and efficient support for solutions
- Simple handling
- > Available 24/7
- Completely hands-free, with inbuilt camera microphones and flashlight

SIMPLY WORLD-CLASS CUSTOMER SUPPORT



BEUMER Group is known worldwide for its individually tailored customer support. This is based on a global network of regional service centres. Our support solutions will keep your systems operating – 24 hours a day, 365 days a year.

BEUMER GROUP – EVERYTHING FROM ONE SINGLE SOURCE

We also act as the main contractor on behalf of our customers and provide comprehensive, highly customised concepts.

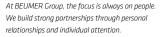
Competent engineering, fast and reliable on-site service as well as optimal spare parts supply round out our offering and ensure high reliability of the systems.













Our customer care programme entitles you to multiple service options, such as maintenance and repair on site through our field service engineers or regular safety checks according to statutory rights. If hardware replacements are needed, our comprehensive warranty service ensures you are always covered.

MODERNISATION

We are constantly developing new ways to upgrade our software and hardware to extend a system's lifetime, lower energy costs and increase efficiency. We will keep you informed of all relevant upgrade opportunities, based on an understanding of your business and system needs.

TRAINING AND QUALIFICATION

We offer standard and tailored customer training programmes to make sure your teams are fully qualified to operate your systems. With hands-on guidance, conducted either on-site or at BEUMER Group locations, your teams can maintain optimal operational performance.

We guarantee spare part replacements around the world through our local companies. As a BEUMER Group customer, you will have your own individual contact to assist you with technical inquiries, warranty issues or repair orders and to secure that your order is delivered on time.

Our hotline support is manned 24/7 by highly trained, multiskilled engineers who all have at least four years of direct field experience. Most cases are solved remotely, however, should the problem require more special-

ised attention, a BEUMER Group engineer

RESIDENTIAL SERVICE

will be quickly sent out.

With our residential service, we are on-site every day to take complete responsibility for your system uptime, performance and operational efficiency. We can take care of all maintenance and management, including system improvements, contingency plans, specialist advice and repairs.





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BEUMER reserves the right to make modifications that serve technical progress.



Products and technologies carrying BEUMER's "made different" seal are characterised by their sustainability based on their economic, environmental and social performance as measured by the BEUMER Sustainability Index (BSI).