



BG SORTER **INNOVATIVE SORTATION** **EFFICIENT AND ADAPTABLE**



SORTATION TECHNOLOGY OF THE FUTURE

One of the leading providers of automated sorting systems, BEUMER Group is your reliable partner for the logistics industry. Our experience in developing and integrating sorting and distribution systems helps us meet your demands for fast, efficient and safe transportation of different goods and products. We want to use our know-how of the industry and our practical knowledge to continuously improve our systems for the customer. The result: our BG Sorter



EXPERTS WITH COMPREHENSIVE EXPERIENCE

BEUMER Group is a future-oriented and economically independent, family-owned business, focusing on long-term success, instead of short-term profit. This is reflected in the quality, efficiency, flexibility and performance of our sortation systems. The majority of all high-speed sorters world-wide are BEUMER Group sorters, overall more than 1,500 installed to date.

The innovative BG Sorter was developed based on this experience and proven technology with the key components of our loop sorters.

INNOVATION BASED ON A RELIABLE PLATFORM

The new tilt tray sorter BG Sorter ET and the cross-belt sorter BG Sorter CB use proven technologies and combine them with technological innovation, such as a sturdy steel framework, contactless energy supply, linear synchronous motors (LSM) and friction drive systems. Nothing is left to chance: over the course of a year, the test structure ran for over 4,000 operating hours and was thoroughly examined.

One of the key components that makes the BG Sorter so reliable is the energy bus on the carriage assembly. It ensures the continued energy supply to the carriages, even in the case of a sensor failure.

HIGHLIGHTS

- › Proven technology with key components based on BEUMER Group BS and LS sorters
- › Wide range of conveyable products
- › Systems are optimally scalable and expandable
- › Excellent energy efficiency
- › Standard components and software ensure high user-friendliness
- › Reliable high-speed transportation

BG SORTER ET

THE FUTURE OF TILT-TRAY SORTATION



Safe transportation of parcels and goods with the BG Sorter ET tilt tray sorter

We wanted to make high-capacity sortation more reliable, efficient and flexible. Our solution: innovation, based on proven concepts. With this in mind we developed the BG Sorter ET. Its new closed-deck tray technology and real-time wireless communications help to ensure the highest sorting quality, efficiency and safe handling of items.

HIGH PERFORMANCE – INNOVATIVE TECHNOLOGY

The BG sorter ET doesn't compromise when it comes to throughput, weight and flexibility. At a speed of up to 3 m/s, it can handle the highest sorting volumes with a carrying capacity of 60 kg per item. Due to a wide selection of tray widths and pitches, the BG Sorter ET sorts items of various sizes and lengths up to 2,000 mm.

We developed a mobile cover between the trays for the BG Sorter ET, which increases reliability for the sorting process and flexibility for handling different sized items.

It follows the movements of the sorter and prevents the items from getting in between the trays, which would otherwise jam the sorter or damage the package.

REAL-TIME COMMUNICATIONS FOR MAXIMUM SORTING QUALITY

Real-time wireless communications replace the infrared sensors in the destinations area, optimising the feeding and discharging processes. It also enables the signal transfer between the system control and the carriage, so you can select, add and modify discharge profiles for example, all within split seconds without changing the hardware. Rapid redirecting means no more full chutes, ensuring smooth operation.

Reliable real-time communication provides safe and trouble-free data transmission for maximum precision and efficiency. It will also decrease assembly and commissioning times considerably, in case you have to change the scope of packages or want to extend your overall systems.



Secure and smooth discharge



Real-time communication allows for flexible rerouting options

FLEXIBLE STRUCTURE – HIGHLY ROBUST

The standardised sorter platform and proven modular design of the BG Sorter ET also contribute to optimum flexibility and durability, because it makes it easy to retrofit and expand the system and integrate into available structures. Its space-saving design lets you make optimal use of your available infrastructure.

Additional features are its robust steel frame and high processing quality.

HIGH LEVEL OF SUSTAINABILITY FOR A MINIMUM OF THE MAINTENANCE COSTS

The BG Sorter ET offers great sustainability: you can choose between a BEUMER OptiDrive® system and a linear synchronous motor (LSM). This allows for electrical efficiency of up to 85 %, reduces the power consumption and CO2 emissions. The gearless drives at the induction units are also an important contributing factor for energy efficiency. The wheels and runners have also been specifically designed for an energy-saving and quiet operation.

Maintenance also gets the green light: intelligent diagnostic tools and status monitoring allows you to detect errors early on and plan maintenance work proactively. The BG Sorter ET is also easily accessible and low in wear and tear due to its contactless energy supply system and double-joint carriages.

HIGHLIGHTS

- › Robust steel construction
- › You can select between two energy-efficient drive systems: BEUMER OptiDrive® and linear synchronous motor (LSM)
- › Contactless energy supply
- › Reliable real-time communication
- › Gentle handling of the items
- › Maximum item weight per tray: 60 kg
- › Wide item range: lengths up to 1,000 mm (one-tray item) or 2,000 mm (two-tray item), widths up to 1,000 mm

BG SORTER CB

A NEW DIMENSION IN CROSS-BELT CONVEYING



Reliable high-capacity sortation with the BG Sorter CB

A new take on automated high-capacity sortation: The new cross-belt sorter BG Sorter CB is characterised by innovative functionalities for excellent efficiency, optimised throughput and maximum flexibility. The contactless energy supply system in combination with real-time wireless communications ensure high levels of availability and sortation quality.

INNOVATIVE CROSS-BELT CONVEYING – HIGHER THROUGHPUT AND FLEXIBILITY

The BG Sorter CB is particularly powerful due to its completely driven surface and wider cross belts. It transports items with widely varying characteristics, with lengths up to 1,550 mm, weights up to 50 kg, at a speed of up to 3 m/s. Each carriage can be equipped with three cross belts, which means you can transport up to three items per carriage or one large item on three cross belts. Compared to traditional cross-belt sorters, the BG sorter CB provides:

- › increased safety at same throughput
- › larger package dimensions at same throughput
- › higher throughput at same package dimensions
- › increased accuracy at same throughput

OPTIMUM SORTING QUALITY FROM REAL-TIME COMMUNICATION

Real-time communications on the BG Sorter CB enable contactless, reliable and error-free data transmission for the precise control of the cross-belt sorter drives. The system control can communicate with all sorter components and adjust the working sequence at top speed. Item monitoring at the induction ensures precise positioning and alignment of the item on the cross-belt sorter.

The discharge process is extremely precise, even without the usually required numerous infrared sensors in the destinations and at varying discharge speeds. The discharge process is timed to the millisecond, ensuring optimised use of the chute area and constant enhancement.



Smooth discharge into the package chutes



Innovative cross-belt transportation for maximum efficiency

FLEXIBLE ADJUSTMENTS – HIGH RELIABILITY

The CB Sorter CB's space-saving, modular design means it can be easily integrated into existing systems and extended, if necessary.

This, in combination with its robust structure and high processing quality, make the BG Sorter CB a long-term reliable investment.

ECONOMICAL EFFICIENCY – ALSO DURING MAINTENANCE

The product life-cycle costs and environmental sustainability of the BG Sorter CB are also in the green range. Depending on the equipment, you can select between a BEUMER OptiDrive® and an LSM. The advantages: up to 85 % efficiency, reduced power consumption and less CO2 emissions. Another contributing factor for the energy efficiency are the gearless drives at the induction units that also ensure a low-noise working environment.

You also benefit from minimised maintenance costs. Eliminating any contact between rotating components reduces the wear and tear considerably. Intelligent diagnostic tools and status monitoring allow for early risk and error detection and proactive maintenance work.

HIGHLIGHTS

- Robust steel construction
- Energy-efficient drive systems: BEUMER OptiDrive® or linear synchronous motor possible
- Contactless energy supply
- Reliable real-time communication system
- Sorter speed up to 3 m/s
- Gentle handling of the items
- Flexible item dimensions: up to 1,550 mm long and 1,000 mm wide on one cross belt
- Modular base

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BEUMER reserves the right to make modifications
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Products and technologies with the BEUMER label „made different“ are characterized by enhanced sustainability.

It is based on their economic, ecological and social performance evaluated by the BEUMER Sustainability Index (BSI).