

BG SORTER CB **FLEXIBILITY IN** **CROSS-BELT SORTING**



PRECISION, SPEED, AND SUSTAINABILITY FOR THE FUTURE

BEUMER BG Sorters are designed to meet the rigorous demands of logistics facilities within the e-commerce, retail, and parcel delivery sectors. They offer unparalleled speed, accuracy, scalability, and ease of integration to provide a robust automated sorting solution that can manage the complexity and volume of modern parcel handling efficiently and cost-effectively.

Available in numerous designs, BG Sorters combine technological innovation with decades of industry experience to meet the challenges of today's high-capacity automated sortation environments. With a strong emphasis on operational flexibility, low environmental impacts, and total value of ownership (TVO), BG Sorters deliver an excellent return on investment, ensuring that your logistics operations are cost-competitive, sustainable, and future-proof.

SCALABLE AND FLEXIBLE DESIGN

Investing in automated sortation is a big commitment, so choosing a system that not only meets current requirements but can also grow with your business is an important factor. BEUMER BG Sorters provide the flexibility and scalability to meet your automated sortation requirements now and in the future.

CONTINUOUSLY CONFIGURABLE

BG Sorters feature a carrier and belt design that can be configured in hundreds of ways to achieve the optimal configuration and maximum system capacity for your logistical needs – both in terms of footprint and the capacity to handle items ranging from small packages to irregularly shaped or oversized parcels.

Limited space is not a problem: BG Sorters can be floor or ceiling mounted to optimise footprint and free up space for other activities. Further design flexibility is possible because these systems can incorporate spirals and curves, both horizontally and vertically, which means BG Sorters can be adapted to meet both physical building constraints and operational imperatives.



The use of a common sorter platform and frame adds to system modularity and longevity and enables extensions or upgrades to accommodate further increases in capacity, all while the software provides the ability to change sortation parameters to match future changes in business needs.

As part of an automated end-to-end system solution, the BG Sorter offers configurable virtual desktops, predictive maintenance forecasting, real-time flow visualisation, and intuitive graphical layouts of your operations.

ROBUST AND RELIABLE OPERATION

Logistics operations are high-speed, high-volume environments, so automated sortation equipment must be robust and reliable. BEUMER BG Sorters use high quality materials and components to minimise maintenance requirements: reducing cost of ownership and delivering total peace of mind.

For example, robust and wear-resistant steel sections mean that BG Sorters can withstand the rigours of continuous operation for decades, without the need for costly replacement sections associated with other sortation systems. In addition, the advanced

Linear Synchronous Motor (LSM) technology has no contact between moving parts translating to ultra-low levels of wear-and-tear and less maintenance requirements than conventional technology.

Wireless communication provides contactless, secure and interference-free data transmission. Real-time communication optimises efficiency and achieves sortation accuracy measured in milliseconds. This precise level of control enables full optimisation of the discharge process.

DATA-DRIVEN OPTIMISATION

Data analysis is key to continuous improvement in logistics operations, enabling ongoing process optimisation and a more predictive approach to maintenance to improve efficiency and drive down costs.

DATA ANALYTICS

BG Sorters come with a large variety of live statistical insights to choose from. BG Insight, BEUMER's data analytics framework, helps operational staff to analyse and understand the sortation data in order to improve your site's performance. Customised dashboards give users an easy and intuitive overview of current and historic operations, predictive maintenance updates. This

optimises uptime and enables better maintenance planning and more effective use of your staff.

SOFTWARE AND DATA

Software and data security is paramount in today's connected world. All BG Sorters have a master redundancy feature: an automatic backup system that steps in instantaneously without loss of performance. If the primary master fails, your operations will continue seamlessly, avoiding costly interruptions and ensuring that there is no loss of service to customers. Your data is also fully cyber secure, because BEUMER Group is an ISO 27000 certified supplier. This means that our BG Sorters come with a comprehensive information security management system that follows internationally recognised best practices, so your data is always protected.

MORE SUSTAINABLE OPERATIONS

Being able to demonstrate robust sustainability credentials is an essential reputational requirement for any modern business. BEUMER BG Sorters offer a wealth of features supporting your environmental, social, and governance (ESG) goals.

ENERGY EFFICIENCY

The BG Sorter's Linear Synchronous Motors



(LSMs) are specifically engineered to boost electrical efficiency and the system also features a power management systems for even greater energy efficiency. Even the bearings and wheels are designed to provide the lowest possible friction to reduce energy usage. All of which adds up to a lower carbon footprint as well as lower energy bills with an energy consumption that will be measured and documented for transparency.

LESS NOISE

High noise levels can have a detrimental effect on staff working in automated environments. BG Sorters sound like a background hum around 62 dB, the equivalent of normal conversational levels, and so have no adverse impact on employee wellbeing.

LIVE LONG AND RECYCLE

BG Sorters are highly reliable, adaptable and built to last, which extends operational lifetime. Because they don't have to be replaced as often as less robust alternatives, they use fewer natural resources. And when these sorters finally reach the end of their useful working life, 95% of the system parts can be recycled.

DELIVERING TOTAL VALUE

There are so many ways that BG Sorters can add value to your automated sortation operation, but not all of them are apparent using conventional purchasing criteria alone. Total Cost of Ownership (TCO) is based only on the purchase price, the estimated maintenance costs over a set number of years, and disposal costs. It does not acknowledge other critical aspects such as longevity, energy savings, employee welfare, or build quality.

At BEUMER, we measure our success using Total Value of Ownership (TVO) because it considers additional aspects such as higher availability, predictive service tools and more streamlined operations. By designing automated sortation systems that deliver at every level, we are confident that our BG Sorters will make a positive contribution to our customers' business – operationally, environmentally, and financially.

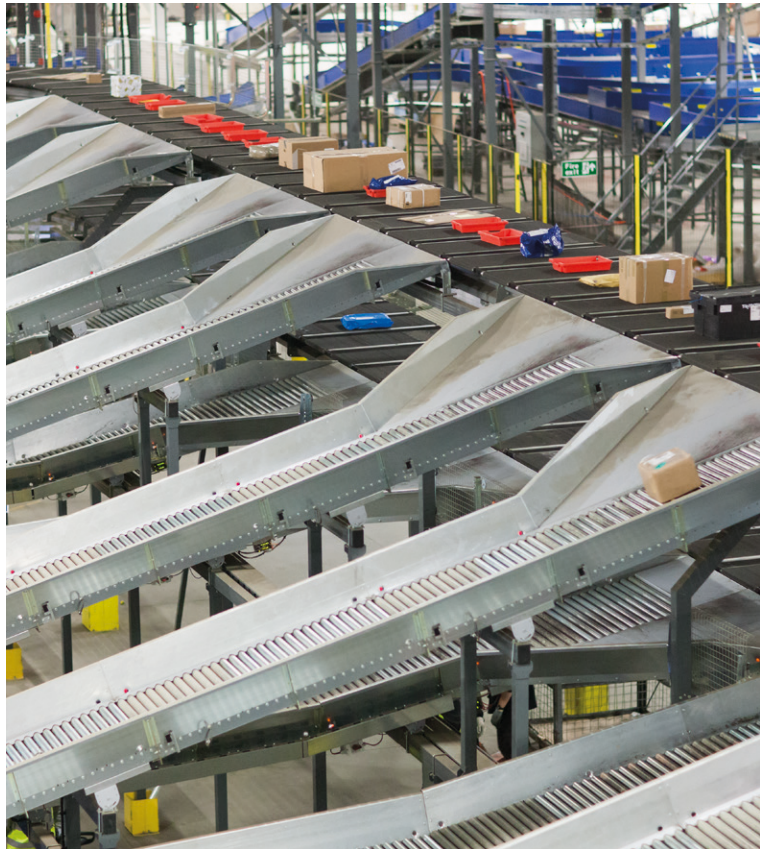
CROSS BELT DESIGN ADDS FLEXIBILITY

High quality cross-belts support system longevity and the length and width of the belt section provides flexibility for the sorter to handle a large variety of item profiles. Depending on configuration, the system

handles larger items up to 1524 mm in length or 1050 mm in width as well as fragile and high-friction items.

To ensure smooth sortation of any item, the BG Sorter CB will automatically make sure the parcel or item is oriented correctly before induction onto the carrier. Once inducted, the system will detect for overhanging objects and correct the position of the item.

For some cross-belt configurations, it is possible to operate the system with adjustable discharge profiles making it possible to send discharge commands to the carrier using different discharge profiles.



SPECIFICATIONS

The cross-belt sections come in different lengths for higher design modularity. The belts can be adjusted in exactly the speed and acceleration that fits with the operational requirements.

- › Drive systems: Linear Synchronous Motor (LSM)
- › Sorter speed: up to 3 m/sec (590 ft/min)
- › Noise level: 62 dB(A)
- › Maximum item width: 1050 mm (41")
- › Maximum item length: 1524 mm (60")
- › Maximum item weight per carriage: 50 kg (110 lbs) for single belt items
- › Cart pitch single belt item: From 600 mm (24")
- › Cart pitch double belt item: From 800 mm (32")

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