



# **BG SORTER ET** **HIGH CAPACITY TILT-** **TRAY 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 tray 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.

### TRAY DESIGN ADDS SAFETY

Between each tray sits an intermediate deck designed to extend the capabilities of tilt-tray technology and bring greater item safety to the sortation process.

The intermediate deck prevents items becoming trapped between trays, reducing the number of sorter stops that are related to items misplaced on tilt-tray carriers. The deck covers the gap between each individual tray and accurately follows the movement of the sorter. The use of a high-strength, low-friction material means that the cover is robust and with minimal wear-and-tear. The solution adds more flexibility to handle odd-shaped items.

A choice of tray width and pitch adds to the system's flexibility and provides flexibility for the sorter to handle, depending on configuration, larger items up to 1920 mm in length or 1000 mm in width. The capacity provided by these options ensures that the BG Sorter ET delivers maximum efficiency and throughput.



## SPECIFICATIONS

The tilt-tray system offers 15 different configurations

- › Drive systems: Linear Synchronous Motor (LSM)
- › Sorter speed: up to 3 m/sec (590 ft/min)
- › Noise level: 62 dB(A)
- › Maximum item width: 1000 mm (39.4")
- › Maximum item length: 1920 mm (75.6")
- › Maximum item weight per tray: 50 kg (110 lbs)

**BEUMER Group GmbH & Co. KG**

P.O. Box 1254 · 59267 Beckum, Germany

Phone +49 (0) 25 21 - 24 0

Fax +49 (0) 25 21 - 24 280

E-mail [info@beumer.com](mailto:info@beumer.com)

**[www.beumer.com](http://www.beumer.com)**

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