



# LS-4000CB CROSS-BELT SORTER

## HIGH CAPACITY, HIGH SPEED CROSS-BELT SORTING SYSTEM

The LS-4000CB cross-belt sorter's high capacity and ability to handle a wide range of item shapes, including fragile and high-friction items, increases operational throughput without the need for additional floor space. In many postal, parcel, warehouse and distribution centres this extra capacity may be sufficient to cope with forecasts for increased throughput without having to make a major investment in a new building. In projects where a new build is still required, LS-4000CB sorters ensure that every cubic metre of space is used to its full potential.

### FEATURES

- › High capacity sortation of fragile and high-friction items
- › Modular platform for flexible layout
- › State-of-the-art drive system
- › Optimised induction system

### BENEFITS

- › Precise positioning and orientation throughout the entire sortation process
- › Optimised integration into an existing facility and efficient use of available space
- › Power-saving efficiency with Linear Synchronous Motor (LSM)
- › Low product life-cycle costs (PLCC)

# HIGH CAPACITY, HIGH SPEED CROSS-BELT SORTATION SYSTEM



In material handling operations there is no doubt that a fast and efficient sorting system is an absolute necessity and contributes greatly to smooth running of your distribution business. Now with the LS-4000CB you can combine speed and efficiency in operations with low power consumption and mechanical reliability – which translate directly into lower running costs.

The system is designed to transport and sort items that present difficulties during traditional sortation, such as fragile and high-friction items. The gentle belt sorting allows for the horizontal discharge of items to ensure precise position and orientation throughout the entire sortation process.

## HIGH LAYOUT FLEXIBILITY

Another innovation introduced by this generation of sorters is a major improvement in the efficient use of available space. The LS-4000 sorters are based on a common installation and technology platform that achieves high levels of system capacity and throughput, even in a space-constrained footprint.

The compact footprint and modular design of the sorters optimises their integration into an existing facility. This space-saving design provides valuable extra room above the sorter and on the floor. The modular design, with low section heights and up to six metres between supports, frees valuable space above the system and at floor level, which can be used for sprinkler systems, personnel and vehicle access or for additional conveyors, sorting and storage systems.

This optimises integration into an existing facility and in both new-build and existing systems the sorters increase design versatility by providing full access to multiple floor levels. They feature a frame incline of up to 10 degrees and track level changes up to seven metres.

All sorters from the LS-4000 series are constructed using the same optimised technology platform to ensure fast, trouble-free installation and commissioning, as well as maximising reliability and availability. The versatile, modular design is based on standardised

units, which integrate mechanical and electrical components, as well as low-level and high-level IT and controls that are fully tested and certified in-house prior to installation.

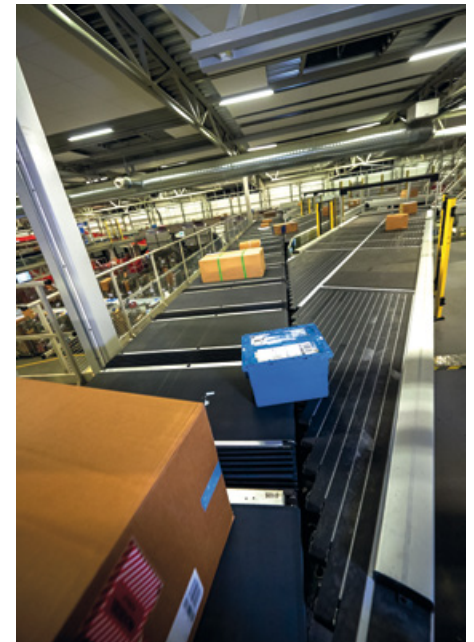
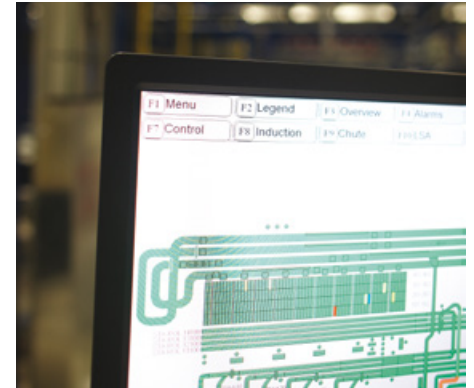
## GREENER AND MORE EFFICIENT

The LS-4000 series of sorters were the first to incorporate a linear synchronous motor (LSM), rather than a conventional linear induction motor (LIM), as their drive system. These LSMs were specifically engineered to boost electrical efficiency, as a result of which the LS-4000 sorters use approximately 75 percent less energy than comparable sorters with LIMs.

## LOW WEAR AND TEAR

The high speed LSMs also set a new low benchmark for product life-cycle costs (PLCC). With no contact between moving parts, LSMs achieve ultra-low levels of wear-and-tear, resulting in lower maintenance requirements, higher reliability and a reduction in the need for replacement parts.





#### INDUCTIONS FOR THE LS-4000CB CROSS-BELT SORTER OFFER:

- › Dynamic functionality
- › Balancing algorithms
- › Handling a wide range of items
- › High degree of automation
- › Gentle handling
- › High capacity for best use of sorter
- › Ergonomics
- › Low noise

#### CHUTES FOR THE LS-4000CB CROSS-BELT SORTER OFFER:

- › Optimal arrangements for every type of packing and palletizing procedure
- › Gentle handling
- › Batching
- › Smooth handling to minimise jams and best presentation
- › Ergonomics for efficient end-of-chute operations
- › Efficient layout for smooth floor operations

A further advantage of LSMs is that they operate at an ultra-low acoustic noise level, creating a safer and more pleasant working environment for staff.

#### IMPROVED SOFTWARE SOLUTIONS

BEUMER Group's well-proven high-level and low-level software controls from the BG Software Suite features improved modularity as well as a user-friendly user interface.

To offer a more efficient software commissioning testing and checking of software is performed by computer emulation. This minimises software failures while still providing faster time-to-market for specific customer solutions.

## SPECIFICATIONS

- › Modular concept based on standard elements.
- › Drive system: Linear Synchronous Motor (LSM).
- › Sorter velocity: Up to 3 m/sec (590 ft/min).
- › Noise level: 62 dB(A).
- › Maximum item width: 800 mm (32").
- › Maximum item length: 1400 mm (55").
- › Maximum item weight: 30 kg (66 lbs) for single belt items. Up to 50 kg (110 lbs) in certain applications.
- › Cart pitch 1-belt item: From 600 mm (24").
- › Cart pitch 2-belt item: From 900 mm (36").
- › Maximum frame incline/decline: Up to 10° in both straight and curve sections. Optional design can allow for slight increase.
- › Temperature range: 0 °C (32 °F) to +45 °C (113 °F). Extended range possible with the addition of special heating and/or cooling elements.

