



LS-4000CB

CROSS-BELT SORTER FOR AIRPORTS

HIGH CAPACITY, HIGH SPEED CROSS-BELT SORTATION

Fast and efficient sortation is essential to the smooth operation of an airport and for ensuring a positive passenger experience. The LS-4000CB cross-belt baggage handling sorter from our Crisplant® product range combines speed and efficiency with low power consumption and high reliability to reduce running costs.

The LS-4000CB is designed to transport and sort a wide range of baggage, including high-friction items or wrapped cases which often challenge conventional sortation systems.

Horizontal induction and discharge of bags ensures precise positioning and orientation throughout the entire sortation process, enabling the system to handle fragile items with ease.

FEATURES

- › High-capacity sortation of bags including wrapped, high-friction items
- › Closed deck design between induction and carts
- › Active discharge, not relying on friction and sliding principles
- › One sortation level for induction and discharge
- › Modular platform for flexible layout
- › Innovative, energy-efficient LSM drive system
- › Ultra-low acoustic noise level.

BENEFITS

- › Precise positioning and orientation throughout the entire sortation process
- › Re-centres misaligned bags
- › Dual drives on discharge belts for 100% redundancy
- › High level of system availability due to low risk of bag jams
- › Efficient use of vertical space due to low section heights
- › Power-saving operation with innovative LSM technology.

ENERGY EFFICIENT BAGGAGE HANDLING SYSTEMS



SAVING SPACE FOR NEW BUILDS AND UPGRADES

The LS-4000CB cross-belt sorter for airports has been introduced as the latest member of the LS-4000 family, specifically to meet the needs of space constrained airports. Using a common platform, with standardised modules and a technology which has been field-proven in major airports around the globe, the LS-4000CB combines proven robustness with the ability to be configured in the most space-efficient footprint.

With a height reduction of more than 450 mm depending on the chute configuration, the LS-4000CB cross-belt design offers the most efficient use of vertical space compared to other high capacity sortation solutions. The low section heights and the ability to position supports up to six metres apart also free valuable space at floor level as well as above the system.

In airports an LS-4000CB cross-belt sorter can help to provide the additional capacity to meet forecasts for increased passenger numbers without the major investment needed for a new terminal building. Whether it is being installed in retro-fit, or in new build projects, the LS-4000CB ensures that every cubic metre of space is used to its full potential. The active discharge, which may be integrated directly with conveyors, does not rely on friction and sliding principles which allows a full sortation system to be installed on a single floor of the terminal building.

GREENER AND MORE EFFICIENT

The LS-4000 family of sorters was the first to introduce Linear Synchronous Motor (LSM) technology to replace the Linear Induction Motors (LIM) used in conventional drive systems. The new LSMs were specifically engineered by BEUMER Group to boost energy efficiency by introducing a number of energy-saving features.

As a result, the LS-4000CB sorters consume up to 75 percent less energy than comparable sorters with traditional linear induction motors.



OPTIMISED CONTROLS

The same modular approach which is used so effectively in the mechanical and electrical components is also extended to the system controls.

The use of proven software modules, integrated across a common platform, ensures fast and seamless installation and commissioning in addition to optimising system reliability and availability.

All low-level and high-level baggage handling system controls are fully tested and certified in-house prior to installation in the airport.

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

- › Dynamic operation increases flexibility
- › Algorithms balance & optimise throughput
- › Handles a range of baggage sizes & shapes
- › High level of automation increases capacity
- › High capacity for best use of space
- › Closed belt surface provides gentle handling
- › Low noise enhances the working environment.

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

- › Flexibility to suit any baggage make-up procedure
- › High-speed transfers for increased capacity
- › Gentle handling of even fragile items
- › Batching to increase throughput
- › Smooth handling to minimise jams
- › Ergonomic design eases end-of-chute handling
- › Efficient layout increases productivity.

SPECIFICATIONS

- › Modular concept using standard elements
- › Drive system: Linear Synchronous Motor (LSM)
- › Sorter velocity: up to 2.5 m/sec (394 ft/min).
- › Acoustic noise level: 62dB(A)
- › Cart pitch: 1200 mm (47.2")
- › Belt length: 1200 mm (47.2")
- › Carrier width: 980 mm (38.6")
- › Frame can be configured to incline/decline
- › Temperature range: 0°C to +45°C (32°F to 113°F)
- › Maximum weight on each cross-belt: 50 kg (110 lbs).

