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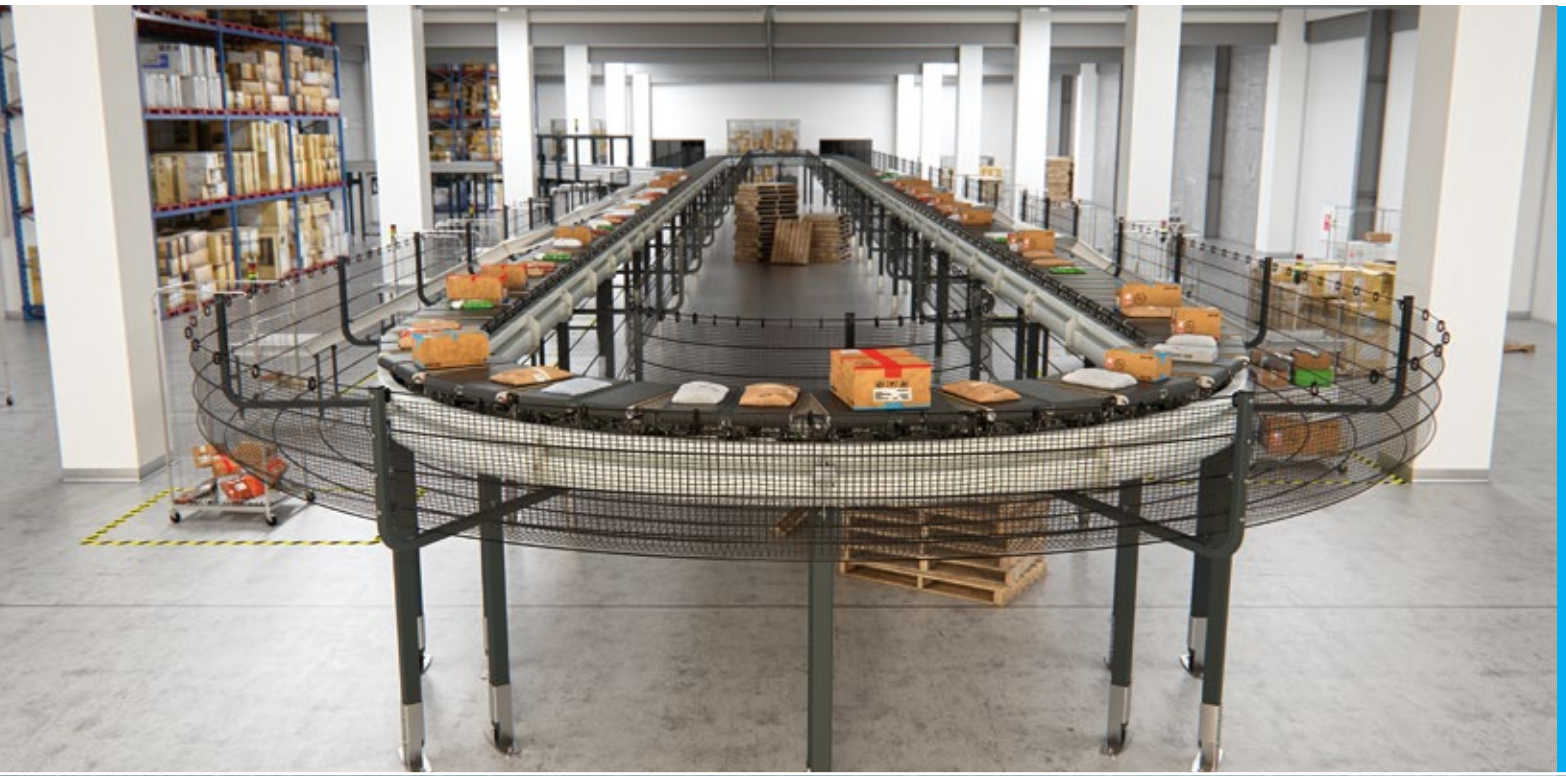
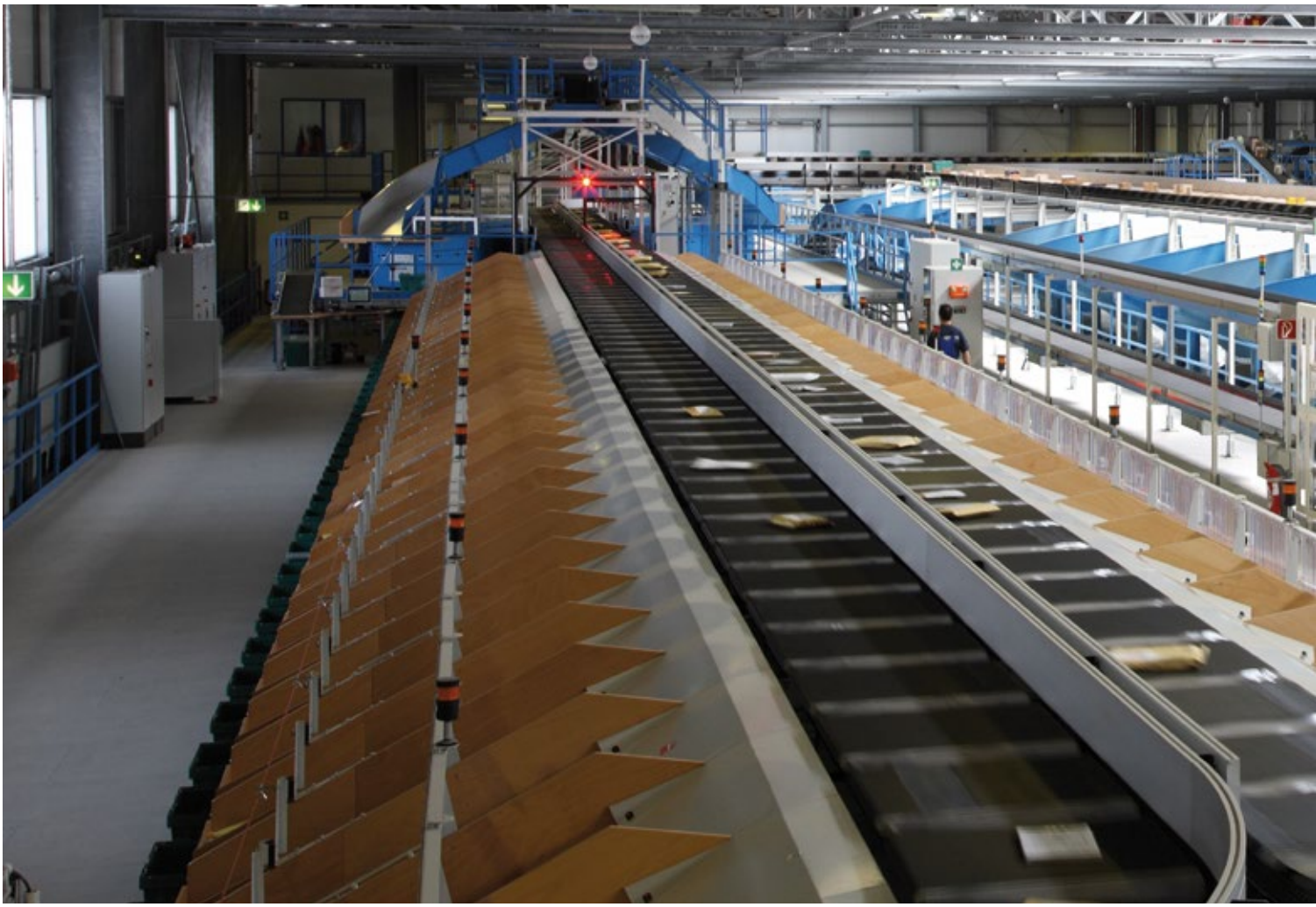


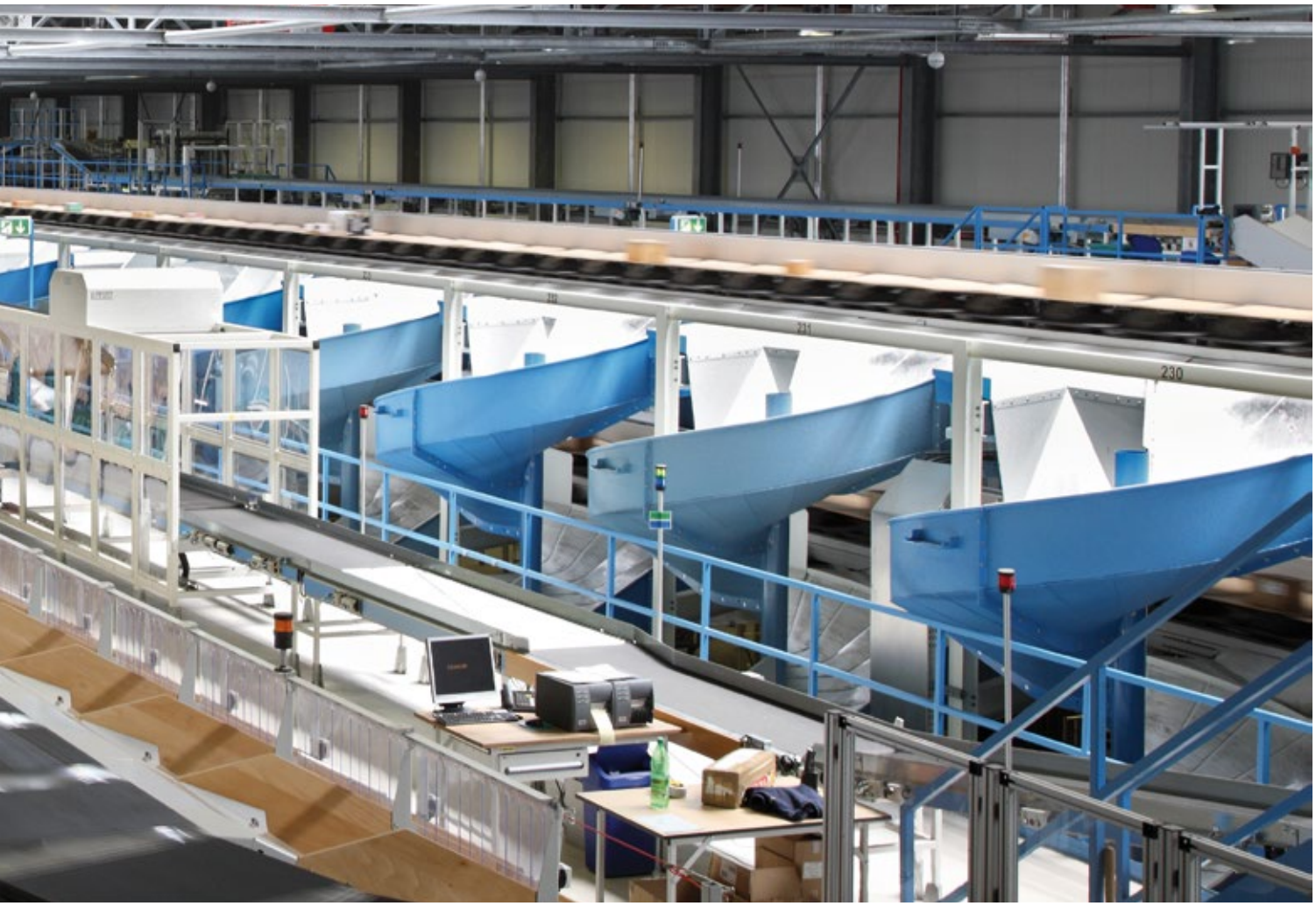
BG SORTER® COMPACT CB
SORTATION IN A VERY TIGHT FOOTPRINT

LOGISTIC SYSTEMS



PROVEN TECHNOLOGY
INNOVATIVE SYSTEM

An increase in volume requires an increase in throughput. When space is limited, or the layout is challenging, a narrow pitch and small radii can be the solution to deliver the benefits of a high-speed sortation system.



Proven technology and innovative design meet these objectives in the BG Sorter® Compact CB, which is a high-speed cross belt loop sorter enabling high levels of throughput and sortation accuracy in a single integrated process.

The mix of items which can be handled by this compact sortation solution ranges from small items and flats to parcels weighing up to 12 kg. This wide mix is typical for sorting items such as fashion, accessories, food products as well as packages, smalls, flyers and rest mail of different sizes and dimensions.

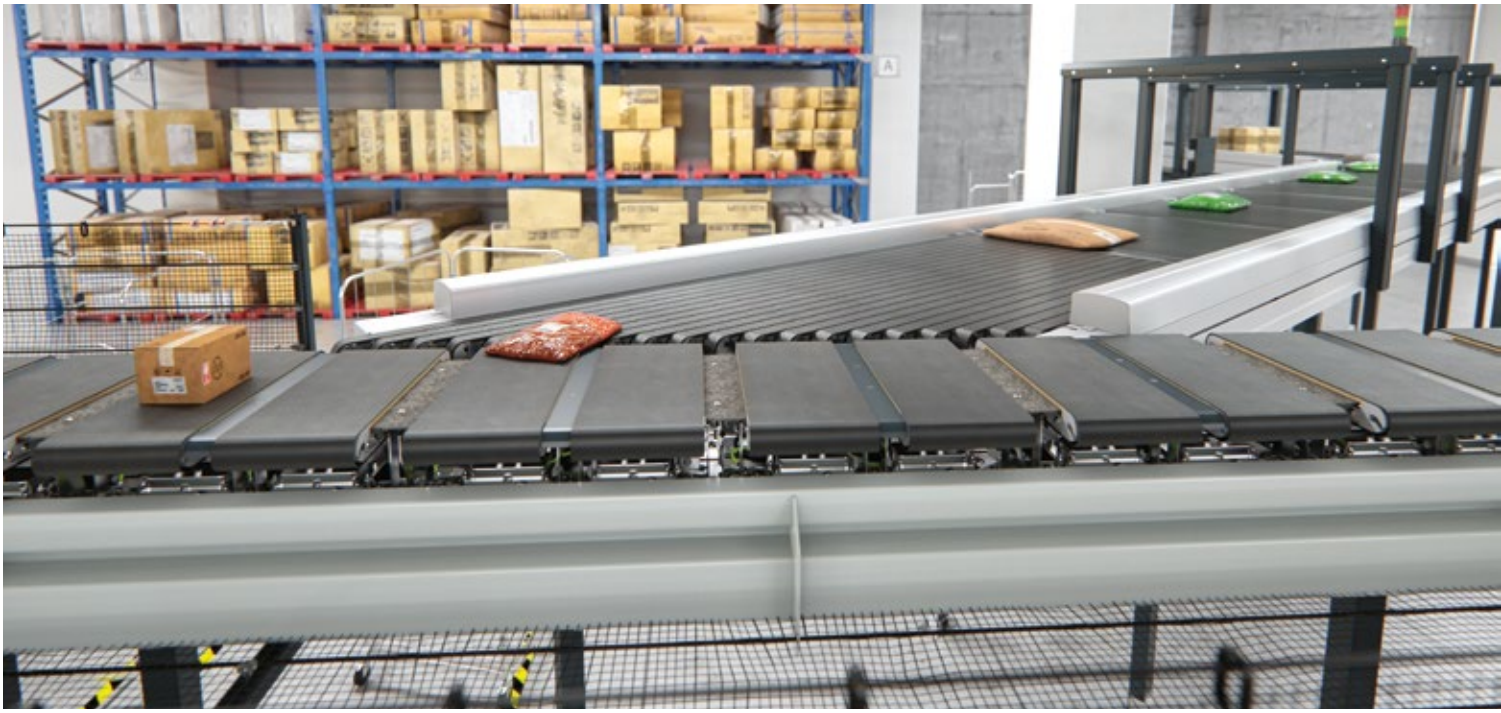
Gentle sortation also enables the BG Sorter® Compact CB to handle items which are fragile or have difficult wrapping.

Even with the complexity of sorting lightweight and plastic-wrapped shipments, the sorter has a proven ability to deliver almost 100% sortation accuracy. This is achieved by using active discharge of the products from the sorter rather than using gravity-fed discharge. The automation of the sortation process replaces labour-intensive sortation of these particular items and provides the operational throughput to support current and future capacity forecasts.

HIGHLIGHTS

- Smart, high-capacity sortation system
- Smallest footprint with tight curve radii
- Low height allows system to fit where headroom is tight
- Low maintenance requirements due to smart design
- Diagnostics and condition monitoring

SMART SOLUTION IN A TIGHT FOOTPRINT



Fully or semi-automatic induction

The compact and automated sortation system uses BEUMER Group's advanced technology which has been proven across highly competitive, high-volume industries.

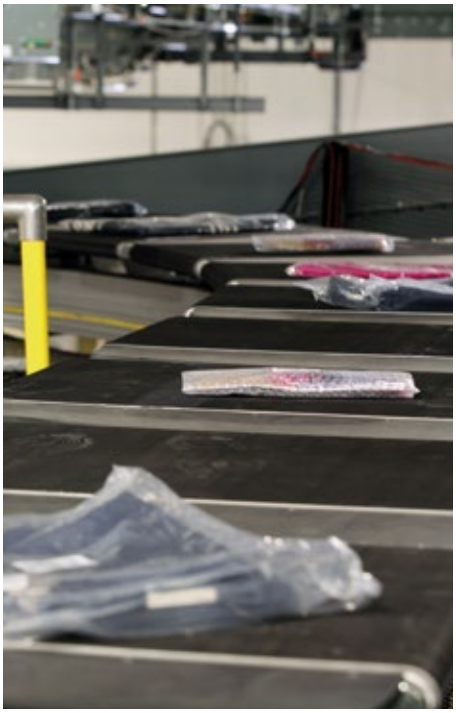
SMART SORTATION

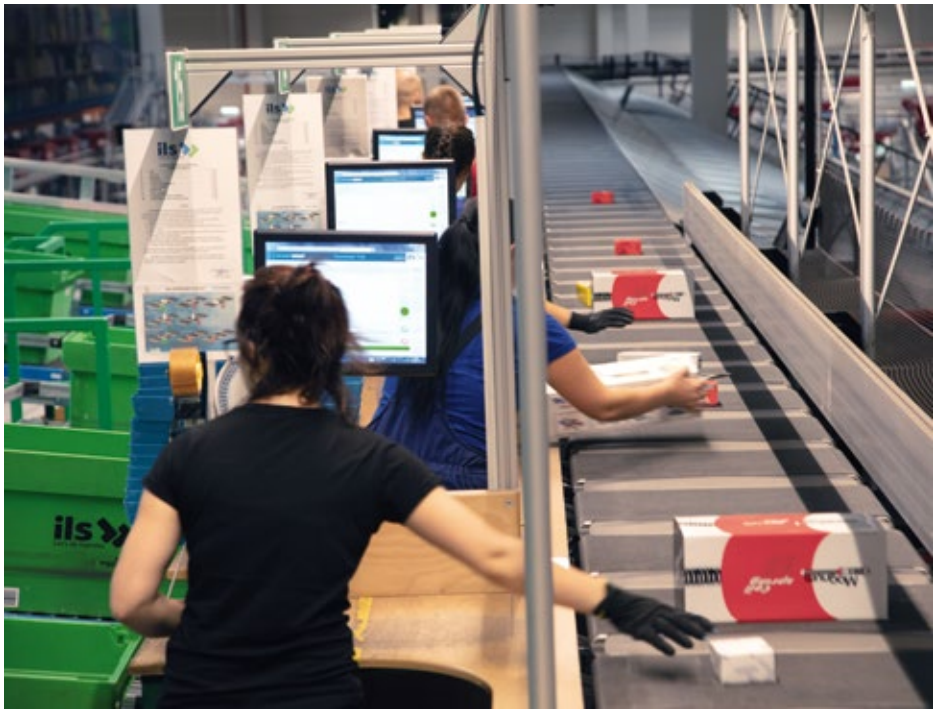
The insights gained from installing and managing these systems provide the expertise to integrate features which streamline the sortation process. These features include the positioning of items on the cross belt at induction and automatic fine-tuning so that each item is centered on the cross belt.

Dynamic adjustment of the acceleration and speed of the induction units and cross belts also makes a significant contribution to sortation efficiency and accuracy.

After induction, each item's barcode is read by a scanner array located directly above the sorter. The sorter control system uses the barcode information to allocate the sort destination with information received from the back-end system. Adaptive discharge timing and speed adjustments of the cross belt lead to an optimised and gentle handling of items as well as an increased fill level of destination.

Smart software enables batching, pre-sort, sequencing and packing functions to be integrated with the destinations to increase efficiency in warehouse and distribution operations.





Small curve radius

TIGHT FOOTPRINT

The flexibility of the modular system enables features such as exceptionally small radii for the curves and a high number of induction units and destination chutes to be integrated into the tightest sortation footprint.

SORTATION ACCURACY

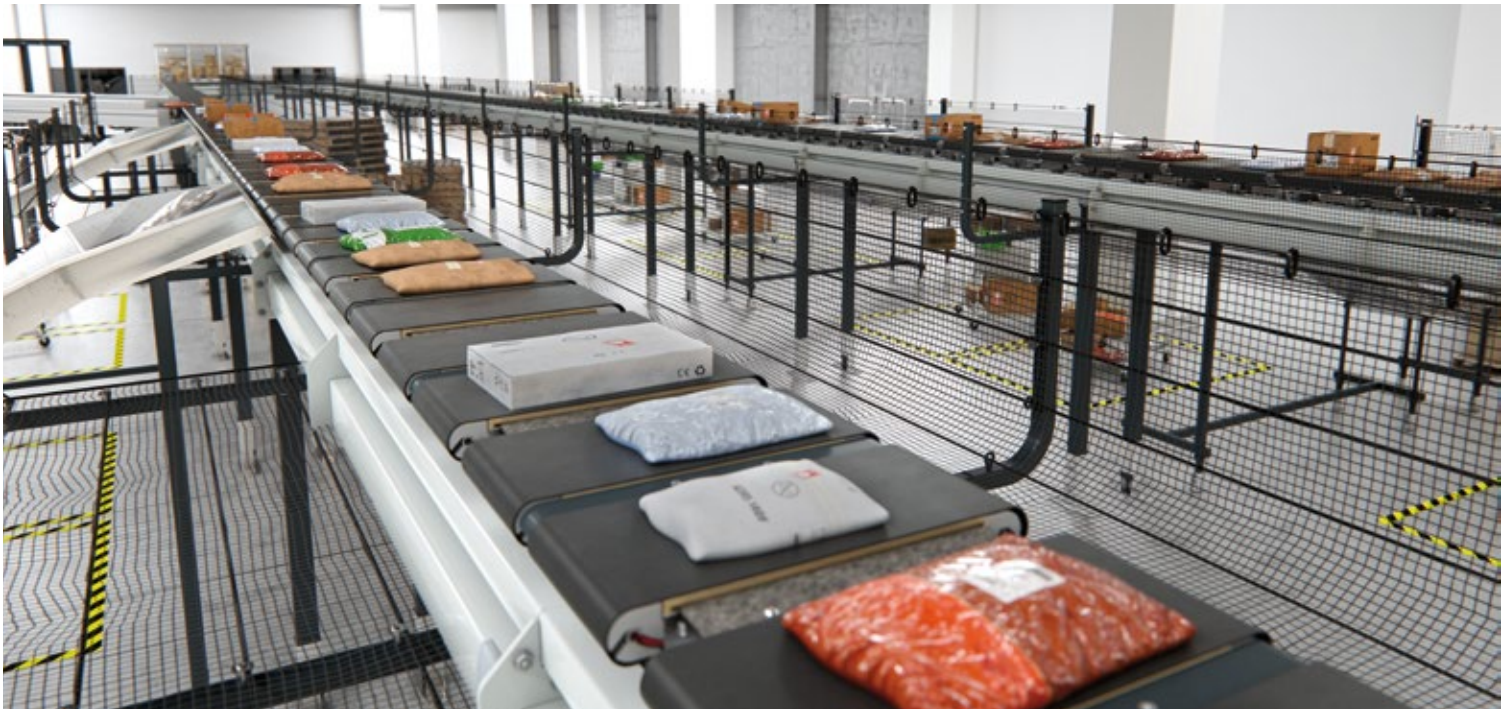
Meeting customer expectations by delivering the correct items with each shipment is crucial, and sortation accuracy is equally important to enable a company to maintain a competitive advantage.

The BG Sorter® Compact CB uses proven cross belt technology and a flexible sortation process which enables high levels of accuracy and tracking. The accuracy is delivered by integrating smart induction and cross belt technology.

HIGHLIGHTS

- High layout flexibility in tight spaces
- Lower handling cost per difficult item
- Digital technology supports data analytics
- Reduced product life-cycle costs

SMOOTH CONTROL
FOR EFFICIENT OPERATION



Optimised and gentle handling of items

BEUMER Group's extensive experience in the successful integration of different control systems for automation delivers a smooth and faultless interface.

CONTROL AND DATA ANALYTICS

End-to-end control of the sortation process is supported by full integration between the sortation system's SCADA, a Warehouse Management System (WMS) or other systems.

To streamline warehouse operation, order-picking and packaging and shipping can be coordinated to optimise throughput and reduce the handling cost per item. For CEP sortation, the priority is often to maintain productivity and throughput by minimising downtime at the in-feed sections. Even with its small footprint, the system design specifically addresses these key priorities for each business and operation.

The system is digital in the sense that it provides the option of using data analytics to improve operational efficiency within the existing system layout. Over time, distribution centres can choose to continually enhance performance by using data analytics on operational, maintenance and management level.

ENERGY AND MAINTENANCE EFFICIENCY

A high-efficiency, contactless energy system is used to transfer power from the sorter frame to the moving cross belts. The drive system enables the system to reduce energy consumption in addition to reducing emissions up to 80 percent compared to sortation systems driven by conventional drive systems.

As the sorter is integrated using very few components, the system requires a low level of maintenance.

Configured for individual end-of-chute handling

The combination of advanced sortation features and proven technology enables the BG Sorter® Compact CB to optimise efficiency and minimise cost by providing flexible sortation in a limited footprint.

INDUCTION OPTIONS

The induction of items onto the sorter is configured to meet the operational targets of each installation. The options range from manual to fully automatic induction which supports the desired throughput and efficiency.

- Dynamic operation with balancing algorithms
- Fully automatic or semi-automatic with built-in ergonomics
- Adapted to a wide item and package mix
- Options for specific operational capacity

DISCHARGE OPTIONS

Chutes are designed to match the individual item mix and end-of-chute handling. The discharge precision allows to tighten the pitch of the chutes, making room for a higher number of chutes to be installed in a tight footprint.

- Configured for individual end-of-chute handling
- Gentle handling directly to bag, tote or accumulation with batch segregation
- Smart algorithms minimise jams
- Ergonomics for efficient end-of-chute operations
- Discharge to either side of the sorter

SPECIFICATIONS

- Low noise, low energy OptiDrive® or Linear Synchronous Motor (LSM) drive
- Contactless power supply
- Real-time wireless communication system
- Maximum item dimensions on one belt:
  – Length: 700 mm (27.5”)
  – Width: 600 mm (23.6”)
  – Height: 500 mm (19.6”)
  – Weight per carriage: 12 kg (26 lbs)
- Sorter speed up to 3 m/sec (590 ft/min)
- 1,500 mm minimum horizontal curve radius
- Full cross belt with single or double belt

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MADE DIFFERENT

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).