

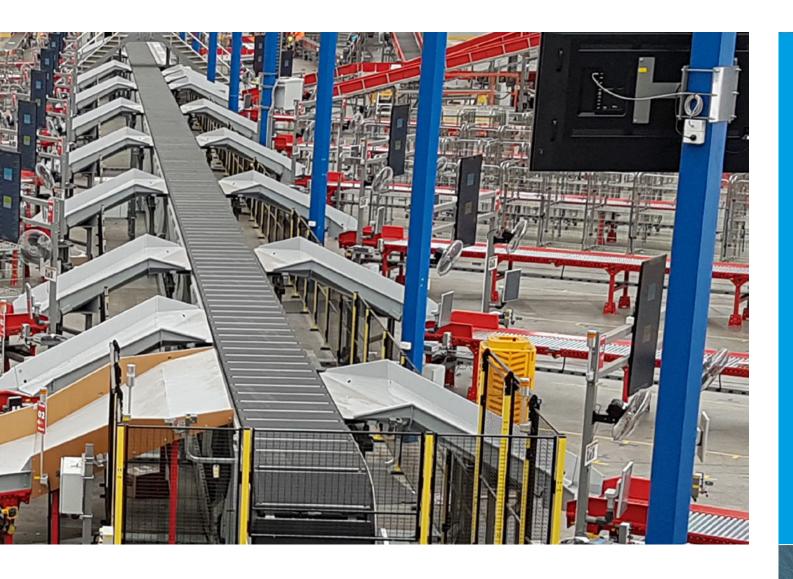


# BG LINE SORTER NEXT-GENERATION LINE SORTING



# **ACTIVE CROSS-BELT TECHNOLOGY EXTENDS THE HANDLING MIX**

Combining the simplicity of a line sorter with the gentle handling capabilities of a high-speed cross-belt sorter sets a new benchmark for mid-size-volume parcel and material handling.



#### INTRODUCING NEW CAPABILITIES

The BG Line Sorter sets new benchmarks for mid-size-volume parcel and material handling by combining the simplicity of a line sorter with the gentle handling capabilities of a high-speed cross-belt sorter.

The introduction of BEUMER Group's unique cross-belt technology enables the BG Line Sorter to extend the handling mix by sorting the widest possible range of items whilst its modular design provides the flexibility to optimise the use of space and ensure the scalability to support future growth.

### HIGH MODULARITY MEANS GREATER FLEXIBILITY

The BG Line Sorter replaces the sliding shoe discharge mechanisms used in conventional line sorters, with the textured belts and electronic cross-belt discharge technology used in BEUMER Group's well known high-speed loop sorters.

This innovation enables the BG Line Sorter to extend the handling capabilities to sort items ranging from the smallest polybags to duct-taped shipments of car tires.

By closing the gaps in the handling capabilities of conventional line sorters, parcel and material handling companies can reduce the percentage of nonconveyable items to achieve a lower handling cost per item and contribute to higher profitability.

#### HIGHLIGHTS

- Active cross-belt technology enables gentle handling capabilities.
- Modular and extendable design with high space efficiency and scalability.
- Field-proven belt and motor technologies.

# SPACE-EFFICIENT AND SCALABLE



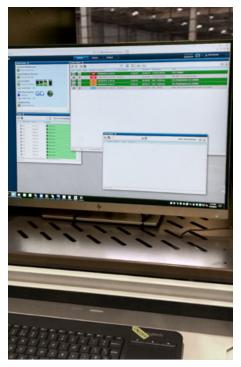
The BG Line Sorter's modular structure provides the flexibility for the system to be easily re-configured, re-positioned or expanded to meet changing business priorities.

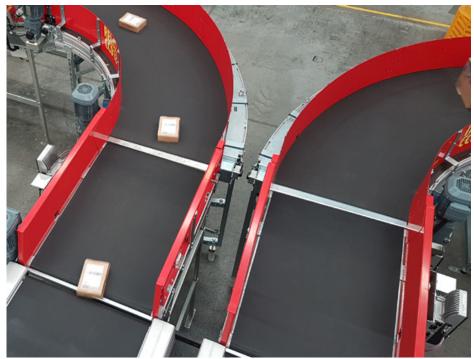
#### MODULAR DESIGN:

As a modular system, based on standardised units, the BG Line Sorter extends flexibility into the layout design and possible future extension. The versatility of the modular design means that the system can be configured to provide the highest level of space efficiency and can be reconfigured or upgraded throughout its lifetime with minimal system down-time.

This also allows the system to be expanded, re-positioned or moved to a new building, and with the scalability to respond to future business growth.

Each standard unit is pre-assembled with the mechanical and electrical components, IT and controls and then fully tested and certified in-house prior to installation. This provides almost plug-and-play operation, with very few connection points per unit, for faster installation and commissioning.





System and controls is highly modular and extendable.

### PROVEN TECHNOLOGY AND ROBUST EFFICIENCY

Although the use of cross-belt technology and Linear Synchronous Motors (LSMs) represents a paradigm shift in line sorting, these features have been proven technology in BEUMER Group's high-speed, cross-belt loop sorting systems for more than a decade.

The BG Line Sorter uses the same highly durable belts and maintenance-free motor technologies that have helped BEUMER Group customers to reduce energy consumption and maintenance costs for high-volume loop-based systems.

The active cross-belt units are manufactured in a standard pitch size and belt length and have been proven in BEUMER Group systems worldwide where they sort billions of items per year.

#### ULTRA-LOW WEAR-AND-TEAR

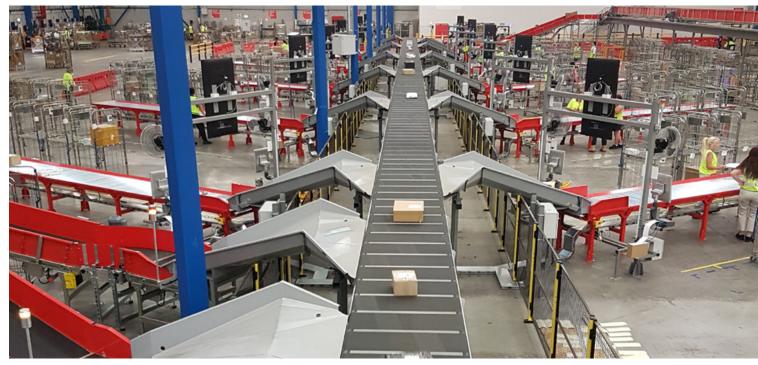
From an operational cost perspective, the BG Line Sorter sets an ultra-low benchmark for Product Life-Cycle Costs with its lower maintenance levels and higher levels of reliability and system availability. The combination of long component lifetimes and a low number of parts also helps to reduce the spares inventory.

Health and safety-wise, the BG Line Sorter operates with ultra-low levels of acoustic noise and no use of compressed air to ensure a safer and more comfortable working environment for staff.

#### HIGHLIGHTS

- Reliable and precise sortation across the widest mix of item shapes and sizes.
- Easy installation with the scalability to meet future changes in capacity.
- Low-friction components ensure endurance and high system availability.
- Lower maintenance costs than conventional line sorters.

### EASY, SCALABLE, RELIABLE AND MAINTAINABLE



The simplicity of a line sorter

A simple to operate technology with industry-standard software and controls. The control system architecture is eminently scalable, making it easy for operators to add modules or move to more advanced, high-speed sortation solutions, if preferred.

#### **SERVICE ACCESSIBILITY**

With only a few moving parts, the wear and tear is kept to a minimum and the straight forward accessibility to all parts inside the BG Line Sorter also helps to minimise maintenance routines. The simplicity in design allows for easy access to the few wear parts in case of need for fast replacements, and access to each individual belt unit is possible without having to disassemble the cart.

#### SORTER CONTROLS

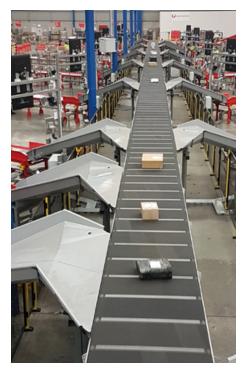
The BG Line Sorter has a scalable controls system architecture and uses industry-standard software and controls. The low level control system is based on a centralised PLC control with the possibility to integrate BEUMER Group's SCADA system.

The solution can be fitted with standard destination controls in small and medium sized sortation setups or integrated with an upper level host system, such as a WMS, when integrated in larger handling system designs.

#### **CONTROL SYSTEM**

BEUMER Group's high level control system integrates seamlessly with host systems to ensure easy access to vital management information.

- Warehouse Management Systems (WMS)
- Material Flow Control (MFC)
- Warehouse Control Systems (WCS)
- Subsystems and peripheral equipment





The gentle handling capabilities of a cross-belt sorter.

#### AUTOMATION AVAILABLE FOR ALL

Automation technologies can impact many aspects of parcel or warehouse operations and a sorting solution must have the scalability to meet changes in operational needs. The BG Line Sorter solution is scalable both in size and system integration possibilities. This flexibility also opens for the opportunity to combine multiple technologies around a high-speed loop sorter.

By extending automation to many areas within a parcel hub or warehouse, operators get the opportunity to drive down cost and increase their competitive edge. A BG Line Sorter solution offers a significantly more comprehensive approach to meeting logistical and market-specific challenges for operators with mid-size handling volumes - also if operators suddenly find themselves needing to adapt to new volumes.

#### **SPECIFICATIONS**

- Handles: Parcels, flats, totes, sacks, sealed bags, polybags, fragile and high-friction items.
- Maximum item width: 800 mm (32").
- Maximum item length: 1500 mm (59").
- Maximum item weight:25 kilos (55 lbs) single belt,50 kilos (110 lbs) multiple belts.
- > Handles 1,500-10,000 items/hour.
- Minimum BG Line sorter length: 15 m (49.2 ft). Extendable in modules in variable lengths.
- BG Software Suite controls based on Siemens PLC. Available for Allen-Bradley.



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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).