

# SMART SORTING

Fluctuating levels of utilisation are the norm in dynamic industries such as e-commerce, and processes need to be tailored in the right way to cope with these more effectively.

Mail & Express Review speaks to experts at BÖWE SYSTEC, a customer-focused, one-stop shop for letter and parcel logistics and learns about the importance of enhanced, targeted automation in sorting centres.

International e-commerce poses enormous challenges for courier and parcel services; distribution centres are groaning under rising volumes of parcels, tighter delivery timescales and the ever-expanding variety of products. On top of this, there are seasonal peaks in demand. Efficient and flexible solutions to improve processes are already a must in the sorting centre and so, too, is a single source partner who understands how to tailor and implement such solutions.

BÖWE SYSTEC, based in Augsburg, Germany has been developing and producing automation technology for over 70 years. Operating globally, in recent years it has invested heavily in research and development in areas such as sorting, where it is currently launching the new OptiSorter Split-Tray, and in warehouse management systems or the RFID technologies of the future.

"As a one-stop shop, we are positioning ourselves as our customers' single point of contact for their entire letter and parcel logistics requirements," explains Joachim Koschier, Managing Director of BÖWE SYSTEC. "They should be able to source everything they need to optimise their distribution or mail sorting centre and their internal processes from us. From the feeding technology to the sorting system and finally solutions for automated goods out."

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### Planning is key

The expertise that BÖWE SYSTEC has built up across a range of industries helps it to analyse customer processes precisely. It is a case of introducing automation at the right points and of thinking in terms of flexible hardware and software solutions right from the design of a parcel or distribution centre. "This is often a bit of a balancing act," explains Albert Hendriks, the Head of the Parcel Sorting Business Unit at BÖWE SYSTEC. "Internal processes need to be configured with enough flexibility to be able to respond at short notice to unforeseen consumer demand. Incorporating additional work stations on the sorter, that can be manned by extra staff if necessary can help reduce the strain on the system," according to Hendriks. "Automation does not necessarily mean cutting staff as much as possible, but rather its clever deployment in other positions, that then contribute to further efficiency increases."

BÖWE SYSTEC sorting solutions help achieve this through their simplicity, flexibility and their ability to be upgraded at any time. "We recommend sorting solutions to our customers that are modular in their design and that at the same time offer an exceptional price-performance ratio," says Hendriks. Modular concepts ensure that BÖWE SYSTEC machines are always tailored to the current requirements of the operation, and the automation process itself can be undertaken gradually.

### Exploiting the advantages of the OptiSorter

The OptiSorter is at the heart of many such flexible, comprehensive solutions. Whether it be in its carousel, vertical, horizontal or dogleg variants or as a multi-level solution, the modular design of this BÖWE SYSTEC parcel sorter means that it can be tailored to suit any situation and upgraded at any time. This is true for both the OptiSorter Horizontal and for its compact variant, the OptiSorter Vertical.

BÖWE SYSTEC parcel sorting systems offer fully automatic sorting. Their Push-Tray sorting technology, which both the OptiSorter Horizontal and the OptiSorter Vertical employ, can handle even heavy, round or unusually shaped items rapidly and reliably. Where

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other types of sorters have already hit their limits, the OptiSorter is capable of sorting an enormous bandwidth of items that extends well beyond all the common types and sizes. The OptiSorter can handle anything from small postcards, through polybags right up to heavy parcels weighing as much as 31.5 kg. It doesn't even have a problem with round or oddly shaped parcels from abroad, which often don't comply with parcel standards.

### Flexible solutions

The OptiSorter Horizontal places the emphasis on flexibility. With its Push-Tray technology, the OptiSorter Horizontal is BÖWE SYSTEC's substantially lower cost answer to the use of current Cross-Belt or Tilt-Tray sorters. For those looking for maximum performance in the minimum of space the best choice is the OptiSorter Vertical. It has been developed as the space-saving solution for those who can't afford to forgo top of the range performance even though they have limited space. Despite its compact design, the Vertical OptiSorter offers all the capabilities of a versatile, high-performance sorting system and offers a cost-effective alternative to a linear sorter. Both OptiSorters are also able to integrate a whole series of functions such as OCR or barcode scanning, weighing, volume measurement or labelling in order to optimise internal processes still further. Its low energy consumption and simple operation and maintenance make the OptiSorter a safe investment for the future.

### Split-Tray technology

A brand new addition to the BÖWE SYSTEC range, the OptiSorter Split-Tray, has been specifically designed for the sorting of light goods weighing up to 5 kg. It is ideal for the automated, high-speed sorting of flat goods and unboxed items. Also referred to as a 'bomb-bay' sorter, it really comes into its own in areas such as e-commerce, omni-channel, retail fulfilment, post, laundry or pharmaceuticals. Its specially shaped trays mean that besides the usual standards it is also able to sort products such as clothing, books, pharmaceuticals, polybags, multimedia articles or jewellery. Irregularly shaped or round items can also be handled without any problem and secured from falls whilst being transported. Both sides of the tray open simultaneously and the item is dropped flat directly into the distribution containers, boxes, or mailbags. Higher sorting volumes can be achieved by using the Double Split-Tray variant of the Split-Tray sorter, which has two compartments per tray.

### Intuitive operation

Untrained staff often need to be used in order to cope with periods of peak demand. If such a strategy is adopted, then BÖWE SYSTEC recommends the use of



### KEY FACTS

- BÖWE SYSTEC provides smart sorting automation from a single source – from goods in to good out
- The OptiSorter Horizontal has a maximum speed of 1.1 m/s, the Vertical can achieve 1.5 m/s – both using Push-Tray technology
- The Split-Tray Sorter is ideal for sorting light goods and reaches a speed of 1.1 m/s
- To ensure the transparent and smooth internal flow of goods, BÖWE SYSTEC uses intuitive software to operate sortation systems & innovative Auto-ID systems, for example, Warehouse Management or Warehouse Control Systems

systems and software that are as intuitive and user-friendly to operate as possible. This goes without saying for BÖWE SYSTEC systems and these really come into their own when new staff need to be rapidly brought up to speed on the machines. The consistent design of the software in all BÖWE SYSTEC systems and their intuitive operation serve as the foundation for substantial productivity increases. Sorting paths are prepared within minutes, processes can be monitored across systems and sites.

### Integration and transparency

BÖWE SYSTEC's fully integrated software concepts ensure a high degree of production transparency. The use of RFID technology, sensors and barcodes makes it possible to track every product throughout the process. Consumers also want to be informed when the goods they have ordered will arrive and expect a quick and

reliable delivery at the desired time. Systems therefore need to be optimised to achieve rapid processing times. Innovative Auto-ID systems from BÖWE SYSTEC deliver increased transparency. These include Warehouse Management Systems (WMS), Warehouse Control Systems (WCS) and serialisation solutions. RFID means that there is nothing standing in the way to the comprehensive tracking of goods in real time.

### Automation for all

Large post and parcel centres are far from being the only operations where automation is important. BÖWE SYSTEC's consultants develop precise models based on an analysis of the current situation and a company's goals, offer alternatives and shows companies whatever their size what "smart automation" means when existing and new technology work together in perfect harmony.



### About Joachim Koschier

Joachim Koschier began his career with BÖWE SYSTEC as Managing Director of the Nordic organisation in 2008. Prior to joining the company, he completed a degree in business administration and went on to hold a number of management positions in the industry. In 2011, he became member of the Management Board of the BÖWE SYSTEC Group. As Chief Sales Officer (CSO), he was responsible for the worldwide sales organisation. Since 2015, he has been successfully running the automation specialist's worldwide business as Group Managing Director.



### About Albert Hendriks

Albert Hendriks, who holds a bachelor degree in electronics and business economics, is one of the co-founders and Managing Directors of Optimus Sorters, a subsidiary of BÖWE SYSTEC, which specialises in designing and manufacturing sorter systems for the logistics and parcel market. Since he started his career in 1990 in the warehousing sector, Albert has been passionate about logistics automation and creating added value by supplying customers with smart automation solutions.