Case Study

arvato BERTELSMANN

Conveyor Systems Ltd

Due to a substantial increase in business at their Hams Hall site near Birmingham, arvato, one of the largest 3PL providers in Europe, decided to upgrade its handling process to improve accuracy and efficiency in the flow of picked goods.

arvato have worked with Conveyor Systems Ltd (CSL) on several large projects together over many years so when arvato expanded its direct-to-consumer fulfilment operations at its state-of-the-art facility it looked to CSL for help. arvato needed a partner to deliver a packing and sortation system that could help to effectively manage seasonal sales peaks in demand. After a rigorous tender process, CSL was selected because of its proven expertise and experience.

CSL's use of the latest 3D CAD Drawing software to help visualise the system as a life-like representation in the arvato existing building was key to meeting the brief and winning the contract.

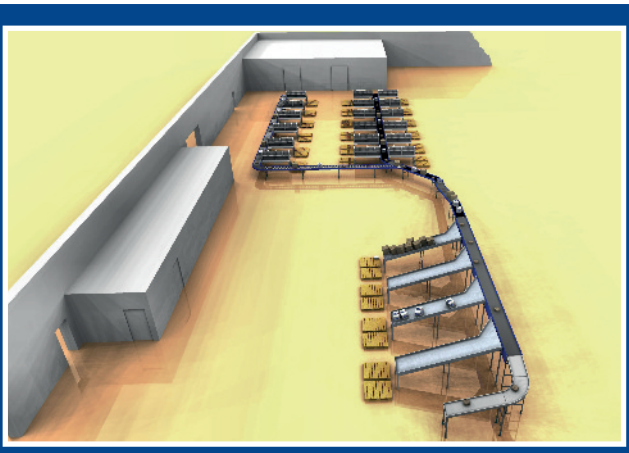
CSL's brief was to combine packed consignments from two packing areas including special belt conveyors with over 36 integrated packing stations. All stations were fitted with a PC based WMS system and despatch labellers, allowing parcels to be sorted into four despatch zones for separate carriers. The conveyor system can handle over 60 packages per minute of varying sizes and weights and a range of packaging types from poly bags, jiffy bags and various sizes of boxes containing diverse products, from 60g gauze bags up to a full case of specialist beer in glass bottles.

To ensure sufficient gaps between packages on the conveyors prior to bar code checking and weighing, CSL designed a unique solution where operatives place items on bespoke conveyor belts in clearly marked placement zones.

.To check and sort the wide variety of packed orders, the automated conveyor system uses an array of nine integrated SICK barcode scanners capable of reading the labels placed anywhere on the visible sides and a check weigher system to cross reference against actual weight measurements before items are fed onto a high speed WMS controlled Intralox DARB sortation conveyor system.

The Intralox DARB sorter, based on a modular belt design, is situated at overhead height both to accommodate a fall on the chutes and to allow operatives access underneath. It has several lanes of despatch chutes each accumulating a buffer of packages and a "run-out" no-read/pack error chute at the end.

The system also incorporates other key features such as Zero Line Accumulation (ZLP) non-contact queuing roller conveyor prior to merging both packing lines, state-of-the-art fibre optic sensors to detect the smallest of Jiffy bags only 15mm high and modular plastic topped conveyors on the bends to eliminate as many transfer points as possible.



For Information on sortation systems Click here

For more information or to discuss a requirement, please call 01283 552255 or visit www.conveyorsystemsltd.co.uk

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