

Case Study



CSL carried out an inter-floor conveying solution several years ago for the NHS in Scotland at its flagship Distribution Centre in Larkhall, South of Glasgow. The system included a spiral elevator/lowerator, with a powered roller conveyor system providing a controlled feed from a mezzanine floor picking area down to the ground floor order consolidation zone via the spiral lowerator which is one of a hundred supplied by CSL into the UK.

Due to a large growth in order volumes, the NHS identified the need to improve efficiency in both picking times and transit times to not just cope with present day levels but to allow for future expansion. After a thorough bidding process CSL were selected as provider, and were subsequently asked to implement this project over its competitors, from design through to installation. The new specification required a versatile system to handle both tote bins and plastic trays through 5 picking zones and down the spiral lowerator to a ground floor packing/dispatch area.

As part of the design process, CSL incorporated some elements of the original system, as it was still in perfect working order and therefore contributed to the ROI.

The new picking system begins in front of 3 vertical storage towers, whereby the empty tote/tray has a barcode label applied with a tote/tray ID number and any products from the vertical storage system are placed into the relevant container.

Once the tote is released onto the conveyor system, an initial scan of the bar code is carried out, using a Cognex vision camera, to validate the integrity of the code, with any no-read/failures routed to a reject lane, separate from the main system, for manual identification and re-routing. All good reads are sent to the main picking line on the mezzanine via a series of conveyors and 90° right angled chain transfer.

The picking operation was designed to function as a zonal pick system, to which CSL incorporated several off-line powered roller sidings which run both parallel and side-by-side with the main transit line. As picking accuracy for health products is paramount, at each of the sidings the totes are re-read and validated by an additional bar code reader mounted to read the code on the front face of the totes. Each code is checked against a static look-up table and transfers the totes into the required pick zone siding. Once products from that area have been picked, totes are manually pushed back onto the line for re-distribution to other zones or completed orders automatically fed to the spiral for feeding down to the ground floor despatch.



An NHS Spokesperson commented “we have worked with CSL previously and after many years of reliable operation we decided to use CSL again to design, supply and carry out the installation. As with the last system the benefits became almost immediately evident”

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

