

UnboxSort System for Order Consolidation

For an emerging 3PL in India

ABOUT THE CUSTOMER

The Customer is one of the largest Consumer supply chain company in India. It is currently operating more than 10 million sq. ft. of state-of-the-art grade A Distribution Centres, Fulfillment Centres and Transportation facilities. The combined Express and Less-than-Truckload (LTL) services have more than 2000 trucks running across the country, servicing 15000 pin codes.

Location: Store Fulfilment centre located in Northern India

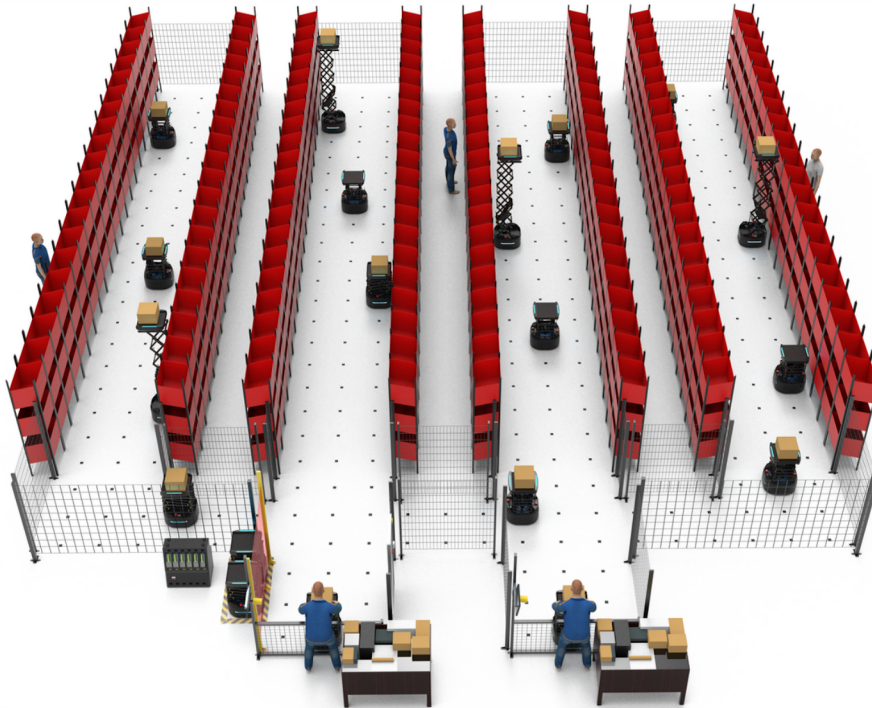
THE CHALLENGE

The customer is encountering difficulties with regard to low picking & consolidation productivity. Additionally, the management of a large workforce is posing a challenge. Currently, the customer is using the process of Bulk Picking which is carried out according to Customer Orders; 3 Presorters primarily sort Parcels into 5 Putwalls, which are then further sorted by 16 Sorters into 450 separate Locations.

The customer desires to optimize store order fulfilment by consolidating apparel, shoe boxes, and fashion accessories into 450 totes at a rate of 1050 packages per hour to minimize the required footprint while maximizing the number of put wall destinations.

Industry	3PL
Process	Store Replenishment
Throughput	1050 pph
No. of Robots (SR450)	13
Destinations	450
Racks Type	3 level; tote racks
Area	250 sqm.
Personnel (Feeding + Bag closing)	4 (2+2)

An comb shaped layout with 4 segments was designed to accommodate 450 destinations allowing parcel to drop directly into carton boxes arranged on 150 3-level racks. Each box has a capacity ranging from 20 to 60 packages depending on the apparel type. A slide directs the dropped parcels into the boxes and sensors detect when the boxes are full and need to be replaced. The system installation time was less than a week avoiding any disturbance to on-site operations.



BENEFITS

- **Faster Payback/ROI:** Improved sorting productivity and accuracy along with an optimised floor space and no. of robots, and a staggered increase in capacity allows the customer to extract a very quick payback on the system costs.
- **Pick-to-Pack SLA improvement:** Processing time dropped by nearly 40% due to reduced touchpoints and end-to-end sorting thus improving order processing time and improved SLA compliance for the customer. This was a crucial KPI impacting customer satisfaction in the fashion fulfillment space.
- **Quick Installation and Scaling:** Since installation on-site happened in a couple of weeks, the operations team didn't have to deal with major operational stoppages and disturbances. UnboxSort would also allow easy shifting to larger facilities when the capacity exceeds the limit of the current one.
- **Improvement in Sort Accuracy:** UnboxSort's simplicity of feeding and direct-to-box sorting process along with intuitive interfacing apps enabled associates to perform near-perfect work (99.99% sort accuracy). This increased customer satisfaction and reduced internal order auditing and supervision costs.