

Revolutionizing pallet handling with automated integration solution



HCLTech helped a leading Logistics company achieve higher throughput and reduced energy consumption.

The client is the world's leading logistics company with 380,000 people in over 220 countries and territories working every day to help cross borders, reach new markets and grow business with around 1.8 billion parcels delivered every year.

The Objective:

To enable a fully automated stacker crane that will provide all movements for storage and retrieval of palletized goods in the double deep high bay warehouse.

The challenge:

The customer operates a state-of-the-art showcase site in the UK. However, the volume of space required is very high as well as the energy consumption owing to the higher operating procedures to keep the personnel comfortable. In comparison, the throughput volume is also low.

The Solution:

The automation is delivered by Swisslog and integrated in BY WMS. This fully automated stacker crane will provide all movements for storage and retrieval of palletized goods in the double deep high bay warehouse. Through an automated conveyor pallet system (ASRS) pallets are fed into 13 high bay cranes. The pallets are then moved by a crane into one of its double deep storage locations. Upon arrival at the location, the forks move the pallet into the deepest position in the rack. The retrieval of pallet is also done by means of the cranes, dropping the pallets on different dispatch lanes. On the infeed lane pallets are measured through

a sensor system, in order to direct the pallets.

The integration included ground-up development of API's and the transactional messages like part master, induction, movement requests, movement confirmations, pick requests, pick cancellations, pick confirmations, pick error handling, inventory attribute changes, product removal and inventory reconciliation. All messages handled through BY's integrator and standard WCS module for communication making use of rest webservice endpoints.



The Impact:

The solution provides a high throughput volume, reduction in space due to the high and compact double deep storage footprint as well as a reduced energy consumption. Up

to 25% decreased energy consumption due to lower operating temperatures (not heated for personnel) and dark operating space.

