



**NIDO**

**DELHIVERY**

Case Study



## Bagging Conveyor Case Study

Delhivery is India's leading supply chain services company that has expanded over 17000+ pincodes across 2000+ cities in just 8 years.

To support and accelerate this growth rate, NIDO has provided a state-of-the-art solution in the domain of conventional conveyors at DELHIVERY's Bilaspur site.

### Project Scenario

A large number of goods with barcodes on each are inbound on a conveyor. After each barcode is scanned by machine vision barcode scanners, they are fed to a primary sorter : Cross Belt. The Cross Belt sorter then feeds the goods to secondary sorters : Put to Light (PTL). The PTL in turn lets the operator know which bag to put the parcel in and multiple such bags are placed on a rack. The site is filled with racks, hence transfer of bag from one station to another presents itself as a huge challenge.

When the good are to be outbound, the operator picks up the good, fills it in a bag, which is then to be transferred to a trolley cage station.

### Project Solution

Based on the warehouse layout, position of storage racks and trolley cage station, customized conveyors were deployed to provide a perfectly tailored solution. The total distance from the first rack to the final station is 89m, but not in a straight line.

An 'O' shaped system was implemented in which five conveyors with precise dimensions were designed and engineered. The dimensions are as follows :

22m | 19m | 17m | 17m | 14m

Each of the five conveyors have their own control panel, along with a Master control panel controlling all the conveyors. In case of emergency at one conveyor, the Master panel is capable of shutting down entire system to ensure safety

Each individual control panel gives the operator the ability to maintain the conveyor in ON position as long as he presses the ON button. This allows the operator to have precise control of conveyors for exception handling.



Conveyor 1



The conveyor are designed to transfer load of varying sizes and weights. The maximum weight of the bag would be 50kg.

The speed of the conveyors are matched to make sure there this no aberrant/unintentional motion of the bag when transferring from one conveyor to another, even if the angle of transfer is 90°. The conveyors are rugged and durable and capable of 24x7 operation

## NIDO Salient Features

- Customized Design
- Pan India Service Support
- Within 24 hours service support



*Merger of Conveyor 1 and 2*

