**CASE STUDY** 



# Custom Tilted Conveyor Designed & Built To Transfer Case Application

# **EXECUTIVE SUMMARY**

A custom-designed and built Tilted Conveyor solution was created to transfer cases for ergonomic loading of tall or wide cases. In this system, empty cases were received from the customer's existing corresponding conveyor, transferred along the Tilted Conveyors, and presented to operators for hand packing.



# Customer Challenge

Benchmark's customers specifically wanted a solution for their case packing line in which operator reach was minimized. Our custom engineered Tilted Conveyors were ideal for transferring tall or wide cases as this non-standard conveyor design included a 45-degree angle allowing operators to more easily reach cases.

## The Solution

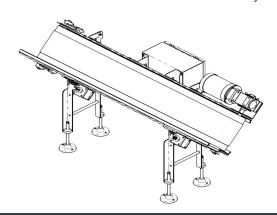
Two Benchmark Tilted Case Conveyors were designed and built to each accept a single lane of empty cases from the customer's corresponding conveyor traveling short dimension leading. Empty cases were transferred along the Tilted Conveyor and presented to operators for hand packing.

The conveyors were tilted at an approximately 45-degree angle, so the top of the belt was facing operators and the lowest portion of the Tilted Conveyor was slightly below the customer's product conveyor. This positioning allowed for ergonomic loading of tall or wide cases by minimizing operator reach. Each discharge end of the Tilted Conveyor included a chute to assist in gravity transfer to the customer's conveyor.

Each conveyor was approximately 6'2" in horizontal length and 12" in width, and elevation was approximately 34", plus or minus 2" at conveyor centerline. These dimensions allowed for filled cases to be gravity transferred to the customer's downstream conveyor. This equipment was custom-built to customer specifications and was constructed with food grade plastic and stainless steel for wipe down. This design represented a non-standard conveyor that was custom engineered for the end user's needs.

## **Additional Highlights**

- Cast iron housings for mounted bearings and corrosion resistant inserts for wipe down compatibility.
- Carbon steel sprockets and roller chain or hollow shaft gearboxes used for power transmission.
- · Ideal for tall or wide cases.
- · Painted carbon steel seam welded tube frame with adjustable feet.



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BENCHMARK TILTED CASE CONVEYOR



APPROXIMATELY 45-DEGREE ANGLE



TILTED CONVEYOR GRAVITY TRANSFER

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