

CASE STUDY



Overview

We all remember taking the rock hard, chalky vitamins as kids, the fact they were available in our favorite cartoon characters was almost enough to distract us from the texture and taste...almost. Today, thankfully daily vitamins are available in gummy form with much more pleasant flavors and improved dietary value.

The global gummy vitamins market is expected to reach \$10.6 billion by 2025.1 Millennials prefer consuming gummies due to busier lifestyles, rising disposable incomes, growing awareness of preventive healthcare issues, and maintaining better health. Other factors driving the demand for gummy vitamins include the rise in incidences of vitamin deficiencies and undernourishment problems in developing and underdeveloped countries.

This month's Albagram features a palletizing line created for a gummy vitamin manufacturer brought to Alba Manufacturing by our integration partner, Weldon Solutions out of York, PA.



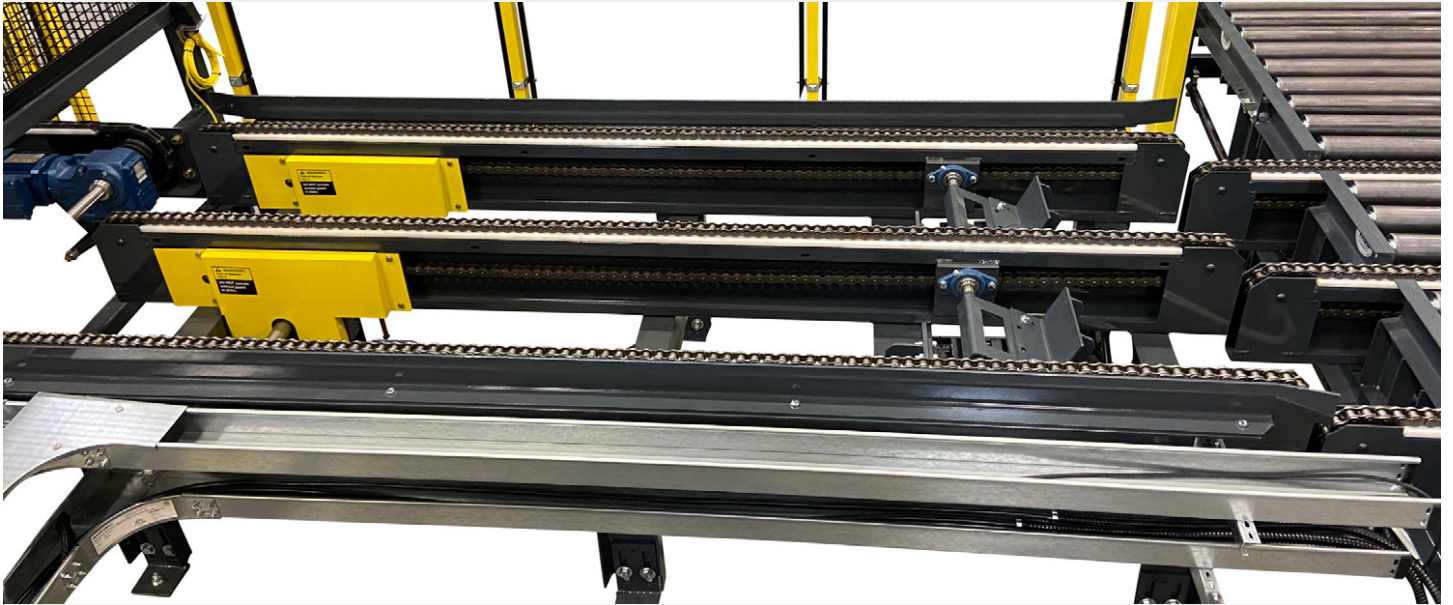
Weldon was tasked with designing and building an automated palletizing cell for cartons of product. These cartons needed to be palletized and wrapped prior to being shipped to various distribution channels. Alba's assortment of pallet handling products served as the material

handling basis of Weldon's robust and efficient robotic palletizing system.

The process begins with a single empty pallet being conveyed onto the palletizing zone consisting of Alba's standard DC-R80 3-Strand Drag Conveyor. This conveyor includes side guides with angled lead-ins, locating the pallet laterally while pivoting style pop-up stops position the pallet's leading edge ensuring the pallet's precise and consistent location prior to the palletizing process.



www.albamfg.com



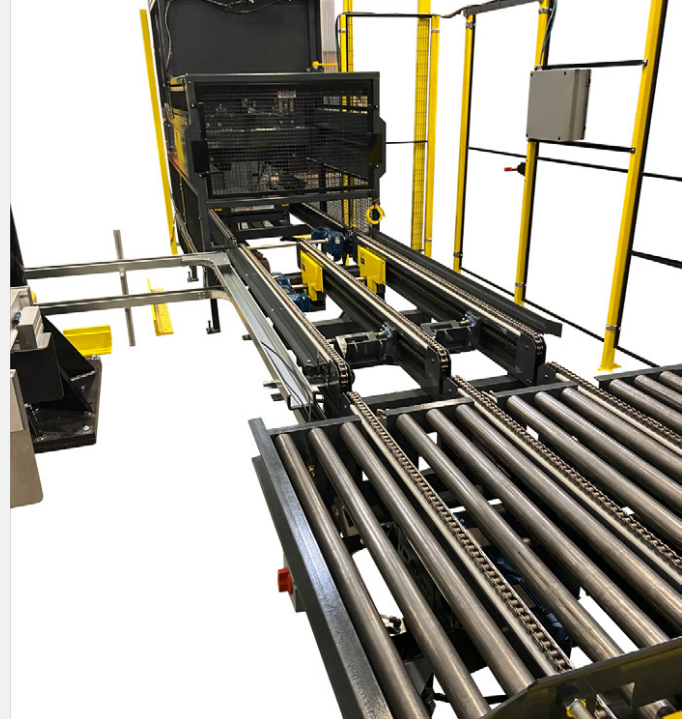
Once Weldon's robot is finished building the pallet, a 3,000 lb. pallet of gummy vitamins is then conveyed to the adjacent 3-strand pop-up chain transfer where Alba's heavy-duty transfer design allows full pallets to make a 90° directional change. Alba's unique transfer design uses a pneumatic cylinder connected to a cam and tie rod creating a "positive lifting motion" allowing pallets to remain square and level as the transfer strands raise or lower the pallet onto (or off of) the static CDLR rollers.



Due to the customer's anticipated growth, Weldon requested that the transfer include pass-through capability allowing the end customer to scale up future production to include additional palletizers. For this reason, Alba supplied our Thru-Drive Side Transfer (TDST) with transfer strands extending through the CDLR's chain guard. This unique capability allows omni-directional pallet handling to Alba's already industry-leading robust transfer design.



Since this pass-thru functionality wasn't needed immediately, Weldon requested a bolt-on (removable) adjustable back stop to assist in pallet alignment during the initial project phase. After being transferred, the pallet would ultimately be conveyed to a stretch wrapper (not shown in the photos), and out of the palletizing cell.



The implementation of Alba's pallet handling equipment reduced the safety risks and the high costs associated with fork truck pallet handling. This palletizing cell was able to efficiently automate an otherwise complicated and labor-intensive operation. The robustness of Alba's welded structural steel constructed equipment ensures the process will continue long into the future.

Products Used:

One (1) DC-R80-3S 3-Strand RC-80 Drag Chain Conveyor

One (1) TDST/TFT251160-4.50-3S Chain Driven Live Roller Conveyor with 3-Strand 90° Transfer

Value-Added Features:

Blade Stops, Back Stops, End Stops and Side Guides

**At Alba Manufacturing,
we provide optimal solutions based on time-tested applications and expertise.
Call Alba Manufacturing at 866.252.2634**

