

Ice Cream Palletizing System



This case study features an impressive project by Weldon Solutions, one of Alba's top system integrators, assisting a leading ice cream producer in enhancing their palletizing process. The project focuses on a new plant expansion, aiming to robotically palletize cases of ice cream and transport the pallets to a stretch wrapper line.

Overview

system operates in a +15°F freezer, requiring careful consideration in specifying all equipment and components suitable for the cold environment. Alba's durable and reliable equipment plays a crucial role in the success of this project, enabling the ice cream producer to efficiently share their product with millions of happy customers.

Weldon's system begins with empty pallets and pallet support boards being fed onto a transfer car. The transfer car base was supplied by Weldon with Alba's CDLR conveyors integrated to the top. An Alba pallet dispenser was also required and designed to dispense 45-1/2" x 26-3/4" half (sized) pallets onto a fixed CDLR conveyor which feeds the transfer car. Full-sized GMA pallets and pallet support boards are placed onto a CDLR conveyor

by a Weldon supplied robot, and ultimately conveyed onto the transfer car as well.

The transfer car delivers the empty pallets and also pallets loaded with slipsheets (layer divider sheets) to multiple palletizing cells. Each palletizing zone has a side pusher to consistently locate the empty pallets for robot loading. Once the robots complete a palletized load, the fully loaded pallets (up to 3,000 lb.) are discharged back to the transfer car to be transferred to the stretch wrapper line.

The full pallets are then moved to the pallet wrapping line, located adjacent to the empty pallet conveyors. This layout allows for the simultaneous loading of empty pallets onto the transfer car and discharging of full pallets. As full pallets are discharged from the



ADDRESS

Alba Manufacturing 8950 Seward Road Fairfield, OH 45011 CONTACT
866.252.2634
rocksolidconveyor@albamfg.com
www.albamfg.com





transfer car, each 40" x 48" GMA pallet is rotated 90° by an Alba lift and rotate CDLR conveyor. The half pallets are conveyed without needing rotation. The final step involves an electric turntable with a CDLR conveyor, rotating the pallets 90° before sending them down Weldon's integrated stretch wrapping line.

Alba Manufacturing and Weldon Solutions successfully transformed a challenging application into a success story. This collaboration exemplifies the power of ingenuity and a shared commitment to solving complex problems. In an industry where precision and efficiency are critical, Alba Manufacturing remains a trusted partner, delivering innovative solutions that enhance performance and drive success.

The next time you encounter a challenge, call Alba Manufacturing. We can help you locate your nearest Alba Partner Network Member to assist with your next project at 866.252.2634 or visit our website at www.albamfg.com.



Freezer Rated Features

- Higher Capacity Drives
- •Reducers and Bearings Filled with Low Temperature Grease
- •Galvanized Roller Tubes (for Protection Against Condensation)
- •Hydraulic Lift Cylinders with HPUs (when Clean Dried Air isn't Available)
- Upgraded Roller Chain Combating Brittleness of Steel in Freezer Environment
- Nylatron Chain Guides (Transfers and Drag Chain Conveyors)

