

Conveyor Trifecta: Flexible, Dependable with Substantial Cost Savings

Case #10217



PROBLEM/CHALLENGE:

A System Integrator (SI) and their customer needed to safely transport CHEP (40"x48") and Winged (30"x35") pallets with a maximum pallet load of 1,900 lbs. A second requirement – increase safety and minimize fork truck traffic while keeping production downtime to an absolute minimum.

SOLUTION:

The perfect solution – MZPA Conveyor (a.k.a. Motorized Zero Pressure Accumulation). We interfaced the end user's existing pallet loading line with their existing stretch-wrapper. Another key requirement of the project – reduce the installation time; thereby, minimizing line downtime.

RESULTS:

By using the MZPA Conveyor (Motorized Zero Pressure Accumulation), SI's customer immediately realized three primary benefits:

1. Dependable - Tested and de-bugged

All the programming is completed at Alba Manufacturing. Every system is tested and de-bugged prior to shipping.

2. Two-Fold Cost Savings in the Field – Reduced Installation Time and Manpower

Our MZPA Conveyor style is “plug and play.” That means at the time of delivery the customer would do the following: un-skid the equipment, anchor it, drop power to the main control box, and re-connect QD (Quick Disconnect) cables. A fully functioning, no mess-no fuss conveying system is born! This leads to an extremely quick installation to get systems up and running.

3. Flexibility

All programming is flexible (meaning it can be changed, added to, or subtracted from in the future). Versus many printed circuit board accumulation logic cards. Alba can also achieve other configurations besides “non-linear” or “straight line” accumulation. This means we can accumulate around the corner on an “L” shaped system through a turntable or transfer which many logic card type technologies cannot manage.

Equipment Supplied:

Motorized Zero Pressure Accumulation Conveyor

Alba supplied over 200' of conveyor on this project consisting of the following:

- Thirty-Six (36) 4' 11-1/4" Model MZPA251140-3.25 Chain Driven Live Roller Sections with Close Roller Centers of 3-1/4"
- Four (4) 5' 0" Model MZPA251140-6 Chain Driven Live Roller Sections with 6" Roller Centers

- One (1) 8' 0" Model TDST251140-6-3S Chain Driven Live Roller Conveyor with 3-Strand 90° Transfer that went thru the side of the Conveyor and thru the Non-Driven Side Frame
- One (1) 10' 0" Model TFT251140-6-3S Chain Driven Live Roller Conveyor with 3-Strand 90° Transfer that went thru the Non-Driven Side of the Conveyor

Features:

- Allen Bradley 830 PLC
- 1/2 HP Baldor motor and Dodge Tigear II reducer in each zone
- One (1) 24 VDC Banner retro-reflective photo eye pre-mounted in each zone
- Two (2) 24 VDC Banner ultra-sonic sensors pre-mounted in two (2) zones to detect fork trucks
- E-Stop pull cord found along entire length of conveyor

All motors and devices were pre-wired, tested, and de-bugged at Alba Manufacturing prior to shipment. As a result, installation time was greatly reduced in the field. The end user appreciated the ease of installation which helped them get up and running more quickly.

ABOUT US:

Alba Manufacturing, established in 1973, engineers and designs heavy-duty roller conveyor systems. Our systems consist of chain driven live roller (CDLR), zero pressure accumulation, drag chain, gravity, lift and rotate, pallet stackers and dispensers, turntables, chain transfers, and transfer cars. Our corporate office and manufacturing facility are in Fairfield, Ohio, 30 minutes north of Cincinnati, Ohio.

For more information regarding this application/solution, please contact us via phone at 866.252.2634; via web at www.albamfg.com or via email at RockSolidConveyor@albamfg.com.