

PACK-OUT STATION

NO: 109

**THE APPLICATION:** Robotic crate loading

**THE PRODUCT:** Zero Pressure Chain Driven Live Roller Conveyor Pack-Out Station

**THE INDUSTRY:** Plastics

**THE NEED:** A customer needed to load crates of product via a robot located on the side of the conveyor and unload empty crates in the smallest footprint feasible. The crates needed to be located in multiple positions because they were two layers deep, two rows wide and needed to be specifically located for robot loading of each layer and each row at a time.

**THE SOLUTION:** Omni Metalcraft Corp. designed a Pack-Out Station consisting of two lanes of zero pressure accumulation chain driven live roller conveyor. The first lane accepted empty crates from a fork truck, the lane accumulated and fed the first alignment section. The crates were stopped by a rotating blade stop, aligned with a crowder where row one of layer one was loaded. The same action was repeated when the crate moved to the next blade stop and crowder. Once the first layer was completed, the crate reversed to repeat the same actions for the second layer. Once completely full the crate was transferred to the adjacent lane to be removed.

- Ultrasonic forklift detection at the load and unload ends

- Zero Pressure accumulation in and out

- Load deflectors and safety endstops

- Lane to lane pop-up chain transfer

- Custom side robot interface location

- Pallet crowder at robot interface station

- Rotating bladestops to save space

