Robotics | A Case Study

Zero-Touch Chilled and Freezer Order Picking for Coop

About **TGW**

TGW Logistics Group is a global systems integrator of automated warehouse solutions. They are a one-stop provider for end-to-end fulfillment solutions—they provide everything from system design, to manufacturing, to implementation, to ongoing lifetime services.

With over 50 years of experience in the material handling industry, TGW partners with leading brands in the grocery, fashion and apparel, and industrial and consumer goods industries. They have optimized the supply chain processes of Puma, Urban Outfitters, Gap, Fastenal, TVH, and more.

TGW's worldwide network includes more than 4,000 employees across three continents.

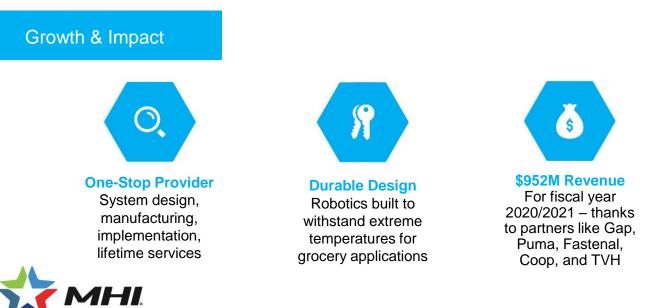
TGW Systems Inc.

3001 Orchard Vista Dr SE, STE 300 Grand Rapids, MI 49546 Phone: 616-888-2595

us.info@tgw-group.com www.tgw-group.com

"We were looking for a company that operates similarly to Coop – sustainably and in an environmentally friendly manner."

Domenico Repetto, Director of Logistics for Northwestern Switzerland at Coop



THE INDUSTRY THAT MAKES SUPPLY CHAINS WORK®

Zero-Touch Chilled and Freezer Order Picking for Coop

Complete, highly automated fulfillment solution for various temperature ranges across multiple buildings featuring TGW robotics.



The Project

Coop, a Switzerland-based retail and wholesale grocery business, chose to centralize three regional DCs, three freezer DCs, and three large bakeries into a single multi-building location near Zurich. To successfully shrink their physical and ecological footprint on this scale, Coop needed automation solutions for various temperatures and good types.

The Solution

TGW's solution combined various goods receipt zones, pallet warehouses, picking areas, and goods issue areas with conveyor systems.

In the frozen goods building, products are delivered on pallets and stored in a high-bay warehouse. When replenishment is needed for order picking, Splitex robots depalletize goods from the high-bay and send them to a shuttle warehouse as a picking buffer. From there, mixed case orders are built by AutoStax palletizing robots in an optimized and store-friendly manner on roll cages. The roll cages are then automatically wrapped and forwarded to shipping.

Similarly, in the chilled goods building, products are

decanted and stored in a shuttle warehouse. Fully automated order picking is achieved with the shuttle system and Stacker robots that load toted goods onto roll cages before they are transported to shipping.

Solution Highlights

- **TGW palletizing robots** for zero-touch picking of chilled and freezer goods
- **TGW Splitex** robots for zero-touch goods receipt and decanting to shuttle warehouses
- **TGW Warehouse Software** controls all processes and calculates the ideal stacking pattern of goods for the order roll cages
- 23 degrees Fahrenheit: temperature at which de/palletizing robots are housed
- -9 degrees Fahrenheit: temperature in the shuttle warehouses

"The concentration of the quantity of goods at a single site enables investment in automation and robotics."

Daniel Hintermann, Director of Logistics at Coop

