

# Robotic Palletizing Case Study

## Carter Control Systems

CCS is a leader in automated material handling and industrial automation solutions. We design, manufacture and implement both standard and custom warehouse automation solutions. No project is too large or too small and we understand how to provide a phased in approach that allows future growth for our customers. We stand by our clients whether they are taking the first steps into automation or outfitting an entire facility. Our guiding principles (Quality, Cooperation, Responsibility, and Communication) are embedded in all we do. With over 300 employees and 40+ years of experience in the material handling and supply chain industry, we provide expertise in a full range of equipment, controls, software, and services. We are also a trusted integrator with proven partnerships throughout the industry. At CCS, we continue to take great pride in helping our clients realize their material handling goals to operate better today and prepare for tomorrow.



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***“CCS was very professional. They had the ability to do the project in a timely manner and met our deadlines while staying within budget.”***

- Aladdin Temp-rite Representative

## Growth & Impact



**Increased**  
Packaging  
Process  
Efficiency



**Eliminated**  
Workers  
Compensation  
Risks



**Paid For Itself**  
Within two years  
of installation

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CCS implemented a multi-axis robotic cell to fully automate Aladdin's packaging process.



## The Client

Aladdin Temp-Rite designs, manufactures and supplies complete meal-delivery systems, equipment and tray top products such as dishware, beverage ware and designer tray covers to the healthcare foodservice industry.

Their previous process had several key issues that Aladdin wanted to address through automation:

- Operators would go up and down the line filling boxes all day long. This repetitive action caused errors.
- Three operators lifting boxes all day increased the risk of workers' compensation claims.
- Data that was attached to each SKID was entered manually every day adding extra time to each shift as well as errors.
- Labor shortages created challenges to find qualified operators.

## The Solution

### Implemented a Multi-axis Robot

CCS designed and programmed a robotic cell to be placed at the end of the conveyor system. It is used to disperse product to one of six pallet locations faster than manual laborers.

### Used Automated Taping Machines with a Conveyor System

Taping machines were added to eliminate human labor and create a segue into automating the fulfillment process after the carton was closed. Gravity conveyor then feeds the closed cartons down to the robotic cell for palletization.

### Integrated SKID Info Into ERP

Aladdin was entering the information attached to each SKID manually. They automated this with software that scans each carton while simultaneously syncing the data to their ERP system.

*“CCS designed and implemented a system that made us much more efficient in managing our shipping and receiving processes. They took the time to understand our operations and developed a solution to address our issues.”*

- Plant Manger, Health Products Manufacturer