



## CASE STUDY

# Sortation in Retail

Tompkins Robotics' tSort System Transforms the Supply Chain for Leading Global Retailer

## Why Choose Tompkins Robotics?

We deliver innovative robotic solutions to the most challenging supply chain problems so businesses worldwide are empowered to create a more efficient, flexible, and scalable future.

Businesses of all sizes navigate their supply chain challenges by harnessing the potential of Tompkins Robotics' innovative solutions to meet their demands today and pioneer future progress.



### Innovation Mindset

We continuously push boundaries to reimagine automation and robotics solutions.



### Partner for Success

We build collaborative relationships with customers and partners to surpass our collective expectations.



### Excellence Always

We are committed to delivering unparalleled quality in every project.

## The Company

The world's leading retailer offers a vast selection of goods at competitive prices, serving millions of customers globally. It operates an expansive distribution network spanning numerous warehouses and fulfillment centers. They deliver on their mission of improving savings while enhancing lifestyles by orchestrating the seamless movement of goods from suppliers to stores and directly to customers' doorsteps.

## The Goal

The retailer sought to replace their traditional fixed sorter, with a system that was flexible, scalable, and modular at a key warehouse tasked with servicing over 450 stores daily.

They aimed to reduce manual handling, increase their sortation capacity, and elevate output to meet rising demands across their retail network.



## The Solution

The retailer chose to implement the Tompkins Robotics' tSort system, for its simplistic design with significant uptime and minimal maintenance. Tompkins Robotics worked closely with the retail giant to identify their unique challenges and tailor the best automated solution for their specific needs.

A customized configuration was designed with the new technology of first-generation tSort Vertical Lifts.

1

### Flexibility & Adaptability

Unlike traditional fixed sortations, like push divert and sweeper sorters, tSort provides the flexibility and modularity to scale operations easily and cost-effectively, adapting to future growth without major infrastructure changes.

2

### High throughput

The implementation of tSort automated mobile robots significantly increased the system's uptime. The robots are engineered to seamlessly compensate for any downtime, resulting in enhanced order sortation and throughput.

3

### Rapid deployment

A typical tSort implementation takes less than half the time of traditional sortation systems. The project spanned seven months from original receipt of order to fully operational, with an installation of only seven weeks.

4

### Reduced operation costs

tSort streamlined operations and decreased labor costs by eliminating the need for excessive handling and reducing staging time for orders awaiting processing. tSort facilitated a fast closeout of orders reducing the cost of processing orders.

5

### Higher capacity in a smaller footprint

tSort's multilevel design more than doubled the number of sort destinations within the warehouse. Allowing the retailer to efficiently process orders to over 450 stores each day.

6

### Improved warehouse safety

tSort's design eliminates the need for hard-wired electrical connections and floor fastenings, ensuring a safe working environment within the warehouse. The self-charging robots operate within an enclosed environment on tables or platforms, minimizing potential hazards and enhancing safety measures.

7

### User friendly operating system

The system's simplicity facilitates easy training allowing operators to quickly fill orders after only 15 minutes of instruction. Its simplicity also eliminated the need for dedicated maintenance staff to manage automation.

## Results & Benefits

The adoption of Tompkins' Robotics tSort system significantly enhanced operational efficiency, increasing throughput and enabling efficient servicing of over 450 stores daily.

Its rapid deployment, low capital investment, and reduced operational costs yield immediate savings and provide a scalable solution to meet increasing demands.



Eliminated handling of staged orders



Improved sortation accuracy to 99.9%



Increased sortation destinations by 250%



"It was incredibly rewarding to collaborate with this well-respected retailer to understand their unique challenges and craft a tailored solution for their distribution and fulfillment needs. Enhancing operational accuracy and efficiency for their distribution centers exemplified our commitment to innovation and client success."

Sean O'Farrell - Tompkins Robotics  
VP Sales & Marketing

