CASE STUDY

CVS

How Integrated Robotic Automation Revolutionized Distribution with Enhanced Speed, Safety & Precision

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
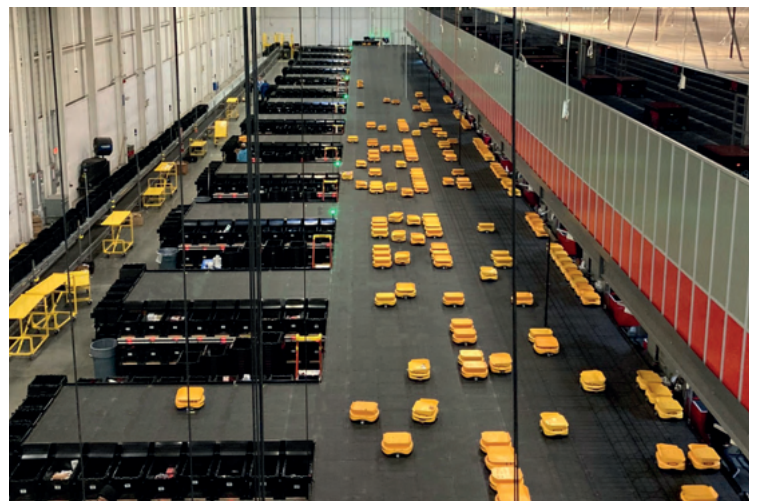We are committed to delivering unparalleled quality in every project.

The Company

CVS is a leading healthcare and retail pharmacy provider, serving millions of customers across the U.S. through its extensive network of stores and digital platforms. With a mission to improve health outcomes and simplify care, CVS ensures the reliable and efficient delivery of health essentials and retail products to communities nationwide.

The Goal

CVS sought to streamline, automate, and maximize efficiency at its largest distribution center in Lumberton, NJ. At over 1,000,000 square feet, Lumberton services the most densely populated network of CVS stores spanning the Northeast and New York City metropolitan area.

They aimed to increase throughput to keep pace with rising demand, while reducing manual labor, enhancing warehouse safety, and optimizing space to support scalable future growth.

The Solution

CVS became the first retailer to implement a dual robotic automation system: AutoStore for storage and retrieval, and Tompkins Robotics' tSort for dynamic sorting.

The integrated solution comprises over 420 robots, servicing 582 pick locations across various stores in their busiest high-volume region.

1 **Modular Design:**
tSort's flexible configuration allows it to integrate with other equipment, enabling CVS to adapt to changing needs and expand operations seamlessly.

2 **Improved Employee Experience:**
The Lumberton Distribution Center is now their safest warehouse, with automation reducing strenuous physical labor. The facility also added headcount to accommodate the increased throughput.

3 **Increased Throughput:**
Before implementation, the facility maxed out at 150,000 units per day, but after deploying tSort, throughput skyrocketed to 1.9 million units per week, with plans to scale further to 3.5 million per week in the near future.

4 **Carefree Maintenance:**
The system's intuitive design facilitates easy training, allowing operators to become fully functional after just 15 minutes of instruction. The carefree maintenance of tSort eliminates the need for dedicated maintenance staff, and robots can be reconfigured in minutes, minimizing downtime.

5 **Space Optimization:**
By Q2 2026, CVS will expand to 750 robots at the 160,000 square foot Lumberton Distribution Center- delivering the same capacity as a traditional 1,000,000 square foot facility.

Results & Benefits

The combined implementation of Tompkins Robotics' tSort system with AutoStore has transformed the CVS Lumberton Distribution Center, delivering unmatched efficiency, accuracy, and scalability while enhancing employee satisfaction.

40% lower picking costs compared to other CVS distribution centers

Over 160% throughput increase from 150,000 to 400,000 units per day

Over 99.9% pick accuracy, ensuring correct store deliveries

"
We've been breaking records almost every week with the amount of volume that we're able to push through that building. It's great to work for a company that believes in innovation."

Jamie Tatum
Lead Director, Supply Chain Strategy, CVS

tompkins robotics

Flexible. Simple. Powerful.