Zebra Robotics Automation™



Photography by Zebra Technologies

SUMMARY



Customer

Waytek Inc. Chanhassen, MN

Industry

Distribution/Fulfillment

Challenge

Increase daily order output in exisiting facility in a challenging labor market; replace aging and unreliable conveyor system; gain flexibility and scalability for distribution operations

Solution

- · Autonomous Mobile robot (AMR) system
- Zebra Industrial Carts
- Zebra Connect
- · Zebra Symmetry Sofware

Business Outcomes

- · 25% increase in daily throughput
- 13% facility space recovery
- 5 years added to facility lifespan

Waytek Improves Throughput by 25% with Autonomous Mobile Robots

By replacing their conveyor system with AMRs, Waytek was able to fulfill more orders, reclaim 13% of their distribution center space for product storage, extend the life of their facility by five years, and free their workers from certain manual tasks.

Prioritizing customer experience in times of high demand

Waytek, a leading distributor of automotive electrical components, has been facing an increasing demand for their goods across the manufacturing sector over the last year. To meet this high demand, Waytek deployed Autonomous Mobile Robots (AMRs) from Zebra Technologies which enabled them to fulfill 1,000 orders per day compared to their previous limit of 800 orders.

About Waytek

Waytek, headquartered in Chanhassen, Minnesota, is a family-owned distributor of electrical components to manufacturers and upfitters specializing in wire harnesses and mobile equipment, and has been in business since 1970. With a mission to provide an exceptional customer experience, Waytek is committed to making it easy for its customers to source electrical parts.

With a rise in component demand across the manufacturing sector combined with the worker shortage, Waytek found itself in the midst of challenging times starting 2020. Over the last year, their order volumes multiplied as a result of growth in e-commerce, however, they struggled to meet this new demand with their existing technology. To keep up with their core mission of providing exceptional customer service, they decided to deploy AMRs.

Challenges:

Managing order fulfillment with limited warehouse capacity

In 2007, Waytek had moved into their 100,000 sq. ft. distribution facility to scale their operations and installed a sortation conveyor system that could handle their increased volumes. This conveyor system helped them order, sort, and manage 800 orders per day for 13 years.

However, around 2019, their order volumes were approaching 800 per day and their conveyor wasn't going to be able to handle the increased volume. In addition, the conveyor ran through their building occupying significant floor space which made it difficult to store the additional inventory needed to support their customers.

As a result, Waytek started looking for a solution that could enable them to meet their customer demand as well as scale their operations within the same facility.

Solution:

Improving throughput with Autonomous Mobile Robots

When Waytek started looking for options, they weighed two possibilities—making major modifications to their conveyor system or any new automation solution that would enable them to fulfill orders from the same facility.

As conveyors come with their own challenges, for instance, the need for continuous maintenance, extensive floor requirements, and limited flexibility, Waytek wasn't keen on moving forward with this option. Moreover, they wanted to elongate the lifespan of their current warehouse, and any modifications to their conveyor system would mean blocking additional floor space.

While considering their options, they came across the AMRs and decided to evaluate the benefits of modifying their conveyor system vs. deploying AMRs. Compared to conveyors, they found that AMRs save a lot of floor space and don't have any built-in capacity limits. With AMRs, warehouses can also scale effortlessly as you don't need to remap your whole facility. If your order volumes increase, you can add more robots.

Due to low capital investment and the ability to quickly scale, Waytek selected AMRs to fulfill more orders, make their distribution facility more efficient, and free their workers from certain manual tasks.

"Amongst all our technological implementations until now, Zebra was the easiest to deploy and it took us only 3 days to become operational with their AMRs. These AMRs are very easy to work with and rarely have any downtime. The Zebra team also consistently maintains and updates the robots, so we don't have to worry about any breakdowns."

Mike Larson. **COO and Co-Owner, Waytek**



Results:

Enhanced throughput, worker efficiency, and space utilization

After deploying the AMRs, Waytek not only improved its throughput but also realized that their workers were much happier as it reduced their workload and enabled them to focus on value-added activities to support their customers. Let's see how AMRs were a game-changer for Waytek.

- By replacing their conveyor system with AMRs, Waytek was able to reclaim 13% of their distribution space in the warehouse.
 They can use this extra space to store more goods and expand their operations as well as extend the lifespan of their facility by five years.
- With AMRs, Waytek is now able to fulfill over 1,000 orders per day compared to 800 orders per day previously. This change has helped them to improve their throughput by 25%.
- Since robots have been added to their workflow, there has been a significant reduction in manual walking. This enables their picking team to stay productive and focus on customer orders.
- Waytek is also using these AMRs to recycle garbage which was earlier done manually. Eliminating these manual movements across the facility has improved worker efficiency significantly, saving employees over 300 ft. of walking on each trip.
- What really stood out for Waytek was the super-fast deployment of AMRs in their facility. They were able to implement and integrate these systems within 3 days.
- Because of the Symmetry software, Waytek employees are able to operate the robots by using their tablets or mobile phones.
 As this software is maintained completely by the Zebra team, the addition of these robots didn't add any workload to Waytek's IT team.

With low capital investment, Waytek was able to resolve their challenges and meet their customer expectations in no time.





For more information about Zebra's autonomous mobile robot solutions, please visit **zebra.com/automation-solutions**



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