3 Reasons Retailers Need Robotic Product Sortation in Fulfillment Warehouses

Deploying robotic product sortation can increase order fulfillment by up to 4X with no additional labor.

LABOR SHORTAGES ARE AFFECTING RETAIL FULFILLMENT OPERATIONS

Global eCommerce sales are forecasted to account for nearly 20% of retail sales; more than 80% of buying still occurs in stores. Source: eMarketer

July 2021 reports show that there is just enough retail inventory to cover sales for little more than one month. Source: U.S. Census Bureau

Retail job applications saw a 44% decline per opening in August since the start of the year. Source: NBC News

Retail sales are forecasted to exceed $4.44 trillion this year, and retailers are under pressure to speed up order fulfillment. Compounding the challenge is the ongoing labor shortage, particularly among warehouse roles. Reports in July showed some 490,000 job openings in warehouse and transportation industries. An AI-driven robotic sortation system can transform the most labor-intensive parts of store replenishment and allocation order processing in fulfillment warehouses today.
Consumer expectations are high, and retailers, grocers, and 3PLs are striving to be more competitive. Distribution facilities that handle store replenishment, allocation, and buy-online-pickup-in-store (BOPIS) orders are processing huge volumes of merchandise. With retailers also filling online orders directly from stores, efficiently increasing throughput in order fulfillment is critical.

Robotic sortation systems can perform tasks associated with store replenishment, split-case cross docking, and allocation order processing. A human operator takes individual items and small cases from totes and places them on induction points, and the system automatically sorts the goods to outbound containers for shipment to stores. The result is a 4X boost in piece pick order processing, along with an up to 10% increase in order container cube utilization.

**Why Deploy Robotic Product Sortation?**

AI-enabled robotic automation applied to product sortation can speed up fulfillment processes and increase order throughput by 4X using existing labor. Fulfillment centers can deploy systems into existing operations to meet increasing order demand without straining their workforce.
Distribution facilities are essential to retail operations, and downtime isn’t an option. Robotic sortation systems are designed to install quickly. It can operate as a standalone system or be integrated with traditional material handling systems such as Automated Storage and Retrieval Systems (ASRS). The physical infrastructure is lightweight and easily integrates into existing fulfillment environments.

The flexible footprint of robotic sortation systems lets retailers install stations wherever they have some space, including on a mezzanine. As requirements change, retailers can scale throughput simply by adding orchestrated parallel systems without taking up significantly more space. Over the long term, robotic sortation systems are designed to fit into an innovation pathway that delivers intelligent enterprise robotics — modular, flexible, and able to grow with each customer’s business.

**BG Robotic Shuttle Product Sortation (BG RSPS)**
Automated robotic sortation systems that pick, sort, pack, and ship break pack, allocation, and large eCommerce orders.
Alleviate Hiring Challenges and Optimize Existing Labor

Traditionally, retailers would hire additional warehouse staff to meet peak demand or seasonal surges in sales. But in the current economy, that’s not feasible.

Along with handling a higher volume of products, robotic sortation significantly optimizes existing labor. Retailers can scale to handle the increased volume of products that need to be shipped to stores without having to increase headcount. In addition, the system is so intuitive that training time for operators is virtually zero; in fact, no training is required with robotic product sortation systems.

An AI-driven sortation system also frees employees from having to walk back and forth, reducing worker fatigue and supporting social distancing protocols. Instead, workers use an ergonomic workstation, easing the strain of repetitive tasks and putting the products on induction points that allow the system to automatically sort the goods into store-bound containers. The system enables retailers to transform distribution operations into a competitive advantage, at a compelling margin and in the midst of the ongoing labor scarcity.

Why Berkshire Grey?

Berkshire Grey's automated solutions are modular, flexible, and available via Robotics-as-a-Service (RaaS) implementation models, allowing customers to accelerate the adoption of game-changing automation technology without upfront capital expenditures.

Berkshire Grey's Robotic Shuttle Product Sortation (BG RSPS) solution:

- Increases piece pick order fulfillment by up to 4x with no additional labor.
- Improves shipment capacity and container cube utilization by up to 10%.
- Handles nearly 100% of typical SKU assortments.
- Operates standalone or integrated with traditional material handling systems like ASRS.
- Installs into existing operations with a small footprint of less than 2,500 square feet.
- Supports configurable order container sizes and batches.