Mobile robotic fleets controlled via intelligent orchestration software can transform distribution centers into high-throughput sortation systems with no disruption to existing operations. Adding robotic picking significantly reduces labor requirements for fulfillment. With eCommerce revenues expected to reach more than $2.7 trillion in 2021 and continue to climb in the years to come, retail, grocery, logistics, and other businesses must adopt innovative mobile robotic sortation. Why now?
Conveyor systems are costly and require months to deploy. And modifying them once built is a nightmare that is cost-prohibitive. A sortation system with dynamically orchestrated fleets of mobile robots enables companies to set up induct and discharge stations wherever it makes the most sense, use whatever piece of floor or mezzanine is available, and turn any physical site into a flexible cost-effective sortation system. These fleets of mobile robots are guided via intelligent orchestration software, which continually learns from goods flows and improves robotic mission time on an ongoing basis — allowing goods to move faster through fulfillment processes.

You can implement mobile robotic fleets into your existing fulfillment operations and they integrate with robotic picking systems to deliver faster fulfillment that requires less labor. Distribution centers are handling more online orders, more frequently now. Robotic picking systems automate the picking and packing of a broad range of SKUs directly into outbound orders, and the mobile bots can more quickly transport the goods across distribution centers, getting them to their destination faster. With robotic picking systems handling the goods and the mobile robots transporting the goods, distribution centers can be transformed into agile, dynamic environments.

Distribution centers are mission-critical to supply chain operations. And that means downtime is never an option. With a fleet of mobile robots working together augmented with robotic picking, if one robot fails or shuts down, another one is instructed by the AI-enabled orchestration software to do its tasks — and the process continues without disruption. With traditional conveyors, if one section of the infrastructure fails, the entire system would shut down and halt fulfillment operations.
Online order fulfillment requires flexibility and agility, both things for which conveyor-based systems aren’t well-known. Mobile robotic fleets can deploy quickly, and if order volume increases and more processing is needed, more robots can be easily added. Rolling a new mobile robot out or expanding the sortation floor can take a matter of hours versus months. Also mobile robots are available via Robotics as a Service, or RaaS, which allows customers to accelerate their adoption of game-changing automation technology without upfront capital expenditures.

Your fulfillment operations can quickly and safely sort, pick, buffer, and pack SKUs (some considered non-conveyable) and increase typical product automation eligibility. Historically, products such as large bags of dog food or shrink-wrapped cases of water bottles would need to be excluded from conveyor-based systems as the drop down the shoot could puncture the bag or break the bottles, damaging products that need to be delivered to customers. With a mobile robot, these products can be safely and quickly transported throughout a distribution center without worry.

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Berkshire Grey’s mobile robots:
- Increase facility capacity and throughput.
- Integrate with our robotic picking systems.
- Deliver the most flexible sortation system you can implement.

All of Berkshire Grey’s mobile systems are:
- Dynamically reconfigurable.
- Suitable for existing and new fulfillment environments.
- Available via both CapEx and RaaS implementation models.

To learn more, explore Mobile Robotics on berkshiregrey.com