



GreyOrange

GreyOrange Intralogistics Robots Projected to Help Dorman Save \$4.2M and Reduce Labor Needs by 30%



The Challenges: **Expensive, error-prone manual forklift operations**

Due to an increase in sales, automotive parts manufacturer Dorman was finding it increasingly difficult to process and ship orders quickly and efficiently.

Manual forklift labor struggled to meet the demand, especially during peak seasons, incurring significant costs of \$5 million annually. Plus, forklift operation was often error-prone, resulting in product damage and shipping delays.

Dorman needed a solution to improve operations, scale volumes and square footage, and meet the demands of their growing business.

Dorman Products, Inc. (NASDAQ : DORM) is a U.S.-based manufacturer of aftermarket automotive products in the United States. With more than 118,000 SKUs and a robust ecommerce presence, Dorman earned \$1.73B in revenues in 2022 and has grown 30% YoY during the past three years.

Geography: United States

GreyOrange Solutions: 25 Intralogistics bots powered by GreyMatter multiagent orchestration

Fulfillment Specs:

- » **Warehouse size:** 1M sq ft
- » **Site location:** Nashville, TN
- » **Number of shifts:** 3
- » **Daily working hours:** 20+

Impact:

- » Zero WMS/ERP integration requirements
- » RIL bots covering 1M sq ft (0.5 miles per trip)
- » Projected \$4.2M savings over 3 years due to a reduction in manpower
- » Projected 30% reduction in forklift labor requirements
- » Projected 50% reduction in worker travel time



The Solution:

Intelligent orchestration of intralogistics bots for safer, more efficient and cost-effective fulfillment

Dorman replaced its forklifts with 25 Ranger Intralogistics (RIL) bots powered by GreyMatter intelligent orchestration to enable and continuously optimize the following processes:

- ▶ **Dock to stock:** After the completion of pallet assembly, wrapping and inventory entry, integrated Autonomous Mobile Robots (AMRs) seamlessly take over the transportation process and convey pallets to their assigned deep storage aisle locations
- ▶ **Replenishment/Shipping:** A turret truck then picks pallets from VNA storage and places them on STPs to be transported to destinations according to material flow, e.g., stock to active inventory, stock to VAS and stock to outbound.
- ▶ **Empty and recycling flow:** RIL bots transport empty pallets to pallet recycling and trash to the trash collection points.

Because the RIL bots move pallets more efficiently (and in a safer manner) than forklifts, many warehouse workers have been able to transition to more value-added tasks.



The Impact:

Millions in projected savings and significant efficiency gains with zero integration requirements

Through smart warehouse optimization, Dorman's implementation of RIL robots has not only streamlined operations but also led to substantial cost savings, workforce empowerment, real-time analytics and overall operational agility. The RIL bots can manage 1400 pallets/day over two shifts and can handle anything that forklifts can move, including trash, plastic crates and cardboard boxes, without any integration. As a result, Dorman has:

- ▶ Significantly reduced wear and tear for equipment and fatigue for workers
- ▶ Simplified training for new warehouse employees

Over time, Dorman expects to achieve:

- ▶ \$4.2M savings over 3 years due to a reduction in manpower
- ▶ 30% reduction in forklift labor requirements
- ▶ 50% reduction in worker travel time



GreyOrange has greatly improved operations at Dorman. Their data-driven strategies, 24x7 support with committed uptime, and focus on safety have significantly enhanced our efficiency levels. They've been instrumental in various initiatives to improve warehouse efficiency, and their support is invaluable. With faster inventory availability, we have been able to improve the fill rates and cycle times for our customers, consistently exceeding expectations at our facility. GreyOrange's intralogistics bots can navigate inside narrow aisles and the smaller footprint of Pick and Delivery stands, which sets them apart from the rest of the market. Beyond technology, the GreyOrange team provides unwavering support from top to bottom. Their commitment to our satisfaction is truly exceptional.

- Brandon Grissom

Enterprise Director of Operational Excellence