

CASE STUDY



Revolutionizing Distribution: How Rite Aid's New Facility Boosted Throughput by 300%

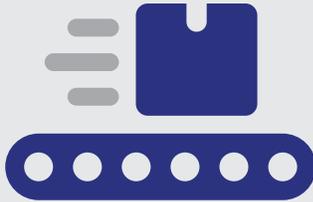
Rite Aid's rapid growth and expanding store base demanded a larger facility and a more efficient distribution system. Managing tens of thousands of SKUs in the new space required solutions to boost throughput, enhance productivity, and maintain order accuracy. assembly processes and storage solutions.

The Client

Rite Aid, founded in 1962 and formerly known as Eckerd, is the third-largest drugstore chain in the U.S., operating over 1,200 stores across 16 states. As a major retail pharmacy, Rite Aid offers a wide range of pharmacy services, health products, and general merchandise.



Results Snapshot



increase in
throughput



99.93%

order accuracy



improvement in
productivity

THE CHALLENGE

As Rite Aid expanded with new store locations, its existing distribution processes needed to scale rapidly. The relocation to a larger facility aimed to support this growth, but managing 45,000 SKUs across a vast 430,000-square-foot warehouse presented challenges in maximizing productivity and accuracy. Rite Aid required a reliable material handling solution to handle diverse products efficiently, improve throughput, and ensure order accuracy for high-demand volumes. Seeking a partner with expertise in warehouse design and scalable solutions, Rite Aid hired LD Systems to lead a comprehensive, high-impact transformation.

Learn more about planning for growth.

Video: https://drive.google.com/file/d/19uvJsWwMNzLUIKOkTHlvjSuO_NDsaUfF/view?usp=sharing

RESULTS

LD Systems implemented a fully integrated system that significantly boosted Rite Aid's operational efficiency in their new 430,000-square-foot distribution center. By optimizing layout and introducing advanced picking and conveyor systems, LD Systems enabled a 300% increase in throughput and a 40% productivity boost, achieving a remarkable 99.93% order accuracy. These improvements equipped Rite Aid to handle increasing demand with exceptional precision and speed.

THE SOLUTION

01



Operations Review

LD Systems conducted a comprehensive analysis of Rite Aid's operations to pinpoint bottlenecks and inefficiencies. This review informed the design strategy, aligning solutions with operational goals to maximize productivity.

02



Layout and Design

The layout was meticulously crafted in AutoCAD to optimize space and workflow, incorporating efficient pathways and strategically positioned equipment. This approach ensured seamless product

03



Equipment Selection and Installation

LD Systems selected high-performance equipment tailored to Rite Aid's needs and supervised the installation process. Each component was positioned to enhance throughput and order accuracy across the facility.

04



Project Management

Managed every project phase, from planning to execution, ensuring adherence to timelines and budgets. This oversight minimized disruptions and facilitated a smooth transition to the new system.

DETAILS AND EQUIPMENT

LD Systems designed an integrated system for Rite Aid's 430,000-square-foot distribution center to improve productivity and accuracy in response to rapid expansion. Following a comprehensive analysis of existing workflows, LD Systems customized the layout to include dedicated picking zones, automated conveyors, and precise sorting systems. Efficiency was prioritized to enable a smooth flow from picking to shipping, ensuring seamless operations.

To maximize space and expedite retrieval, LD Systems introduced advanced pallet and carton flow racks, granting quick access to over 45,000 SKUs. The solution transformed Rite Aid's operational capacity, enabling it to accommodate growing demand while achieving significant gains in productivity and order fulfillment accuracy.



Storage Solutions and Strategy

LD Systems implemented a range of advanced storage solutions:

5-Order Selection Modules: Configured for both case and unit picking, streamlining item selection across zones.

Pallet Racking: High-density racking for large quantities of palletized goods, optimizing bulk storage and access.

Carton Flow: Gravity-driven racks expedite cartons from loading to picking, improving selection speed.

Pallet Flow: Ensures efficient first-in, first-out movement of high-demand inventory



Material Handling and Conveyor Systems

The conveyor system supports efficient material movement:

Transport Conveyors: Facilitate movement between picking, packing, and shipping, reducing manual handling.

Accumulation Points: Temporarily hold items, optimizing order flow for smooth processing.

Merges: Combine multiple SKU lines into a single, organized flow.

Shoe Sorter: Directs totes and cartons to designated areas, enhancing sorting efficiency.

Controls and Weight Verification: Ensures item flow and accuracy before shipping.





CONCLUSION

With LD Systems' integrated solution, Rite Aid's distribution center now operates with exceptional efficiency, meeting the demands of its expanding store network. The advanced system supports high-volume throughput while maintaining superior accuracy, positioning Rite Aid to serve its customers with precision and speed.

The Results

- 300% increase in throughput
- 40% boost in productivity
- 99.93% order accuracy