

Aerospace Parts Distributor Expands Storage With Vertical Carousel Systems

An aerospace parts distributor needed to move additional inventory into its Northlake facility after shutting down another location. Southwest Solutions Group replaced rows of pallet rack with ten vertical carousel systems to increase storage capacity, improve retrieval, and strengthen inventory control.

INDUSTRY

Industrial

The project supported aerospace parts storage for an industrial manufacturing operation.

LOCATION

Northlake Texas

Completed for a facility in the Dallas-Fort Worth metro area.

FACILITY TYPE

Manufacturing

A manufacturing department needed added storage capacity for parts coming from another facility.

SOLUTION

Automated Storage and Retrieval System

Ten 30-foot vertical carousels replaced rows of pallet rack with denser parts storage.

PRODUCTS USED

Vertical Carousel Storage System

Vertical carousel systems, multipurpose carriers, software, spare parts, and service support worked together to improve parts storage and access.

OPERATIONAL GOAL

Increase Parts Storage Capacity

The project helped the facility store additional aerospace parts while improving access, cycle counting, and inventory control.

THE PROBLEM

Facility Consolidation Created Aerospace Parts Storage Pressure

The aerospace parts distributor was shutting down another facility and needed its Northlake operation to absorb additional aerospace parts. Existing rows of pallet rack made the added material harder to fit, access, and manage within the available footprint, creating a need for denser storage that would not interrupt daily production.



01

Facility Consolidation Pressure

The company needed the Northlake facility to hold parts from another site that was being shut down. The existing storage approach had to handle more material without creating unnecessary congestion in the manufacturing area.

02

Pallet Rack Space Constraints

The before-state storage layout relied on rows of pallet rack. That approach consumed floor space and limited how efficiently the facility could store the added aerospace parts.

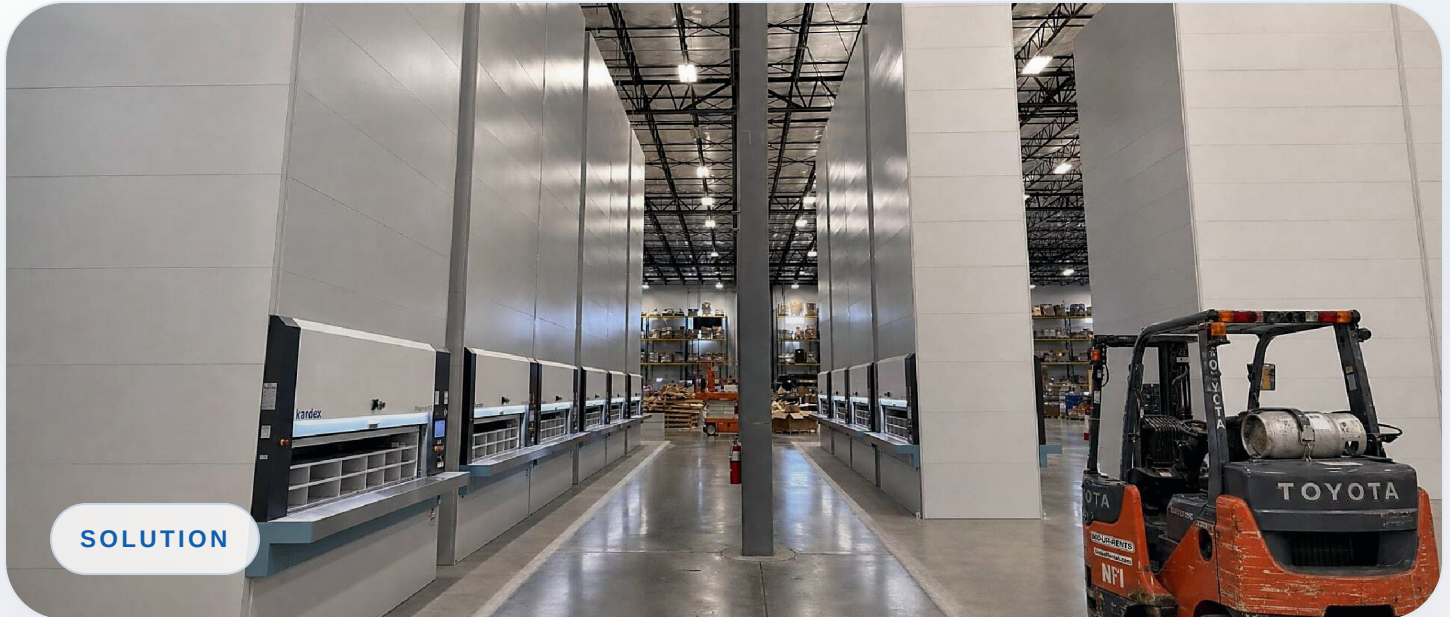
03

Manual Access And Handling Concerns

Team members previously needed ladders to reach some stored materials. The company needed a storage system that improved access while supporting faster retrieval, batching, kitting, and inventory review.

Vertical Carousel Storage Built For Denser Parts Access

Southwest Solutions Group provided ten 30-foot vertical carousel systems to replace rows of pallet rack and consolidate aerospace parts storage at the Northlake facility. Each unit measured 125.00 inches wide by 67.40 inches deep by 30 feet 1.7 inches high and included 36 multipurpose carriers. The system provided the dense storage, turnkey delivery, service capabilities, and competitive pricing required for the project.



SOLUTION

WHAT WE INSTALLED

Ten Vertical Carousel Systems

Southwest Solutions Group installed ten vertical carousel systems to replace rows of pallet rack with a taller automated storage system. Each unit included 36 multipurpose carriers to organize aerospace parts in a denser vertical footprint.

WHY IT FIT

A Familiar System For Added Capacity

The vertical carousel approach matched the need to store additional materials at the Northlake facility while reducing dependence on floor-level rack rows. The system also provided a familiar automated storage approach for increasing capacity within the available footprint.

OPERATIONAL IMPACT

Faster Access And Stronger Inventory Control

The installed system increased storage capacity, supported faster retrieval, and helped the team batch and kit parts faster. Inventory management software, spare parts, technical services, and ongoing support added resources for the automated storage system.

Staged Installation Around Active Manufacturing

The project was planned around an active manufacturing operation, so installation was spaced out to avoid interrupting daily production while ten 30-foot vertical carousels replaced rows of pallet rack. Southwest Solutions Group coordinated layout planning, power requirements, project documentation, equipment delivery, installation, and final training. The scope also included inventory management software, a spare parts package, technical services, and ongoing system support.

01

DISCOVERY & SITE SURVEY

Confirm Storage Goals And Site Conditions

Southwest Solutions Group reviewed the company's need to absorb aerospace parts from another facility and replace rows of pallet rack. Planning focused on storage capacity, access, available space, and requirements for the vertical carousel system.

02

LAYOUT, POWER & DATA PLAN

Plan Carousel Placement And Utilities

The layout accounted for ten 30-foot vertical carousel systems, service access, inventory management software, and required electrical service. The available plan view drawing supported equipment placement and project coordination.

03

SUBMITTALS & APPROVALS

Prepare Project Documentation

Project documentation defined the vertical carousel scope before installation. This step helped coordinate the work so the active manufacturing environment could continue operating during the planned installation sequence.

04

FABRICATION & DELIVERY

Coordinate Equipment For The Site

The vertical carousel equipment and related support items were coordinated for delivery to the Northlake facility. Sequencing supported the phased installation approach used to reduce disruption to daily production.

05

INSTALLATION & TRAINING

Install The System And Train The Team

Installation work was completed in phases so the facility could continue daily production. Training was completed at the end of the project for the new vertical carousel system.

06

MAINTENANCE & SUPPORT

Support The Installed Storage System

The project scope included a spare parts package, technical services, and ongoing support. These services gave the company post-installation resources for maintaining the vertical carousel system.

RESULTS

More Capacity, Faster Retrieval, And Better Inventory Control

The vertical carousel systems helped the company move from rows of pallet rack to a denser automated storage and retrieval system for aerospace parts. The project recovered space, increased storage capacity, improved retrieval, and supported better inventory accuracy.

PRIMARY OUTCOME

Increased Aerospace Parts Storage

The company gained additional storage capacity at the Northlake facility after another site was shut down. The vertical carousels replaced pallet rack and helped the facility hold more parts in a more controlled footprint.

WORKFLOW

Faster Retrieval, Batching, And Kitting

The project supported faster retrieval times and helped teammates batch and kit parts faster. Reducing ladder-based access also improved day-to-day handling for the stored materials addressed by the system.

ORGANIZATION

Improved Inventory Accuracy

The carousel system improved inventory visibility and supported better cycle counting. The team could identify minimums and maximums faster for ordering, which improved control over stored aerospace parts.

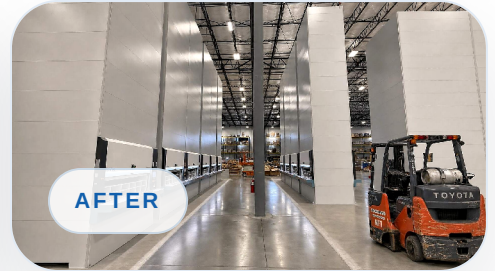
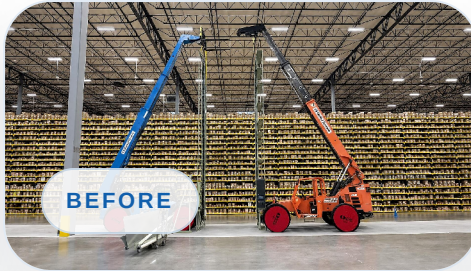
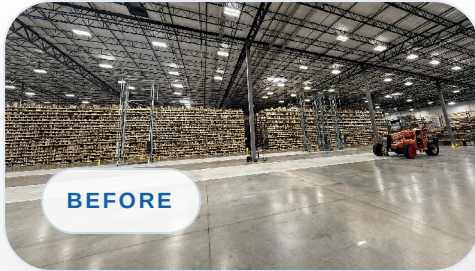
LONG-TERM VALUE

Recovered Space With Service Support

The project recovered space while increasing storage capacity, giving the facility a stronger platform for ongoing parts access. Inventory management software, spare parts, technical services, and ongoing support added long-term service value for the installed system.

Before And After Storage Transformation

Project images show the original pallet rack storage and the installed vertical carousel systems used to increase aerospace parts storage capacity.



READY TO SOLVE A SIMILAR PROBLEM?

Need To Store More Parts Without Expanding?

Southwest Solutions Group designs and installs storage systems that help manufacturing teams recover space, improve access, and organize inventory.

Talk with our team about vertical carousels, automated storage, and service support for your facility.