PROJECT SNAPSHOT

SOUTHWESTSOLUTIONSGROUP

Pilatus Business Aircraft Reduces Warehouse Storage Footprint by 85%

Pilatus Business Aircraft was moving warehouse storage into a newly constructed facility with less available space. Southwest Solutions Group replaced approximately 2,000 square feet of mezzanine racks and shelving with two 28-foot Kardex Remstar Vertical Lift Modules, reducing the storage footprint to approximately 240 square feet.

INDUSTRY

Industrial

Warehouse storage project for a business aircraft manufacturer.

LOCATION

Broomfield, CO

Completed for a newly constructed facility in the Denver metro area.

FACILITY TYPE

Warehouse

Storage area supporting inventory access, picking, stocking, and tracking.

SOLUTION

Automated Storage and Retrieval System

Two vertical lift modules replaced the previous mezzanine storage layout.

PRODUCTS USED

(2) 28' H Kardex Remstar Vertical Lift Modules with Power Pick Inventory Management Software

The system used available building height to consolidate inventory into high-density vertical storage.

OPERATIONAL GOAL

Reduce Warehouse Storage Footprint

The project focused on fitting warehouse storage into a smaller area while improving access, pick speed, inventory accuracy, and ergonomics.

THE PROBLEM

A Facility Move Reduced Available Warehouse Storage Space

Pilatus Business Aircraft was moving warehouse storage into a newly constructed facility with less room for inventory than the previous layout required. The existing operation relied on stationary shelving above and below a mezzanine, creating a space constraint and slowing parts picking as the warehouse prepared for the move.

01

Limited Warehouse Storage Space

The new facility had less room available for warehouse storage than the previous location. Pilatus Business Aircraft needed to fit inventory into the new floor plan without losing practical access to stored items.

02

Mezzanine Shelving Slowed Picking

The old storage area used stationary shelving above and below a mezzanine. Staff had to move through fixed shelving areas and use stairs, which was not efficient for picking speed.

03

Large Existing Storage Footprint

The prior mezzanine, racks, and shelving occupied approximately 2,000 square feet. That footprint was too large for the storage space available in the new warehouse.

THE SOLUTION

Kardex Remstar VLMs Replaced Mezzanine Storage

Southwest Solutions Group replaced approximately 2,000 square feet of mezzanine racks and shelving with two 28-foot Kardex Remstar Vertical Lift Modules and Power Pick inventory management software. The new facility's available height made automated vertical storage a practical fit, consolidating inventory upward instead of across a wide fixed-shelving footprint. Power Pick supported controlled inventory access and full tracking for picking, stocking, and accuracy.

WHAT WE INSTALLED

Two 28-Foot Kardex Remstar Vertical Lift Modules

The completed automated storage and retrieval system included two Kardex Remstar Vertical Lift Modules with Power Pick inventory management software. The VLMs replaced the former mezzanine racks and shelving with approximately 240 square feet of automated vertical storage.

WHY IT FIT

Facility Height Supported High-Density Vertical Storage

The new facility had enough height for 28-foot VLMs, allowing Pilatus Business Aircraft to store inventory vertically instead of across a large mezzanine footprint. This approach matched the smaller warehouse storage area created by the facility move.

OPERATIONAL IMPACT

Automated Retrieval Reduced Manual Travel

The VLMs reduced reliance on walking through stationary shelving and navigating stairs in the former mezzanine storage area. Power Pick added controlled inventory access and full software tracking to support faster retrieval, faster pick rates, and increased accuracy.

IMPLEMENTATION

Coordinating VLM Installation With the Facility Move

The project was tied to Pilatus Business Aircraft's move into a newly constructed facility, so the storage plan had to account for available height, reduced warehouse floor space, and the transition from mezzanine shelving to automated storage. Southwest Solutions Group coordinated two Kardex Remstar VLMs with Power Pick software around the move schedule. Installation ran from March 26, 2018, to April 13, 2018, with full customer acceptance approximately five months after purchase order issuance.

01 DISCOVERY & SITE SURVEY

Confirm the Storage Reduction Requirement

Southwest Solutions Group reviewed the facility move requirement, the smaller warehouse storage area, and the previous mezzanine footprint. The existing racks and shelving established the baseline for reducing storage from approximately 2,000 square feet into vertical equipment.

02 LAYOUT, POWER & DATA PLAN

Plan Around Height and Software Requirements

The layout centered on using the new facility's available height for two 28-foot Kardex Remstar VLMs. Planning also accounted for Power Pick inventory management software to support controlled access and inventory tracking.

03 SUBMITTALS & APPROVALS

Confirm the VLM and Software Scope

The approved scope included two Kardex Remstar Vertical Lift Modules with Power Pick inventory management software. Southwest Solutions Group kept the design tied to the storage footprint reduction goal and the facility move requirements.

04 FABRICATION & DELIVERY

Coordinate Equipment With New Facility Timing

The VLM equipment and software scope were coordinated around the new construction and move timing. This kept the warehouse storage project aligned with the transition from mezzanine shelving to automated vertical storage.

05 INSTALLATION & TRAINING

Install the Automated Storage and Retrieval System

Installation took place from March 26, 2018, to April 13, 2018. The completed system replaced the former mezzanine racks and shelving with two Kardex Remstar VLMs in the warehouse.

06 MAINTENANCE & SUPPORT

Support the System After Acceptance

The project reached full customer acceptance approximately five months after purchase order issuance. Pilatus Business Aircraft selected Southwest Solutions Group in part for its consultative system design approach and service guarantees after installation.

RESULTS

Compact Automated Storage With Faster Inventory Access

The Kardex VLM system helped Pilatus Business Aircraft replace mezzanine shelving with compact automated vertical storage. The project reduced the warehouse storage footprint by approximately 85% while supporting faster retrieval, faster pick rates, improved inventory accuracy, and better ergonomics.

PRIMARY OUTCOME

Warehouse Storage Footprint Reduced by 85%

Southwest Solutions Group replaced approximately 2,000 square feet of mezzanine racks and shelving with approximately 240 square feet of Kardex VLM storage. This allowed Pilatus Business Aircraft to fit warehouse inventory into the smaller storage area available at the new facility.

WORKFLOW

Faster Picking and Retrieval

The automated storage and retrieval system reduced reliance on walking through stationary shelving and navigating the former mezzanine layout. Documented project outcomes included faster retrieval times and faster pick rates.

ORGANIZATION

Improved Inventory Control

Power Pick inventory management software helped control access to inventory and provide full software tracking. This supported increased inventory accuracy compared with the previous stationary shelving arrangement.

LONG-TERM VALUE

More Usable Floor Space and Better Ergonomics

Replacing the mezzanine storage area eliminated stair travel from the previous storage process. The smaller automated storage footprint also preserved more usable warehouse floor space in the new facility.

PROJECT PHOTOS

Before and After Mezzanine Storage Replacement

Project photos show the previous mezzanine shelving layout and the completed Kardex Remstar Vertical Lift Modules installed in the warehouse.

READY TO SOLVE A SIMILAR PROBLEM?

Need to Reduce Warehouse Storage Space Without Losing Access?

Southwest Solutions Group helps warehouse teams evaluate storage layouts, available building height, inventory access needs, and picking workflows.

If a facility move, expansion, or storage constraint requires a smaller footprint, our team can help determine whether an automated storage and retrieval system is a practical fit.