

Aerospace Manufacturer Improves Material Handling with Material Lifts

Southwest Solutions Group installed three vertical reciprocating conveyors, also known as material lifts, for a leading aerospace manufacturer. The system created a faster way to move materials between the production floor and the second level.

INDUSTRY

Industrial

Completed for an aerospace manufacturing facility with high-volume material handling needs.

LOCATION

Bastrop, Texas

Completed for a new facility in the Austin area while construction activity was still underway.

FACILITY TYPE

New Warehouse

Installed in a new manufacturing warehouse during facility construction.

SOLUTION

Material Lift System

Three material lifts created a faster way to move materials between production levels.

PRODUCTS USED

Material Lifts & Vertical Reciprocating Conveyors

Vertical reciprocating conveyors moved materials between production levels.

OPERATIONAL GOAL

Faster Material Retrieval

Improve material handling while reducing walking and forklift travel between production levels.

THE PROBLEM

Material Handling Between Production Levels Needed Improvement

A leading aerospace manufacturer needed a faster way to move materials and equipment between production levels inside a new warehouse. The layout also required separate lift access for high-priority and standard production areas.



BEFORE

01

Two Production Zones

The production floor needed to be divided into two areas with different material handling requirements. One zone needed two side-by-side lifts, while the other needed one lift for lower-priority equipment access.

02

Second-Level Material Access

Materials and equipment had to move from the lower production floor to the finished second level. Traditional freight elevator routes required more walking and forklift travel.

03

Active Construction Site

The warehouse was still under construction while Southwest Solutions Group worked around other trades onsite. The material lift installation had to coordinate with concrete pit preparation and second-floor openings at each lift location.

THE SOLUTION

Three Material Lifts Improved Material Handling

Southwest Solutions Group installed three vertical reciprocating conveyors, or material lifts, for a new aerospace manufacturing warehouse. Two lifts served a high-priority production area, while a third supported a separate work zone.



WHAT WE INSTALLED

Three Material Lift Locations

The system included three material lifts positioned to move materials between production levels while supporting separate work areas.

WHY IT FIT

Built Around the Facility Layout

The customer's concrete team prepared pits so the VRC platforms could drop level with the finished floor for loading and unloading. Openings were also left in the second level so the lifts could extend through the floor at each required location.

OPERATIONAL IMPACT

Faster Material Handling Between Floors

The material lifts created a direct vertical material path between levels rather than routing movement through traditional freight elevators. That approach supported faster retrieval, improved workflow, reduced walking, and less fork truck travel.

Fast-Track Material Lift Installation

Southwest Solutions Group began design work in late 2025 and moved the three material lifts through production, delivery, onsite coordination, and installation by the end of May 2026. Because the warehouse was still under construction, the team had to align lift locations, pit preparation, and second-floor openings with other trades working in the building while keeping the material movement plan intact.

01

DISCOVERY & SITE SURVEY

Defined The Two Lift Zones

SSG reviewed the two production floor areas and confirmed where vertical material access was needed. The plan separated the high-priority area with two side-by-side VRCs from the lower-priority area served by one VRC.

02

LAYOUT & EQUIPMENT PLANNING

Coordinated Pits And Floor Openings

The layout accounted for pit-mounted platforms at the lower level and openings in the finished second floor. This planning aligned the lift locations with the warehouse construction work already in progress.

03

SUBMITTALS & APPROVALS

Advanced The Three-Unit Scope

SSG moved the design and project documentation forward to keep the fast-tracked material lift installation on path. The process helped coordinate lift installation requirements with the facility construction work.

04

FABRICATION & DELIVERY

Moved VRC Units Through Production

The three material lifts were produced and brought onsite for installation. Delivery and staging had to account for an active warehouse build with other trades working in the same environment.

05

INSTALLATION

Installed Lifts In Prepared Locations

Local technicians installed the VRCs in the prepared pit locations and through the second-floor openings. The finished work created dedicated vertical access points for material movement.

06

ONGOING SUPPORT

Provided Local Post-Install Support

SSG's local ability to support the customer after installation was one reason the team was selected. That service presence gives the customer a nearby resource for the installed VRC systems.

RESULTS

Material Lifts Improved Material Handling

The completed material lift system gave the customer faster movement between production levels while reducing walking and forklift travel.

PRIMARY OUTCOME

Faster Material Handling

The main result was faster retrieval for production materials moving to the second floor. The three VRCs gave production areas direct lift access at the points where vertical material movement was needed.

WORKFLOW

Reduced Walking And Fork Truck Travel

By placing material lifts in the production floor zones, the customer reduced reliance on traditional freight elevator routes. This improved workflow by shortening the path for material movement between levels.

ORGANIZATION

Lift Access Separated By Priority Area

The layout gave The production floor two defined VRC-served areas. The high-priority zone received two side-by-side lifts, while the separate lower-priority area received one dedicated lift.

LONG-TERM VALUE

Built-In Vertical Access For A New Facility

Because the pits and second-floor openings were planned during construction, the lift system became part of the warehouse material movement plan. The installation supports ongoing long-term manufacturing operations with local post-install support from Southwest Solutions Group.

Material Lift Installation Gallery

These photos show the warehouse during construction and the completed material lift installation.



READY TO SOLVE A SIMILAR PROBLEM?

Need a Better Way to Move Materials Between Floors?

Southwest Solutions Group designs and installs material lifts and material handling systems that improve workflow between production levels.

Talk with our team about material lifts, vertical reciprocating conveyors, and custom material handling solutions.