

CASE STUDY



Shipping and Receiving Platform Optimization

Neuco's Bolingbrook, Illinois facility was experiencing increasing strain in both its shipping and receiving operations as volumes continued to grow. The Large Order Land shipping area had become crowded with floor mounted conveyor supports that limited usable floor space and complicated routine maintenance. On the receiving side, pallet drop and staging activities were occurring within the same constrained areas as downstream material handling equipment, making it harder to maintain clear workflow and operational visibility.

LD Systems evaluated the layout and operational constraints across both areas and engineered structural platform and mezzanine solutions that reclaimed floor space, improved equipment access, and created a more organized material flow from receiving through shipping.

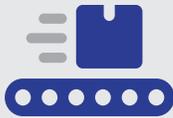
The Client

Neuco is a leading distributor of HVACR parts and equipment, supplying contractors and service professionals throughout North America. Its distribution operations support thousands of replacement parts and systems that require efficient inventory management and reliable order fulfillment.

Results Snapshot



Reclaimed valuable floor space



Reduced reliance on cluttered floor mounted conveyor supports



Improved equipment access



Receiving mezzanine with organized pallet drop

THE CHALLENGE

Neuco's Bolingbrook facility was experiencing growing operational pressure in both its shipping and receiving areas as volumes continued to increase.

The Large Order Land shipping area had become congested with conveyor supports that reduced usable floor space.

Numerous floor mounted conveyor stands occupied valuable space across the shipping area. This crowded layout restricted equipment access, complicated maintenance work, and made the area more difficult for operators to navigate.

Receiving operations lacked a dedicated structure for pallet drop and staging.

Without an organized mezzanine platform, pallet receiving and staging activities occurred in less structured areas. This limited process visibility and slowed the movement of product into downstream conveyor systems.

Material flow and operational organization were becoming harder to manage.

Operators, equipment, product, empty cartons, and waste materials often moved through the same constrained areas, creating congestion and reducing overall efficiency.

Any improvements had to work within the constraints of the existing building.

The solution needed to reclaim usable space, improve access and workflow, and enhance safety while respecting building load limits and minimizing the need for new foundations or major structural modifications.

RESULTS

- Reclaimed valuable floor space in the Large Order Land shipping area
- Reduced reliance on cluttered floor mounted conveyor supports
- Improved equipment access for operators and maintenance teams
- Created a dedicated receiving mezzanine with organized pallet drop locations

THE SOLUTION

01



Operations Review

LD Systems reviewed Neuco's shipping and receiving operations to identify the primary constraints affecting space utilization, equipment accessibility, and material flow throughout the facility.

02



Layout and Design

Based on this analysis, LD Systems developed a structural platform solution for the Large Order Land shipping area and a mezzanine based receiving platform that reorganized floor space and improved operational visibility.

03



Equipment Selection and Installation

The project included installation of elevated platform structures, mezzanine systems, conveyors, vertical pallet lifts, and safety systems designed to integrate with Neuco's existing material handling equipment.

04



Project Management

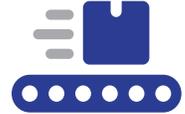
LD Systems coordinated engineering, installation, and system integration to ensure the new structures were implemented efficiently while minimizing disruption to day to day operations.

ENGINEERING THE SOLUTION

Elevated Platform for Large Order Land

LD Systems installed an elevated work platform positioned between the existing shipping mezzanine and the staging platform in the Large Order Land shipping area.

By relocating conveyor supports onto the new platform structure, most floor mounted conveyor stands were removed. This reclaimed valuable operational floor space and significantly improved access around the equipment for both operators and maintenance personnel.



The platform incorporates bar grating decking and integrated catwalk access at diverter conveyors. The open grating design allows dust and debris to fall through the structure, helping maintain cleaner work areas while improving service access.

The structure was designed to utilize the existing factory floor capacity, eliminating the need for new concrete footings or major structural changes.

Receiving Mezzanine and Material Flow

LD Systems designed and installed a structural mezzanine system that created a dedicated receiving platform for pallet drop and staging.

Multiple pallet drop locations were installed along the mezzanine and protected by safety gates to improve operator safety. Pallets are staged in clearly numbered positions before entering downstream conveyor systems.

The system integrates MDR and ECC conveyors, vertical pallet lifts, controls, electrical systems, guarding, stairs, and handrails to create a fully functional receiving environment.

Dedicated zones were also established for product handling, empty carton management, and waste removal, improving organization and overall process visibility throughout receiving operations.



CONCLUSION

The improvements at Neuco's Bolingbrook facility created a safer and more organized environment across both shipping and receiving operations.

By introducing elevated platforms and structural mezzanines, LD Systems reclaimed valuable floor space, improved access for operators and maintenance teams, and established clearer material flow paths throughout the facility.

These upgrades reduced reliance on crowded floor mounted conveyor supports, improved day to day operational visibility, and positioned Neuco's facility to support higher throughput with greater efficiency.



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