

Industry Brochure

# Intralogistics Solutions for Manufacturing



**kardex**

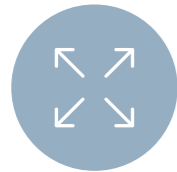


# Industry challenges

**A break in production supply can cause serious repercussions for manufacturing warehouses. Given this type of pressure, how can businesses meet 24/7 demands without impacting costs or jeopardizing regulatory compliance measures?**

Manufacturing warehouses share common needs: scalable space, seamless processes, guaranteed traceability and a reliable supply of goods. It is alarming the number of mishaps that can occur when working with raw materials, sensitive items, semi-finished parts and heavy loads. This can be even further complicated when factoring in current demands such as the increasing use of mixed pallets, individual cases, customization and delivery expectations. Growth, although a goal, is also another challenge. It is not easy to achieve if the warehouse is missing the necessary production space and has low productivity rates.

Long walking distances and search times, damaged and dirty inventory, excessive costs or unergonomic working conditions impact industrial manufacturing and have a negative effect on the overall focus of a reliable production supply. Without rethinking intralogistics and incorporating modern technology, it is difficult to overcome these challenges, and grow sustainably.



Squeeze more storage out of an already compromised space



Heavy lifting and long search times for workers



Poor traceability and unreliable operations





# Smart intralogistics

Based on decades of hands-on experience partnering with warehouses world-wide, Kardex understands how to use automation to strengthen warehouse intralogistics and help companies stay a step ahead of the competition. Kardex's automated solutions are fast, reliable and designed to meet unique industry-specific challenges.

## Why automate?

Automation enables growth by providing efficient processes and minimizing storage space. Kardex solutions offer just-in-time material flow, minimize search and travel times and support a reliable production supply. By utilizing a facility's entire height or width and incorporating results-oriented features such as automated buffer storage, they provide the necessary tools to succeed and grow. With automated solutions from Kardex, manufacturers have full control over inventory and avoid running out of stock.

Automation caters to unique requirements such as managing hazardous materials, semi-finished parts, heavy and bulky loads and sensitive goods. With ergonomics as a priority, automated goods-to-person storage and retrieval systems deliver items to the "Golden Zone" keeping workers safe. With Kardex as an industry partner, technology and software come from a single source.

**85%**  
less space  
required

**Just-in-time**  
production  
supply

**99%**  
accuracy  
rates

## Automation allows space to grow

USNR is a United States based OEM manufacturer supplying wood processing companies around the globe. To keep up with its growing business, USNR turned to Kardex to implement a more efficient and automated process.

Completed in multiple phases, the team first installed two Kardex Shuttles which store approximately 2,500 SKUs for customer orders, spare part orders and transfer orders. A third Kardex Shuttle was installed to serve as a stand-alone tool room utilizing the entire floor to ceiling height of the facility. Lastly, a fourth Kardex Shuttle stores raw materials and fixtures using a manual extraction table to make storage and retrieval easy and ergonomic.

### Customer benefits



Recovered 92%  
floor space



Improved ergonomics  
& saved 53% labor staff





# Automated pallet storage solution transforms processes for semi-picked tool sets

After successfully utilizing 20 automated storage and retrieval solutions over the years, ABB Switzerland once again turned to Kardex. The company was experiencing significant space and maneuvering difficulties caused from assembly sets that were not yet fully picked.

Two Vertical Lift Module Kardex Shuttle 1000 units were installed to provide space-saving storage for pallets with double frames. At 9-meters high, the Kardex Shuttle 1000s optimize the entire facility space. ABB Switzerland can now fit 58 pallets within a footprint of only 18.94m<sup>2</sup> and ensures an on-time delivery.

### Customer benefits



Eliminated bottlenecks



Optimized space



# Sustainable expansion during ongoing operations

Procter & Gamble is a United States consumer products company represented in 70 countries. After Procter & Gamble's distribution center in Marktheidenfeld-Altfeld, Germany reached its capacity limits, Kardex Mlog was hired to extend the facility and serve as a general contractor. Kardex Mlog created 38,700 additional pallets storage spaces by doubling the number of rack aisles from 8 to 16.

The modifications were carried out during ongoing operations. To store the goods on the lower floor and retrieve them on the middle floor, the new conveyor system extends over three different levels. Extensive sensor and control technology was implemented in the SRMs and the conveying system.

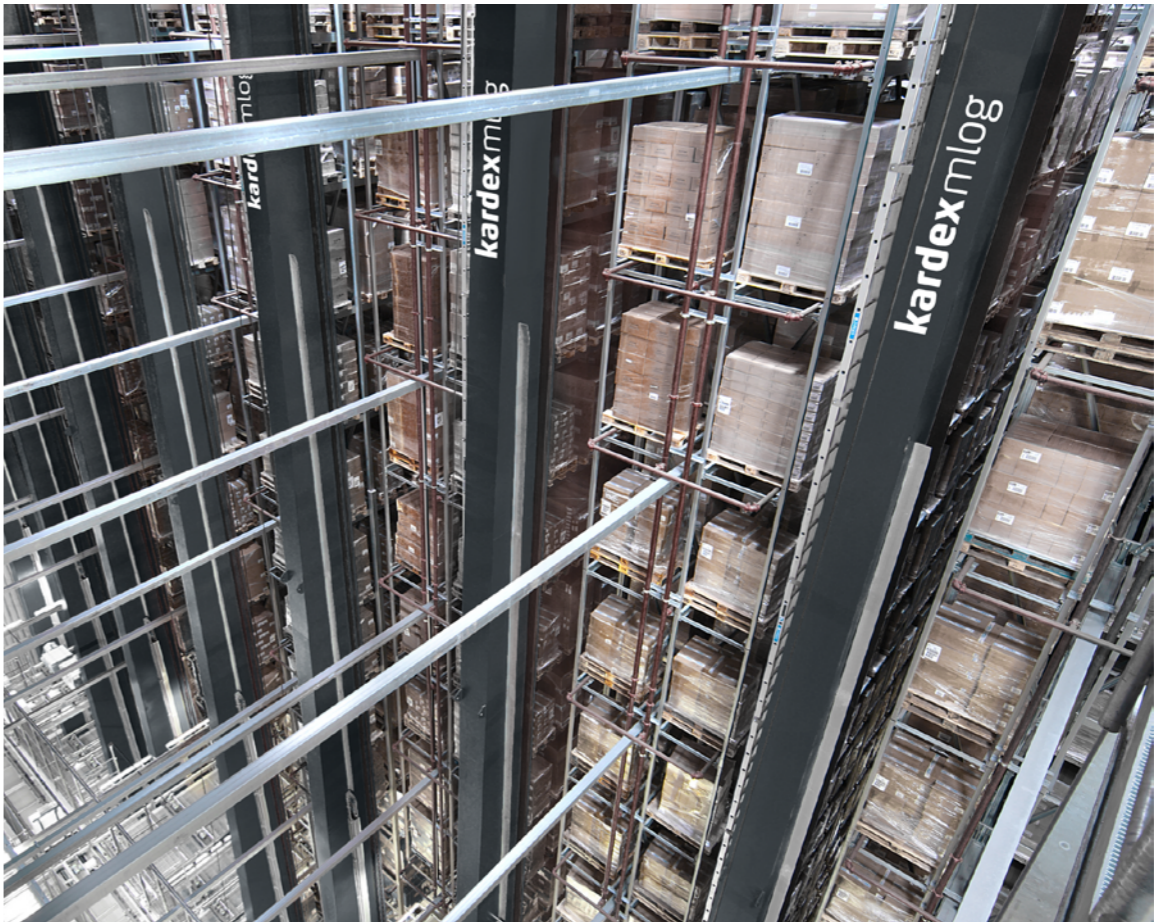
### Customer benefits



Doubled number of rack-aisle – added 38.700 pallet spaces



Achieved 24 double cycles per hour



# Industry expertise

Kardex is a global industry partner offering customized intralogistics solutions for individual requirements across various industries. Based on decades of working with small to large-scale businesses in every corner of the globe, we have seen first-hand how every industry has its own unique challenges and demands when it comes to warehouse and plant operations.



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Retail/  
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Furniture



Mechanical  
Engineering



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Energy/Mining



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Electronics



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and Service



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