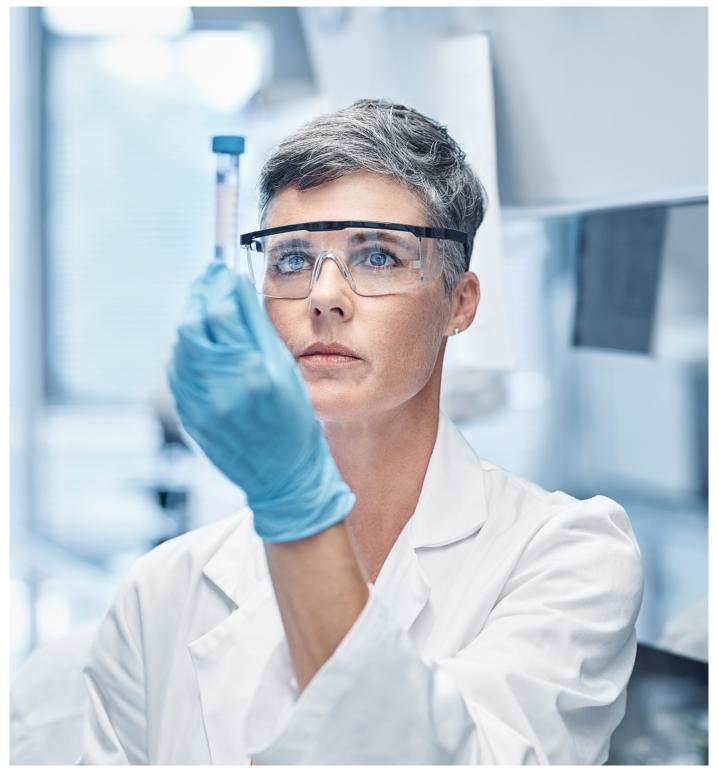
Intralogistics Solutions for Pharmaceuticals



Industry challenges

Pharmaceutical product storage requires the highest standards and places extreme demands on hygiene and process reliability. Quality assurance plays a central role because every mistake has a direct impact on a consumer's health.

Pharmaceutical companies have always faced strict guidelines and required unique facility conditions, but these challenges are becoming even more complicated by current circumstances. Unprecedented pressure from the global pandemic combined with regulatory scrutiny and labor shortages are the tip of the iceberg for an already complex industry.

It is essential to fully understand and comply with the guidelines set forth by the GXP, GDP, GAMP 5 and the FDA. Inventory errors, expired products, uncontrolled temperatures and poor worker ergonomics are out of the question. However, this is much easier said than done and warehouse managers are often puzzled by the precise requirements involved in pharmaceutical storage.



How to ensure a continuous accountability along the entire process chain



How to adhere defined storage environment conditions



How to validate all process steps including the steps at the suppliers and the used technical equipment



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?

Automated solutions from Kardex mitigate specific challenges faced by the pharmaceutical industry. They maximizes space, reduce errors and provide full traceability. They also cater to special environments such as climate control, humidity control and clean room hygiene standards.

It is critical to work with an intralogistics partner familiar with industry regulations who can provide scalable and flexible solutions when implementing automation. With Kardex as an industry partner, technology and software come from a single source. This significantly simplifies validation processes. Perhaps a warehouse requires conveying technology, intermediate storage or access to a deep-freeze unit from a room temperature area. Kardex will customize a solution to meet individual needs.

Continuous track and trace Ensure
hygiene
regulations

Compact storage and use of space

Merck – A customized solution saves 60% floor space

Merck is a leading science and technology company in the pharmaceutical and chemical industry. They partnered with Kardex to help with a newly constructed research center in Germany. Merck wanted to create a cool and deep-freeze storage area that was accessible from a room-temperature area.

Kardex installed a customized solution that includes three standard Vertical Lift Module Kardex Shuttles modified for chilled conditions. Laser pointers and position indicators show an item's exact position. In addition, the solution contains a refrigeration unit, a back-up cooling unit, and a drying device to prevent humidity.

Customer benefits



60% reduction in floor space



Improved ergonomics for plant workers



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Fresenius Kabi – New conveying technology connects three floors

To enable further growth, the global healthcare company, Fresenius Kabi, decided to extend its logistics center in Friedberg, Germany. The company wanted to connect several halls with a new picking area and construct an additional floor.

Fresenius Kabi assigned Kardex three main tasks: install a new conveying system capable of reaching all floors and areas including the control system; adapt the existing visualization system and integrate these new enhancements with the existing warehouse management software and material flow system.

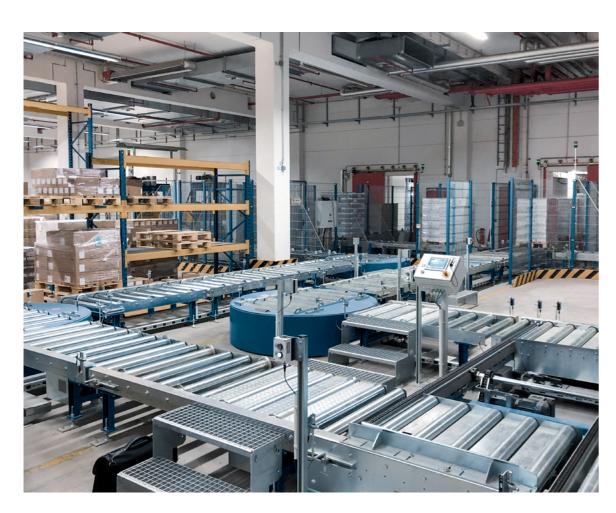
Customer benefits



Significantly increased throughput



Automated material flow



Böhringer Ingelheim – Highly efficient storage in clean room conditions

Boehringer Ingelheim MicroParts GmbH, a German manufacturer of inhalation devices, commissioned Kardex to construct a clean room warehouse with approximately 1,800 storage spaces between its production center and high-bay warehouse. In the new Kardex MTower warehouse the storage and retrieval is created so that the loading units are carried out by a vertically operated transfer beam on which a shuttle car moves horizontally. The loading units are picked up by a telescopic fork built onto the shuttle car.

The new conveying and racking technology is easy to clean. It is made of silicone-free materials and stainless steel and forms smooth, tapered surfaces.

Customer benefits



Clean room facility with 1,800 storage spaces



Highly efficient automated storage and retrieval



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.



Automotive and Transportation Equipment



Chemicals



Healthcare/ Hospitals



Wholesale/ Retail/ E-Commerce



Food and Beverage



Kitchen/Wood/ Furniture



Mechanical Engineering



Consumer Goods



Energy/Mining



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Electronics



Pharmaceuticals



Administration and Service



Third-Party Logistics/ Transportation



Public Administration and Government