



**NEW  
GENERATION!**  
High-Performance  
System Upgrade

# Miniload Systems

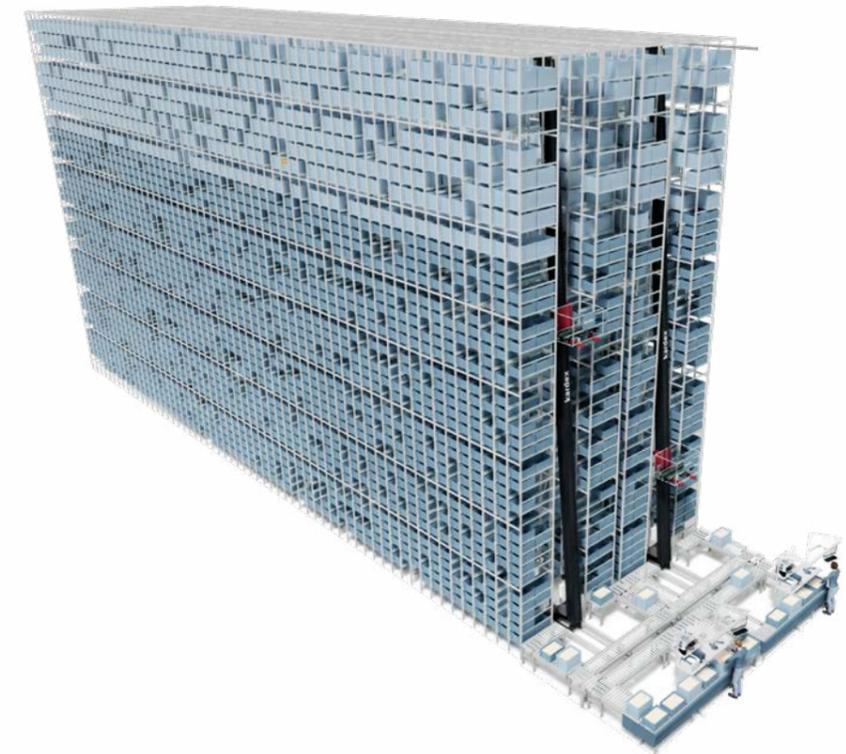
with Stacker Cranes

# Miniload system with stacker cranes

As a general contractor and manufacturer of automated material flow and storage systems for more than 50 years, Kardex Mlog has been a reliable partner for numerous global market leaders in diverse industries. Together with our customers, we use standardized components to develop customized system solutions used daily worldwide.

The optimal performance and efficiency of a warehouse depends primarily on having the right storage solutions. The design and realization of integrated automation solutions for material flow and storage processes are key components of the core business. To date, we have installed more than 1,000 storage systems of various designs. The miniload systems, with up to 20-meter-high stacker cranes, enable single or multiple-deep storage. Diverse load handling devices can be deployed, depending on the requirements in each case. The overall system offers efficient and optimal storage of bins, carons, or trays. It guarantees highly dynamic handling of load units of up to 50 kg each. The flexibility of the solutions, which can be extended and modified, guarantees long-term security of investment.

As a reliable partner, Kardex Mlog provides advisory support to its customers during each project phase. The relevant parameters are considered during planning, ensuring that the project runs smoothly.



## Proven application cases

### Wide range of products with guaranteed availability of goods

Guaranteed availability of goods coupled with reliable staging are critical elements for assembly and production. The deployment of supply strategies such as Kanban or one-piece flow combined with real-time transparency enables the company to significantly reduce inventories.

### Compact storage with short staging periods

Guaranteed supply capability is a crucial success factor for companies in trade and industry. Goods ready for shipping must be staged correctly and at short notice. Flexible material flow solutions can meet the various requirements placed on the storage system, such as a wide range of slow-moving items, peak loads during the year, and effective returns handling.

### Exchange of stacker cranes to increase performance

Replacing aging stacker cranes improves the performance of miniload systems. New generations enable higher dynamics, optimized energy use, and improved system availability. At the same time, maintenance intensity and failure risks are reduced, which permanently increases system availability.

# Key components

As a general contractor for automated material flow and warehouse systems, Kardex Mlog provides all services and components from a single source. Our core competencies include planning, project management, execution and realization, and system adjustments to the plant during ongoing operations. Especially in small parts handling, with goods to-person picking and the resulting numerous contact points between picker and system, coordinated and customer-specific system designs are an important factor.



## Kardex Control Center

- Warehouse management software, compatible with all common IT systems
- Storage strategy, material flow control, energy management, plant visualization, intuitive dashboard & report evaluations, picking dialogs



## Workstations

- Application-specific and ergonomic design
- Best-practice solutions for picking, returns, formation of shipping units, etc.



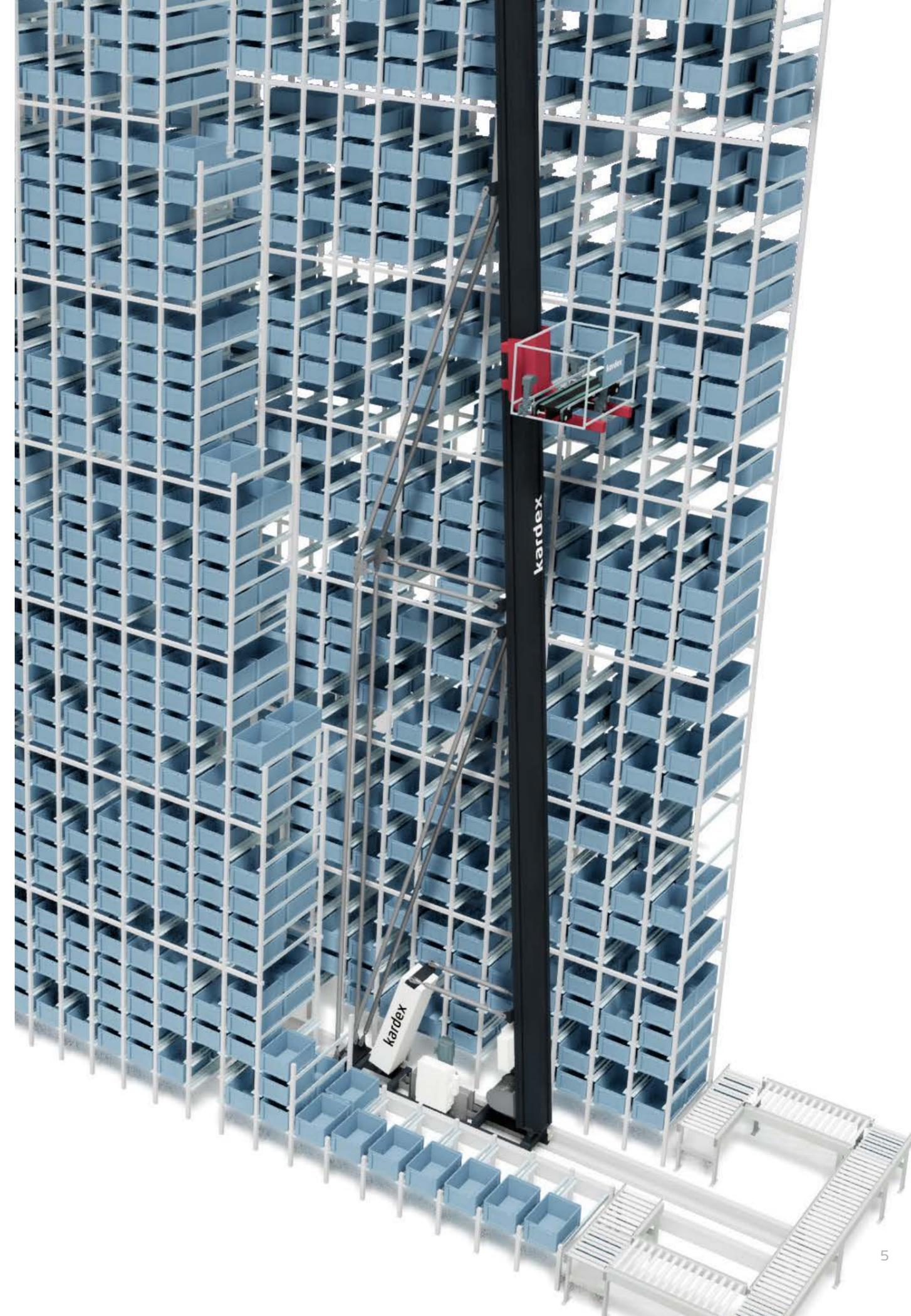
## Conveying technology

- Transportation and distribution of bins, trays, and cartons
- Customized layouts – Connection to logistical areas



## Stacker cranes and load handling devices

- Construction heights up to 20m, single or double-deep storage
- Deployment of diverse and multiple load handling devices possible



# Supplementary functions & services

Intralogistics solutions from Kardex Mlog are developed as integrated solutions for plant internal material flows. Extensive process chains or sections of these chains can be mapped. Depending on the application case, the core technologies are supplemented with additional applications.



## Internal transport

- Automated guided vehicles and tugger trains for supplying other areas of the company
- Applications dependent on the transport distance and frequency and on the flexibility requirements with regard to route and transfer points



## Integrated pick and pack process

- Picking robots for bin picking
- Packing process with carton erectors, carton sealers, volume reduction
- Intuitive Picking Assistant (IPA)



## Life Cycle Service

- Extensive portfolio to assure plant availability
- Refurbishment and extension of miniload systems during ongoing operations



## Miniload systems with stacker cranes from Kardex Mlog

We aim to provide each customer with the right solution for their needs. For this reason, it is essential that we clearly understand the details of the task and the customer-specific challenges in each case. When developing the solution, we rely on a portfolio of established system solutions, which we can supplement with customized adaptations. In our relationship with customers, delivery reliability and transparency are at the forefront, making us a reliable partner for our customers in all intralogistics topics.

The requirements placed on logistics plants can change over time. Our extensive and cross industry process knowledge and the constant development of new technologies enable us to provide the best possible support during the development phases. We combine diverse technologies and we integrate innovative, complete intralogistics solutions. With our Life Cycle Service, we ensure your plant's availability and future viability.

# Smart Intralogistics Solutions

Kardex offers an A-Z product portfolio targeting the niche needs of various industries. Discover innovative offers ranging from everyday handling of bins and pallets or storage in controlled environments to fully-integrated automated storage solutions and material handling systems. From day one, the Life Cycle Service team works hand-in-hand to support your project implementation, maintenance and future plans.

