

AutoStore[™] empowered by Kardex

As a global AutoStore partner, Kardex offers the fastest order fulfillment system per square foot on the market. Applicable across multiple industries and able to handle any kind of small parts, AutoStore solutions from Kardex are redefining warehouse operations.

AutoStore systems are operated by battery-powered robots that move on an aluminum cubic grid. Within this grid, storage bins are stacked on top of each other. The autonomous high-speed robots continuously pick up the bins, rearrange them and deliver them to the directly connected workstations for order picking and replenishment. Thanks to the modular construction principle, AutoStore systems can easily expand without impacting ongoing operations. The extremely flexible grid system optimizes storage density to its maximum, enabling the inventory to be quadrupled in the same space compared to conventional systems. With a global average availability of 99.6%, AutoStore is the most efficient and reliable storage system in the world.

Kardex's innovation enhances AutoStore functionality with tools like the Intuitive Picking Assistant (IPA) and Kardex FulfillX software. These innovations highlight Kardex's commitment to providing efficient, cutting-edge AutoStore solutions.

Maximum space utilization

Future proof & scalable Fastest order fulfillment



Application range

E-commerce order fulfillment

From same day delivery demands to customized products and stress-free returns, many e-commerce providers struggle to keep up with today's customer expectations. With this in mind, tailor-made AutoStore solutions from Kardex offer several features to help e-commerce companies successfully grow while maintaining a competitive edge.

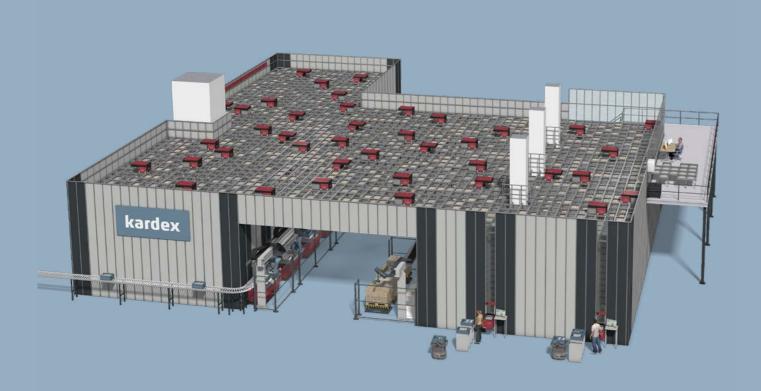
Just-in-time supply of production lines

As customer requirements continue to change at a minute's notice, companies need to keep a steady growing range of parts in stock. AutoStore supplies just-in-time production lines with parts that are stored in the densest possible way.

Micro-fulfillment solutions

Whether you operate in the backroom of a store, the center of a store or a small corner of a warehouse, AutoStore is compact enough to fit almost anywhere. Due to high-density storage, the in-store product assortment can be expanded, while providing an engaging customer experience.

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Bin dimensions and loads

Outside dimension (l × w)	649 mm × 449 mm 25.6 in × 17.7 in
Inside dimension (l × w)	603mm × 403mm 23.7 in × 15.9 in
Max. load capacity	30 kg 66.1 lbs

Bins are available in the following three heights

Outside	425mm / 330mm / 220mm 16.7 in / 13 in / 8.7 in
Inside	404 mm / 312 mm / 202 mm 15.9 in / 12.3 in / 8 in
Max. stack	 14 bins / 16 bins / 24 bins



Components



Bins

- Made of either polyethylene (HDPE) or anti-static ESD
- Lengthwise and crosswise bin dividers can maximize capacity



Grid

- Bins are stacked vertically in the grid and retrieved by robots
- Grid can be installed to fit any warehouse size and shape



Robots

- Operate 24/7 regardless of lighting & recharge automatically
- If one robot breaks down, another one takes over its tasks



Ports (workstations)

- Various port options available based on functionality and required throughput – the FusionPort boasts up to 550 bin presentations per hour
- Switch between picking & replenishing at the push of a button



Controller

- Command center, traffic control & database management
- Connects the network to the customer's infrastructure

5

Complementary technology

Kardex can install AutoStore either as a stand-alone solution or integrated into an overall logistics concept. By pushing warehouse automation to its limits, order fulfillment will see significant cost savings and enhanced performance.



Conveyor technology

- AutoStore ports can be linked directly to conveyor systems
- Smooth transition to sub-systems (e.g., carton erectors & sealers, labelers, palletizers, AGVs and AMRs)



Pick and place robotics

- AutoStore ports can be operated by integrated robots
- Robots work with various processes including pick-to-tote, pick-to-belt, pick-to-pallet, consolidation and replenishment



Software

- Modular and customized software solutions
- Integrate into existing process environments or serve as superior control software

Kardex solutions to enhance performance

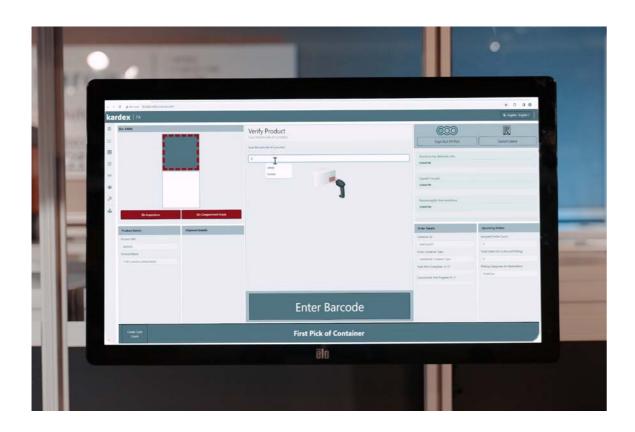
At Kardex, our focus on innovation is key to enhancing AutoStore performance and transforming the order fulfillment experience. By innovating and integrating cutting-edge tools like the Intuitive Picking Assistant (IPA) and Kardex FulfillX, we streamline warehouse operations, reduce picking errors, and boost operational efficiency.

These innovations demonstrate our commitment to providing clients with the most advanced and efficient solutions in the industry.



Intuitive Picking Assistant

- Guides operators through picking tasks by visually indicating pick location and displaying order information onto the port
- Recognizes hand movement to prevent picking errors
- Accelerates picking process, reduces picking errors, and creates an ergonomic environment



Kardex FulfillX Software

- Warehouse execution system that leverages advanced algorithms to optimize workflows, ensuring faster and more accurate order fulfillment
- Highly configurable software to optimize AutoStore robots, operators, inventory accuracy and flexibility to meet your business requirements now and in the future

Sensor Cleaning Station

- Affixed to the top of the grid, it utilizes compressed air to automatically remove dust and debris from AutoStore robot sensors as the robot positions itself over top of the station
- The net cleaning time is only 1-2 seconds per robot
- Routine, automated cleaning reduces the chance of the robots malfunctioning, resulting in less downtime



Testimonial

Kardex drastically improved MAHLE Aftermarket's distribution operations by implementing the AutoStore solution, enabling the company to store the same amount of product in a significantly reduced footprint.

"We chose Kardex for our AutoStore implementation because we were looking for an experienced partner with innovative strengths, intense customer focus, collaboration and a solid global presence with the ability to provide superior service coverage,"

Georges Mourad, Director Global Operations and Business Excellence Aftermarket at MAHLF



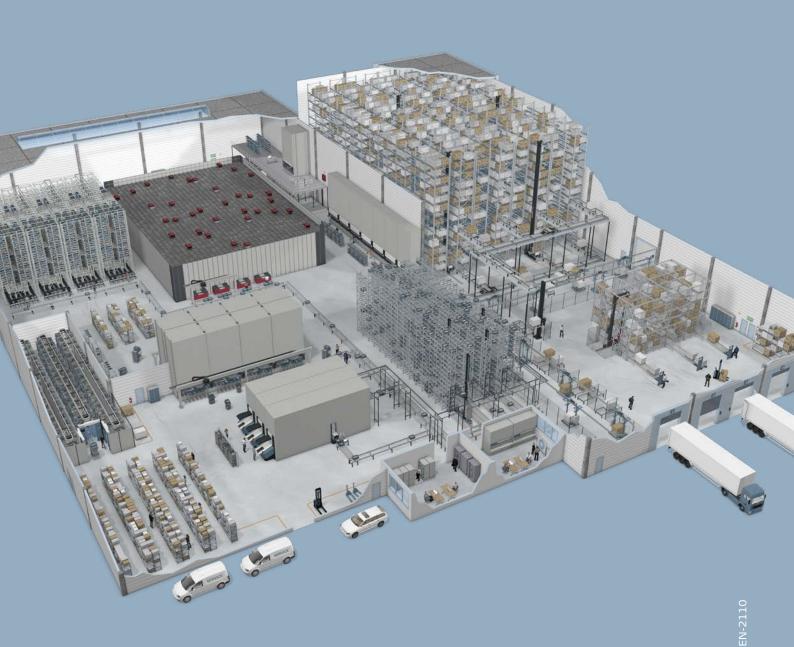
Why partner with Kardex?

The right partner can help you navigate the automation journey to meet and exceed your goals. Kardex has a dedicated team with many years of experience in planning and implementing tailor-made AutoStore solutions within a wide range of industries. Our aim is to take everything into account – combining different technologies and providing complete, integrated, and cutting-edge intralogistics solutions from a single source.

We have dedicated project managers committed to working side by side with you through system concept, design, and installation. Our team will also be onsite during the installation and ramp up phase to ensure a smooth transition for you and your team. Using our extensive nationwide service and support network, you will be fully supported throughout the lifecycle of your AutoStore system, even in the most remote location. We are always close to you – worldwide.

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.



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