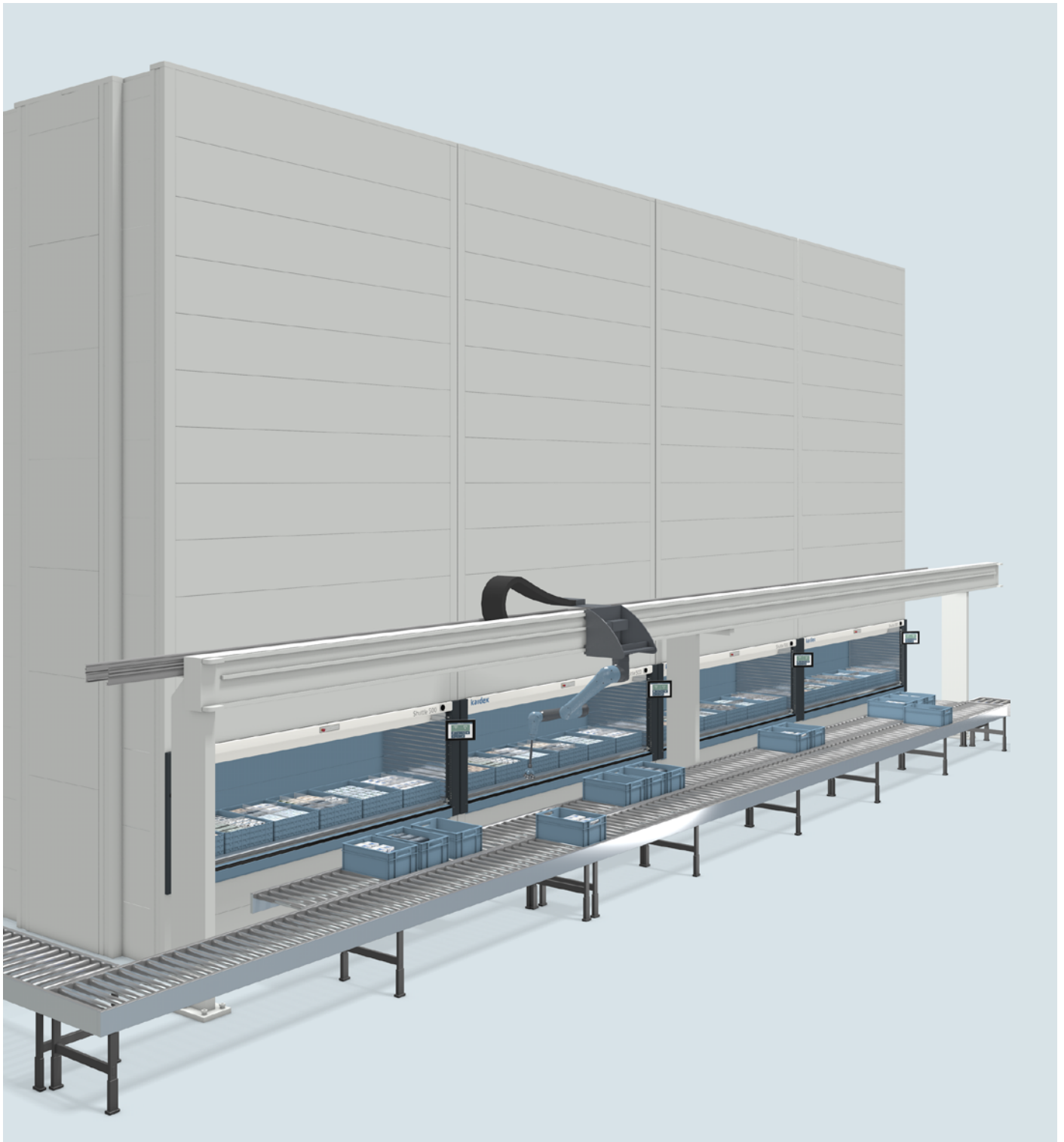
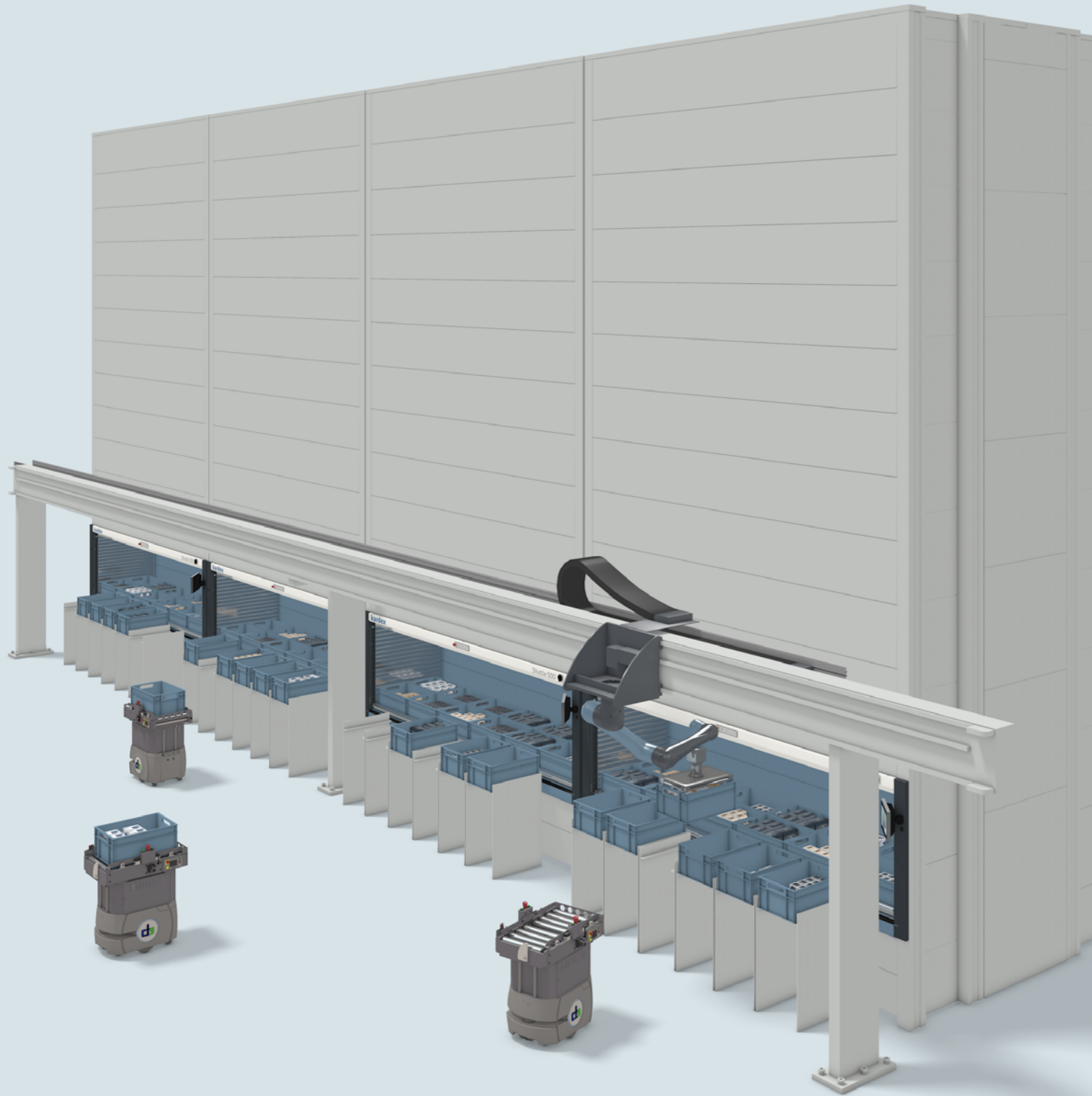


Solution Guide

# Revolutionize Order Fulfillment





# Surpass competitors with fast order picking

**Retail and e-commerce companies managing a high number of SKUs are utilizing modern technology to set new customer standards. Yesterday's intralogistics solutions are simply not sophisticated enough to match today's demands.**

Companies need solutions that deliver fast and reliable results without a hefty price tag. To achieve this, they should consider replacing manual order picking and replenishment with modern technologies while working with an intralogistics partner that understands the retail and e-commerce market. A partner who can deliver transparent, fast and scalable intralogistics.

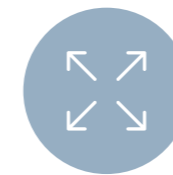
Benefit from a fully-automated picking process – the [Vertical Lift Module \(VLM\) Kardex Shuttle](#) in combination with a [pick and place robotics solution](#). In cooperation with robotics experts, such as Robomotive, Kardex provides customers with an extreme advantage by integrating robots that pick, process and place single items and full cases to and from any picking stations and storage systems. The Kardex Shuttle offers a broad range of high-performance space-saving storage and picking solutions for single items to meet the demands facing retail and e-commerce companies. Optimizing the Kardex Shuttle to its maximum potential, Kardex adds smart robots for material handling that seamlessly integrate into existing systems and automate picking and replenishment.



Implement smart and space-saving solutions



Manage e-commerce deliveries with fluctuating demands



Benefit from flexible and scalable solutions



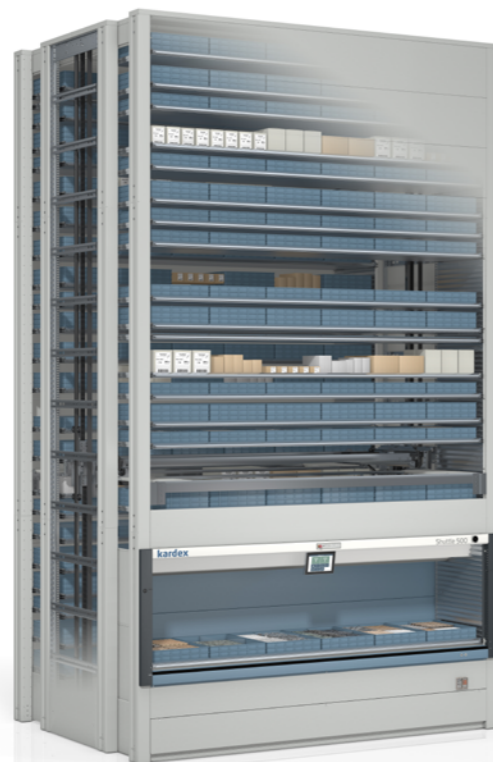
Replace manual picking and replenishment

# Impact the bottom line

**Are you experiencing growth and want to increase throughput, service level and accuracy while optimizing space? The Kardex Shuttle is both flexible and scalable, making it appealing to small businesses with big goals as well as established businesses looking to integrate new processes.**

Many e-commerce businesses turn to a Kardex Shuttle because it has a compact footprint and high throughput rates. It can save up to 85% floor space. When complemented by pick and place robots, order accuracy increases significantly, eliminating picking errors all together.

The Kardex Shuttle features an enclosed shelf-based storage system designed to increase capacity in a compact footprint. It consists of two columns of trays with an automated extractor positioned in the center. The extractor automatically locates the trays and retrieves them as needed. Kardex Shuttles operate on a goods-to-person principle and increase productivity by providing goods efficiently to an operator during order fulfillment.



# Kardex Shuttle benefits

With demand for faster order fulfillment, retail and e-commerce operations need to focus on improving processes to optimize customer experiences.

## Excellent throughput

Optimize order fulfillment efficiency and increase accuracy rates by adding pick-to-light technology.

## Minimal floor space

Kardex Shuttles have a compact footprint and can reduce floor space by up to 85%.

## Reduced labor

By combining one or more Kardex Shuttles with pick and place robots, processes become fully automated. This reduces overall labor needs and optimizes efficiency in terms of search and walk times.



# Tackling today's needs

## Automate manual picking & replenishment

To fully leverage the Kardex Shuttles capabilities and undoubtedly surpass competitor speeds and precision, users may add pick and place robots. Exactly where you always need extra hands, robots provide additional resources 24/7, reducing dependency on manual labor.

In association with experts in pick and place robotics, Kardex offers robotics solutions as a standalone subsystem added to the Kardex Shuttle solution. Pick and place robots seamlessly integrate and automate manual picking and replenishing processes. Kardex houses all critical components under one roof eliminating the stress often experienced by managing systems with multiple sources.

Using hardware-independent 3D vision software, pick and place robots can replicate the exact precision and synchronization of a human's eye-hand coordination to create a multi-functional and versatile robotic solution.

## Optimize material flow

Pick and place robots manage single items as well as standard totes. By integrating them into an existing conveyor system or an autonomous mobile robot (AMR) system, they separate, orientate, measure, sort, scan and transfer goods from A to B. The robots can handle order totes or replenishment totes, automatically across multiple Kardex Shuttles. Traveling along a gantry from Kardex Shuttle to Kardex Shuttle they operate where you need them and thus optimize the utilization of the entire installation.

- Achieve up to 600 picks per hour
- Capable to handle single items as well as totes
- Recognize and separate products regardless of shape, size or packaging
- Process orders accurately and efficiently 24/7

## Implement a complete solution

Combining the flexibility of the Kardex Shuttle with the agility of pick and place robots provides one, integrated solution escalating order fulfillment to the next level. Smart, modern technology designed for today's market offers warehouses an unrivaled competitive advantage.

- Increase picking performance and accuracy
- Benefit from inventory transparency
- Operate 24/7
- Improve ergonomics at picking and replenishment

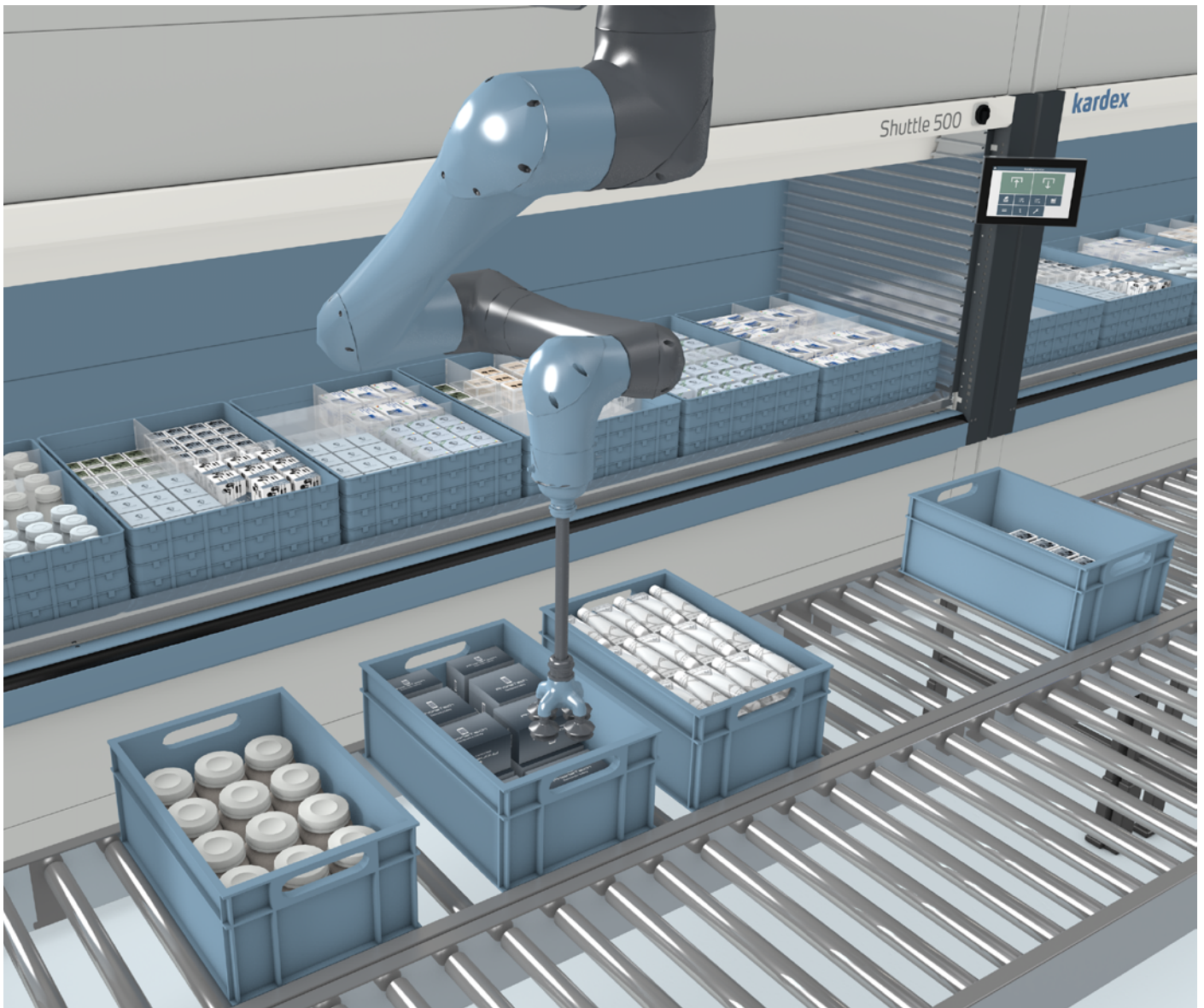
## Retail and e-commerce order fulfillment

**The Kardex Shuttle maintains an outstanding track record and reputation in the retail and e-commerce market. It is designed to meet constantly increasing order expectations, high product availability and optimize order fulfillment processes.**

One extremely attractive benefit of the Kardex Shuttle is its flexibility. The modular and scalable system adapts as needed - smaller companies can expand the system as their business grows while larger companies can easily relocate the Kardex Shuttle when adding a new footprint or new location.

Taking the Kardex Shuttle a step further, pick and place robots manage the stress often felt in retail and e-commerce warehouses by working 24/7. The robots replace manual processes like order picking, replenishing, (de)palletizing, and more.





## Are you ready to take your business to the next level?

To match the needs of today's retail and e-commerce customers, warehouses need sophisticated, state-of-the-art order fulfillment processes and technology. Kardex understands the intricacies of supplying same-day deliveries, managing a diverse product portfolio, balancing fluctuating inventory demands and staying prominent in an oversaturated landscape. Our combined, automated solutions work 24/7 and provide the speed and precision necessary to succeed in today's market.

 [Contact a specialist](#)

[kardex.com](https://www.kardex.com)