

Factsheet

Kardex Shuttle



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The Kardex Shuttle is a Vertical Lift Module (VLM) that stores two columns of trays vertically on the front and rear of the machine. An extractor located in the middle of the VLM automatically moves trays to the access opening. Optiflex technology automatically measures the height of the stored goods on each tray and assigns them to an ideal storage location.

Thanks to its flexible and modular design, the Kardex Shuttle can be adapted at any time as product volumes and sizes change. It ensures a small footprint with space savings of up to 85% and dynamic storage space allocation. It is ideal for storing articles with various sizes and weights or when the inventory mix changes frequently. Each Kardex Shuttle can be used as a stand-alone unit or connected to a networked system. It is even possible to install a Kardex Shuttle outside a building to increase the existing system's capacity.

The Kardex Shuttle is used for storage applications as well as for single item picking and multiple batch picking. Based on product size and weight, customers can choose from four different product types. While a Kardex Shuttle 250/500 fits best for smaller parts with loads of up to 555 kg, the Kardex Shuttle 700 is recommended for medium loads. When storing heavy loads or even pallets, the Kardex Shuttle 1000 is the perfect choice.

 [Learn more](#) in our customer success stories

High
storage
density

Wide range of
storage
goods

Modular
unit design



Application range

Tool storage

Using Kardex Shuttles for tool storage will consolidate multiple storage locations and cabinets into one unit. This enables new levels of productivity by drastically eliminating travel and search times while managing a transparent inventory overview. This ergonomic solution also optimizes floor space.

Semi-finished products and spare parts

Certain production steps need buffer systems when they include a wait or hold step. The Kardex Shuttle efficiently stores and accurately retrieves semi-finished products. It is also well suited to store spare parts and supply the production as needed.

Order picking

With the Kardex Shuttle it is easy to manage orders from different distribution channels. It optimizes order fulfillment including picking, replenishment and returns handling. It outperforms traditional shelving systems and enables accurate picking and high throughput rates, while also managing fluctuating demand. It can even become fully-automated by integrating robotics.



Unit dimensions in millimeters	Kardex Shuttle 250/500	Kardex Shuttle 700	Kardex Shuttle 1000
Width	1,580 – 4,380	1,580 – 4,380	1,580 – 4,380
Depth	2,312 – 3,074	2,363 – 3,125	2,363 – 4,343
Height	2,550 – 30,050	2,550 – 20,050	2,550 – 20,050
Payload	Up to 555 kg	Up to 725 kg	Up to 1,000 kg
Height grid	100	100	100
Storage location grid	25	50	50

Standard technical data, other sizes possible on request.

 [Learn more about VLMs](#)

Main components



Access opening

- Users benefit from the option to have an access opening on the front and rear of the device
- Multiple access openings across several floors are possible



Trays

- Trays store goods and bins and move by the help of the extractor directly to the access opening or back to a free storage space
- Trays travel at individual speeds



Personal protection light curtain

- The unit stops operating if the light barrier is activated
- This protects the operator and the inventory



Optiflex technology

- A sensor measures the height of the articles
- Based on this height, it identifies the ideal storage location for each tray

Complementary technology

Kardex can install the Kardex Shuttle either as a stand-alone solution or integrated into an overall logistics concept. By adding further enhancements or combining it with other technologies, users benefit from higher performance results and see improvements in throughput and accuracy.



Display LED-Navigator

- Improves user guidance
- Provides order information at exactly the right time



Workstation equipment

- Light pointer, position indicator, confirmation button, lifting equipment such as cranes, sockets & interfaces
- Hardware handshake for robot or conveyor connection



Ergonomic & performance options

- Dual tray function such as the ability to pick from one tray while the next tray is prepared
- Multilevel function to provide several trays simultaneously



Kardex VLM Box

- Maximum storage capacity
- Flexible in design, size and number of storage locations



Life Cycle Service

- Holistic, flexible, and modular service portfolio
- Remote support and optional services like smart monitoring, assistance and conferencing or analytics

Further options and storage environments with air conditioning, clean room, fire protection or esd versions are available.



Tool storage with Kardex Shuttles



Order picking with Kardex Shuttles

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.

