



KARDEX MEGAMAT – the automated vertical carousel

High density, fast and secure
storage and retrieval





The Company

The Kardex Remstar International Group is one of the world's leading manufacturers of automated storage and retrieval systems.

Many of the world's largest and most prestigious companies, from a wide range of industry sectors, put their trust in Kardex solutions.

Kardex AG has been listed on the Zurich stock market since 1987.



Our Mission Statement

Our mission is to build on our position as one of the world's leading suppliers of automated storage and retrieval technologies by designing solutions which are innovative and superior in performance and value.

Our goal is to establish lifelong customer relationships where our commitment to service, support and training exceeds all expectations.

The KARDEX M



EGAMAT – the original vertical carousel



KARDEX MEGAMAT

The Kardex Megamat unit is an automated vertical carousel designed for medium to high speed picking applications.

Kardex Megamat advantages at a glance:

- Maximum ceiling height optimisation with minimum floor space
- Increased capacity through high density storage
- Increased productivity
- Fast retrieval through high speeds

All Kardex Megamat units can be installed either as stand-alone machines or networked solutions. This allows for future systems expansion and enables investment programmes to be spread over the period of anticipated growth.



KARDEX MEGAMAT

– the tried and tested vertical carousel

The principle



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Goods to man

The retrieval of stock items, with the Kardex Megamat unit, works on the 'goods to man' principle. A precise high-performance, computer-controlled system selects the shortest and fastest routes delivering selected carriers to the access opening with a high degree of accuracy. Smooth acceleration and deceleration of the carriers is made possible a frequency controlled drive-train motor. The high density character of the Kardex Megamat unit ensures optimal

use of available floor space. The unit height can vary at time of manufacture to an optimal size to house the amount of goods to be stored. The stored goods are protected behind rolled steel panels and a series of photo cells at the access opening .

An environmentally friendly, acrylic-based finish can be applied on request.

The access opening is positioned at an ergonomic working height with the operator panel being clearly laid out.

A manual sliding door ensures that goods remain secure and dust free after use.

Carrier flexibility

Multi-purpose carriers for the storage of:

- Goods (direct storage)
- Storage and transport bins
- Customer-specific boxes, totes and containers

Depending on the intended application, the carrier height can be subdivided as desired.

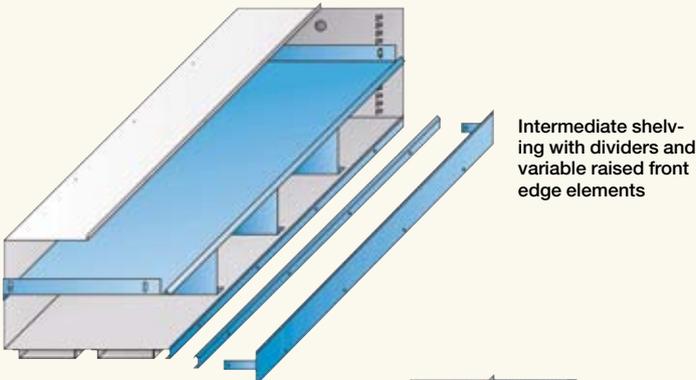
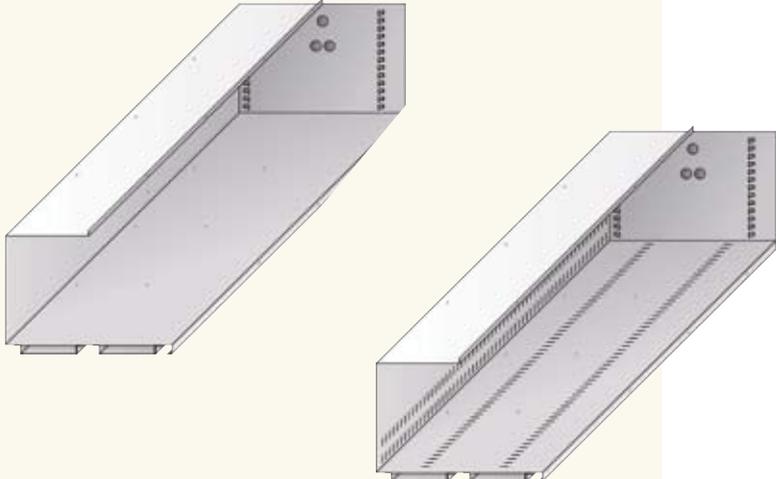
The carriers can be made even more flexible through the use of dividers, drawers and hinged drawer fronts that can be fitted as required.

Transparent storage boxes can also be installed for the storage of small parts or components.

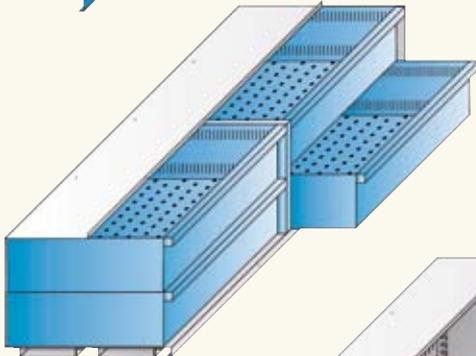
The wide range of Kardex Megamat units is created by many variations of :

- Carrier depth
- Carrier width
- Carrier height
- Carrier load capacity

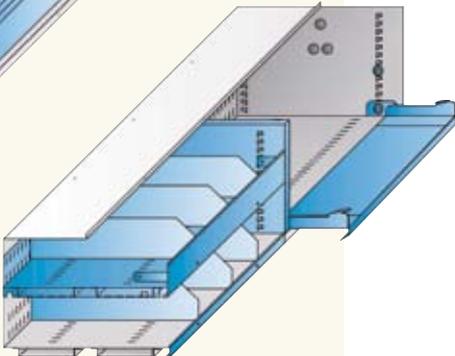
This makes the Kardex Megamat unit adaptable to almost any application imaginable.



Intermediate shelving with dividers and variable raised front edge elements



Combination option with intermediate carriers and hinged drawer front



Clearly visible provisioning with working materials



Small parts storage with drawers

The benefits



Save space and costs

Production and storage space is expensive. The Kardex Megamat unit takes up minimal floor space and fully exploits available ceiling height with its compact and stable construction.

Save time

Optimised picking following the 'goods to man' principle, means minimum machine travel time, this increases productivity levels.

Increased safety and security

The operator is kept safe by a personnel protection system at the access opening as well as by the complete enclosure of the machine. The goods retrieved are protected against unauthorised access by an access opening locking system or, as an additional option, by password identification.

Goods protection devices in the access opening protect stored goods as well as the machine against damage.

Improved ergonomics

Climbing stairs and ladders, stretching and bending to reach and lift heavy objects are now activities of the past. Each carrier is automatically brought to the ergonomically designed access opening for effortless order picking.



In practice

From the tiniest screw to very large, multi-part sets or tools, the Kardex Megamat unit is ideal for the storage and retrieval of almost any imaginable item in a secure and space-effective way.



before



after

A medium-sized company in the electronics sector replaced their extensive manual component store with six Kardex Megamat vertical carousels. Along with the benefits of space savings and productivity increases, the replacement and reorganisation made it much easier for the company to achieve quality management certification according to DIN EN ISO 9001.



Units installed in a factory



Access opening shown in an office environment

A Swiss traffic authority discovers the Simplicity of archiving number plates. The number is entered into the computer and the Kardex Megamat unit automatically brings the right carrier to the access opening. The required pick location is indicated to the user by a light.

In practice

Kardex Megamat solutions for various industries



Kardex Megamat units replace racking for space-saving, ergonomic and efficient parts storage and retrieval



Storage of microchips with the ESD version as protection against electrostatic build-up



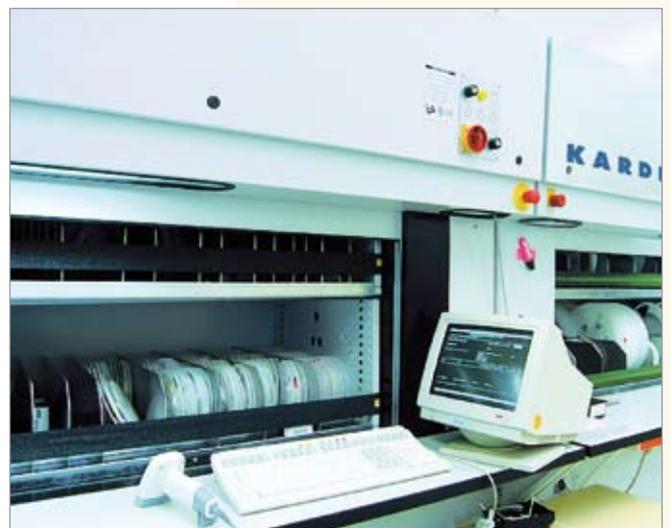
Storage of sensitive electronic components on special coils under ESD conditions



Dry storage in a controlled atmosphere with a constant relative humidity of 5%



Safe tool provision with state-of-the-art tool management



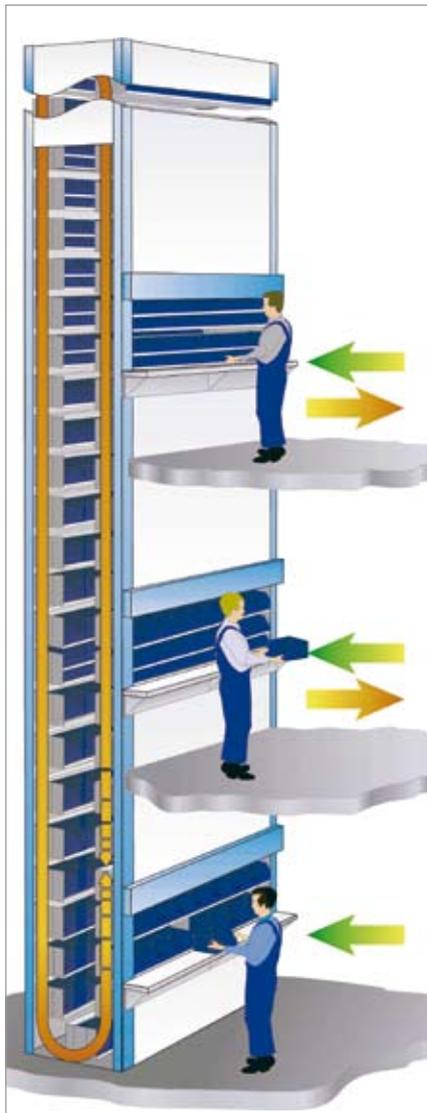
Special storage of rolled SMD components on the assembly line

In practice

Various applications and configurations of the Kardex Megamat vertical carousel

The unit offers a range of individual solutions in various sizes and configurations.

- Installation through several different floors
- Clean room
- ESD version
- Explosion protection
- Food and hygiene standards
- Environmental control
- Controlled atmosphere
- Heavy duty system



The vertical carousel is also the perfect solution for working over several different floors



Technical specifications

Device dimensions

Standard height	up to 9.95 m
Width	2,772 to 3,901 mm
Depth	1,264 to 1,774 mm

Carrier dimensions

Usable width	2,347 bis 3,250 mm
Usable depth	425 bis 625 mm
Compartment spacing	254 bis 457 mm
Higher loads	on request

Loading

Total loading capacity per unit	
all units	up to 23 to
Loading capacity per carrier unit	
Class 1000 models	up to 220 kg
Class 1500 models	up to 350 kg
Class 2000 models	up to 650 kg

Technical adjustments are subject to change without notification.

Technical features

- Choice of ergonomic access heights
- Customer-specific configuration of carriers and sub-divisions
- A comprehensive range of dividers and transparent boxes
- The working surface can be provided in a variety of finishes (e.g. stainless steel, plastics, wood, ESD version, etc.)
- Locking sliding doors for access openings
- Operating with MM240, MM550, MM260 and C2000 controllers with interface
- Inventory management integrated in MM550 controllers and above
- Inventory management using
- Power Pick software package Power Pick
- Route optimisation
- Photoelectric personnel safety and goods/machine protection barriers
- 4 access/loading openings
- Available in a wide range of colours
- Outdoor installation options

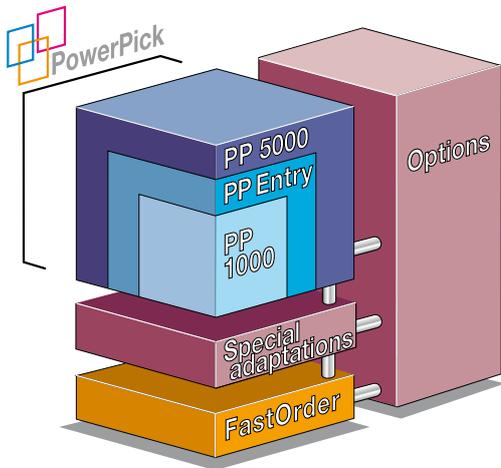
Special solutions and systems on request

The standard range does not include all the options and accessories mentioned above.

Software and DP Integration

The POWER PICK® software modules enable scalable integration into existing DP infrastructures.

The ergonomic, user-friendly interface helps to increase productivity in orderpicking performance.



Efficiency and flexibility – simplicity itself

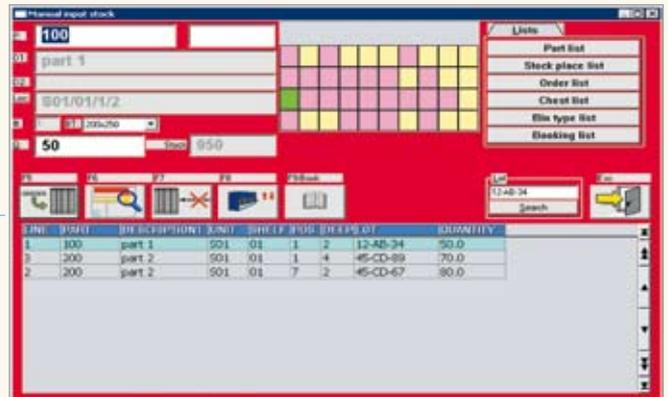
Power Pick 5000 is a modular open system. For users, this means that specific processes and changing requirements can be mapped without any problems.

For most applications, Power Pick 5000 makes it possible to cover a wide range of requirements in the storage segment without the need for additional modifications.

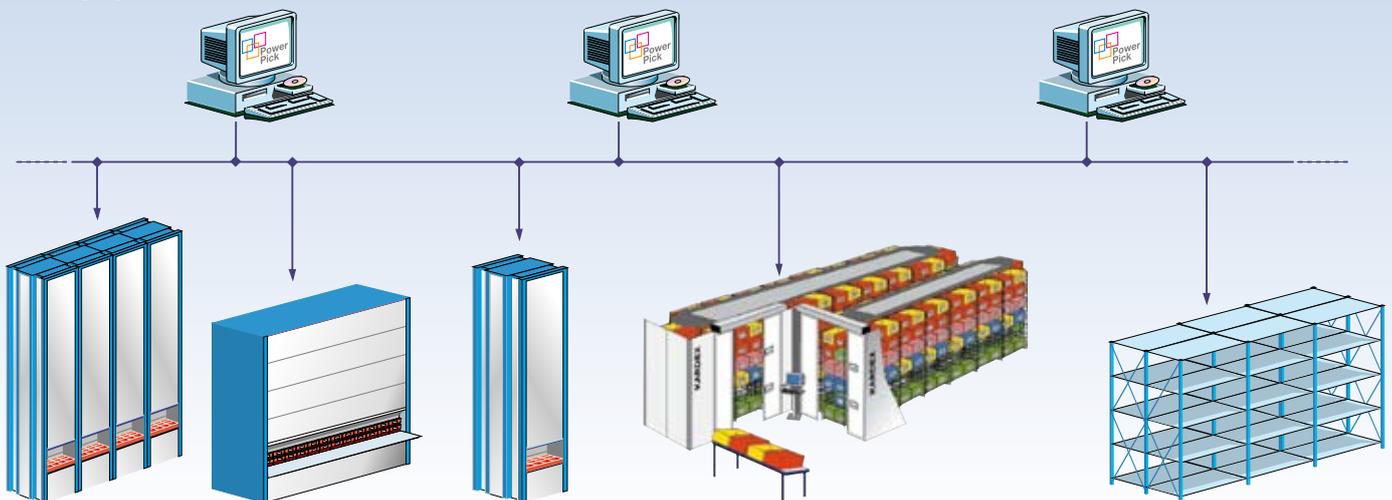
Systematic inventory management

Inventory management with Power Pick means much more than simple storage and retrieval. The Kardex software also helps you to optimise the management of your demand, your stock as well as your storage space – so that you're always in control.

Storage dialogue
Clearly structured dialogue tab with a graphic display of shelf layout and a configurable storage list.



Power Pick 5000
Construction of a network of automatic and static storage systems and workstations.



Controlling

The KARDEX MEGAMAT is controlled by the tried and tested Control 2000.

Standard version

- Industry-relevant housing (Water and dust protection according to IP54)
- Resolution 240 x 128 pixels
- Several simultaneous accesses per machine possible
- Open system via RS232, RS422, Ethernet interfaces
- Connection of peripheral devices such as printers, scanners, scales, alphanumeric keyboard, additional display etc. possible
- Optimised and/or dedicated location storage
- Memory function

System characteristics

- Languages: Two optional languages are pre-installed (e.g. G/E)
- Messages: Output of system messages in plain text and/or symbols
- Host interface: Host communication via integrated interface
- Access: All components are accessible from the front

Drive train management

- Smooth start and stop of vertical and horizontal motions
- Pinpoint precise stop positioning in arbitrary matrix
- Optimised access times thanks to load-dependent speed control
- Direct keyboard-based parameter input
- Speed control, e.g. for sensitive goods



Diagnostics function

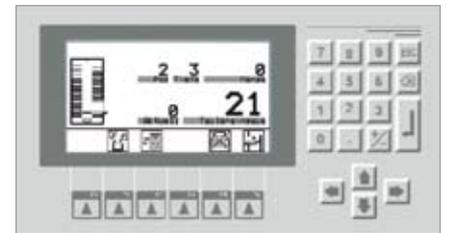
- System timer/system operations timer
- Machine timer/machine operations timer
- Access counter/motor movements
- Firmware and hardware upgrade display
- Event log: last 20 operations are retrievable

Service interface (RS232)

- Device settings through service software (PC/Windows tool)
- Remote diagnostics via modem link possible
- Service interval display
- Update programs can be uploaded from PC

Options

- Port for barcode reader for OP 2000
- Computer port adapter
- Article and storage location management DB 2000
- DB 2000 data back-up to PC Flashcard
- Alphanumeric keyboard
- User administration
- Weight management
- Storage compaction function
- Tray transfer for multiple picking (Window to Window)
- Connection to fire alarm systems
- Host communication over TCP/IP
- Alphanumeric slave display
- ID-card reader
- Overhang checking



Additional module DB 2000

- Article number management (20 character AN) with description (30 character AN)
- Capacity for approx. 8,000 data sets
- Empty tray management
- Multi-location management
- Inventory management (individual and total stock)
- Minimum stock level management
- Selectable FIFO and LIFO strategies per article
- List output on-screen or to printer
- Menu-supported operator guidance
- Data back up to external PC
- One central DB 2000 can provide management functions for several machines/access openings (client/server principle)



KARDEX has more interesting brochures for you:

KARDEX storage technologies:

KARDEX SHUTTLE® XP-Family, FSE/MEGAsys

– automated, modular high-bay storage

KARDEX SHUTTLE® XPlus in practice

– GUK-Falzmaschinen

KARDEX SHUTTLE® XP in hospitals

– people first!!

KARDEX SENTINEL®

– electronically controlled carousel

KARDEX® HORIZONTAL

– automated horizontal carousel

Efficiency for storage technologies

KARDEX POWER PICK®

– power software – economical inventory management

KARDEX customer service

– competent, reliable, customer-oriented

In addition – KARDEX office technologies:

KARDEX office world

KARDEX LEKTRIEVER® in the office

KARDEX fire protection cabinets

– safe and secure against fire and theft

We reserve the right to change technical specifications without prior notice.

Your benefits at a glance



Specialist support



Turnkey installation



Remote diagnostics by
KARDEX online services



Customer service



Optional 24-hour service



Storage technologies and office

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Call us to find out more about KARDEX storage technologies: