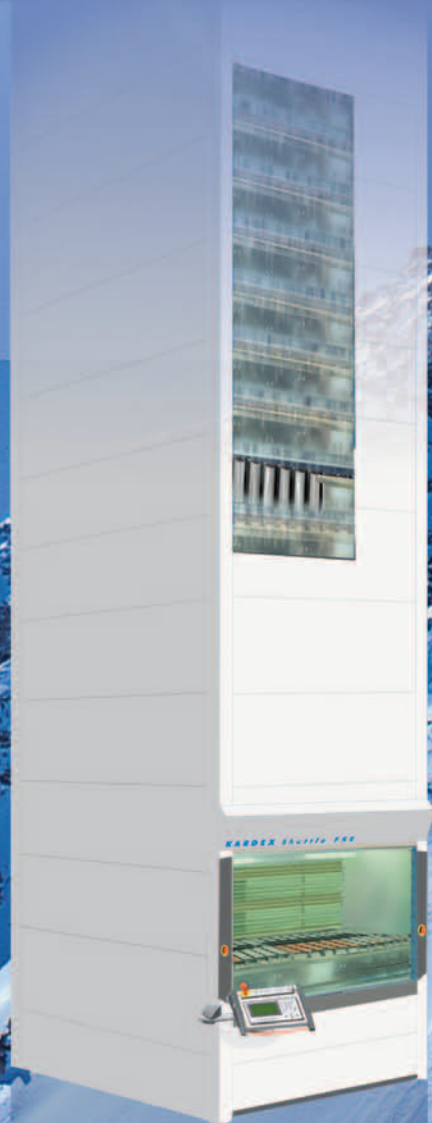




STORAGE TECHNIQUE

KARDEX® MEGAsys – Storage systems for controlled environment, dry and clean rooms

Storage systems for the
most extreme demands



KARDEX



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.

KARDEX® MEGAsys

Storage and commissioning for controlled atmosphere environments

KARDEX® MEGAsys DRY

Dry atmosphere storage and commissioning for moisture and corrosion susceptible items.

- 10% relative humidity by means of nitrogen purging
- 5% relative humidity by means of adsorption dehumidification
- ESD compatible model



KARDEX® MEGAsys CLIMA

Controlled temperature storage and commissioning, item storage at constant, increased or below zero temperatures.

- Ultra-low temperature storage up to - 20°C (Cold store hygiene model)
- High temperature storage up to + 70°C
- +/- 1°C temperature variance



KARDEX® MEGAsys CLR

Clean room conditioned storage and commissioning for the storage of items at risk from contamination in a clean working environment

- Clean room classification from EN-ISO Class 5 to 8 (5 on request)
- Constant temperature, variance +/- 1°C
- Positive/negative pressure environments
- Smooth surfaces
- Hygiene model
- Filter classes
 - Prefilters F5 to F9
 - Main filters H13 to H14

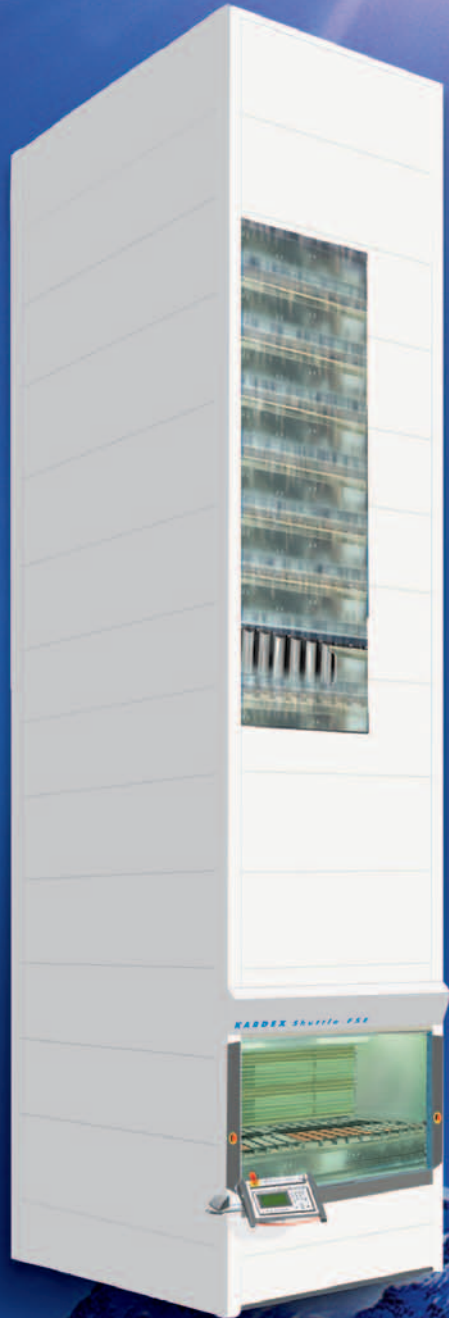


KARDEX® MEGAsys COMBI

Combined dry, controlled environment and clean room atmosphere storage and commissioning.

Example:

- Dry storage
- Low relative humidity 5 %
- In ISO clean room Class 6
- Constant temperature 18°C +/- 1°C



MEGAsys is available in both the Kardex Shuttle FSE vertical lift module and Kardex Megamat vertical carousel.

The principle

With the Kardex MEGAsys systems, you have the storage option of having a dry, controlled environment or clean room – or all of them at once.

In a room-in-room configuration or as stand-alone units: the units can be positioned as desired without any constructional limitations; for instance, they can be docked into existing clean room facilities in such a way that only the access opening is in the clean room.



Advantages at a glance

- Low operating costs
- Maximized safety thanks to traceability
- Absolute safety in the storage of sensitive items
- Low investment costs in comparison with conventional solutions
- Room-in-room solutions, independent cells can be located in the grey zone
- Flexibility thanks to arbitrary positioning options, no constructional limitations

In practice

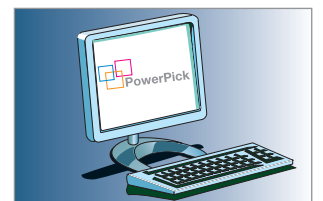
Kardex MEGAsys systems prove their value in numerous institutions and businesses on a daily basis.



Data logging/traceability

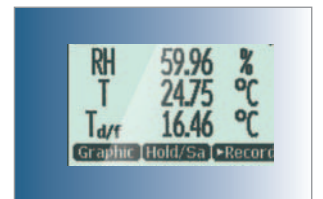
Monitoring and control unit including data logging

- Temperature monitoring, control and documentation
- Relative humidity monitoring, control and documentation
- Tolerance corridor +/- 1°C
- Monitoring capability for up to 32 sensors



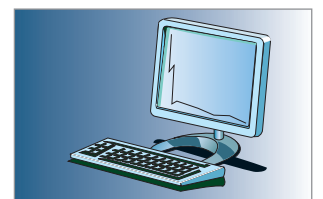
Auxiliary module ASYS Soft RR

- Monitor and document clean room class



Item traceability

- Storage of monitored values
- Analysis and display of monitored values





Technical specifications

KARDEX SHUTTLE® FSE MEGAsys

Unit dimensions

Width	1,612 to 3,910 mm
Height	2,500 to 20,000 mm
Depth	2,094 to 4,236 mm

Overall loading capacity per machine

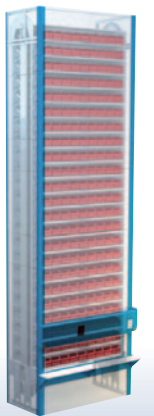
Higher loading capacity	up to 70 t on request
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Carrier loading capacity

Dependent on carrier dimensions	up to 300 / 650 / 680 kgs
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Loading height

Max. stored item height	up to 775 mm
Greater height items	on request



KARDEX MEGAMAT® MEGAsys

Unit dimensions

Width	2,772 to 3,901 mm
Height	2,330 to 9,950 mm
Depth	1,264 to 1,774 mm

Overall loading capacity per machine

Higher loading capacity	up to 23 t on request
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Carrier loading capacity

Dependent on carrier dimensions	up to 180 / 220 / 350 / 650 kgs
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Loading height

Max. stored item height	up to 457 mm
Greater height items	on request

MEGAsys specifications

MEGAsys DRY

Dehumidification

Nitrogen purging
≥ 10% relative humidity
Adsorption dehumidification
≥ 5% relative humidity with constant regulation

MEGAsys CLR

Filter classes

Prefilters	F5 to F9
Main filters	H13 to H14

Clean room classes

EN-ISO Class 6 to 8	
EN-ISO Class 5	on request

MEGAsys CLIMA

Temperature range

up to - 20°C ultra-low, constant
up to + 70°C increased, constant

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

Your benefits at a glance



Specialist support



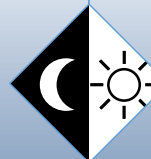
Turnkey installation



Remote diagnostics by KARDEX online services



Customer service



Optional 24-hour service



Storage technologies and office

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