

Kardex Remstar

Company presentation

kardexremstar

Agenda

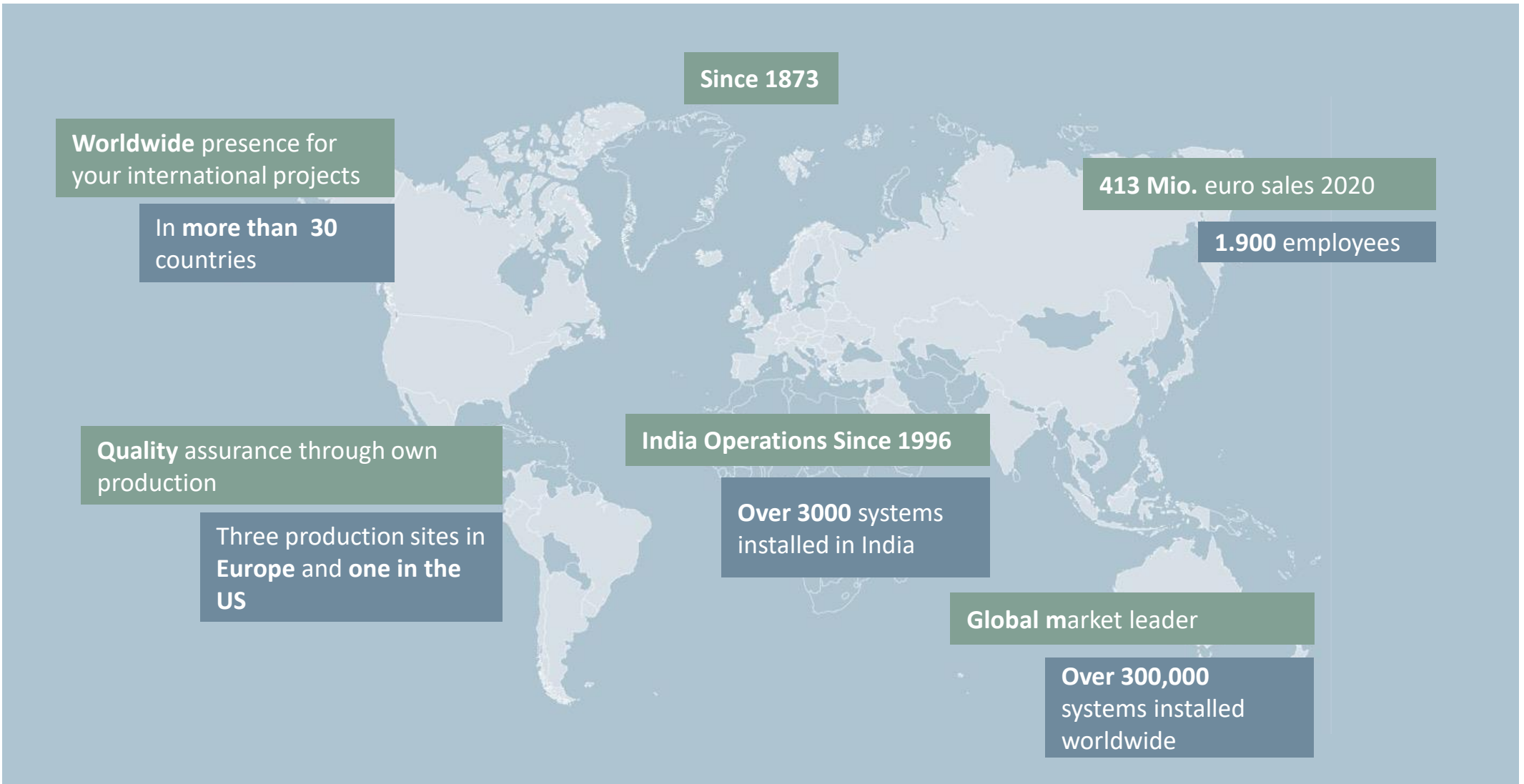
- Introducing Kardex
- Kardex Remstar facts & figures
- Industry solutions
- Product and solution portfolio
- Life Cycle Service portfolio
- References



Kardex

Intralogistics solutions from a single provider

Worldwide intralogistics competence



Leading intralogistics provider - Combined expertise



Kardex Mlog is a leading supplier of integrated material handling systems and high-bay warehouses.



Kardex Remstar develops, produces, and maintains dynamic storage and retrieval systems.



AutoStore is a Kardex partner for high-performance and space-saving storage and picking solutions to rapidly process small parts orders with autonomous robots.

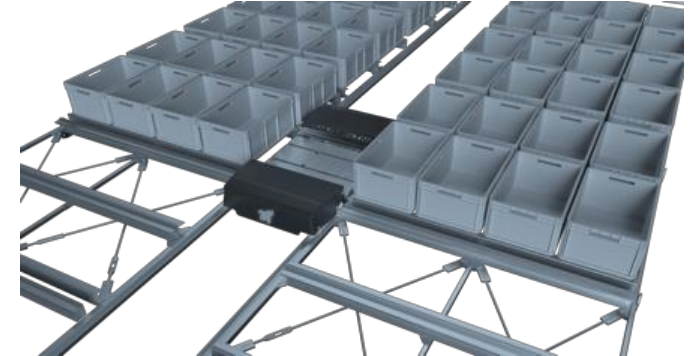
Acquisitions & shareholdings – 3rd party technologies



SumoBox develops and produces modular boxes tailored to Kardex' automated storage and retrieval systems to ensure a maximum use of a system's storage capacity. The boxes are very flexible and fulfill individual customer needs.



Robomotive develops and implements smart robot technologies. It's unique selling point is mimicking the adaptive eye-hand coordination of humans with the help of robots, 3D cameras, grippers, and smart software algorithms.



Rocket Solution develops innovative and standardized multi-shuttle systems. These systems consist of high-dynamic storage vehicles that operate within the rack to provide and buffer bins and trays.

Kardex Remstar Details

Facts, figures and data

Comprehensive intralogistics portfolio

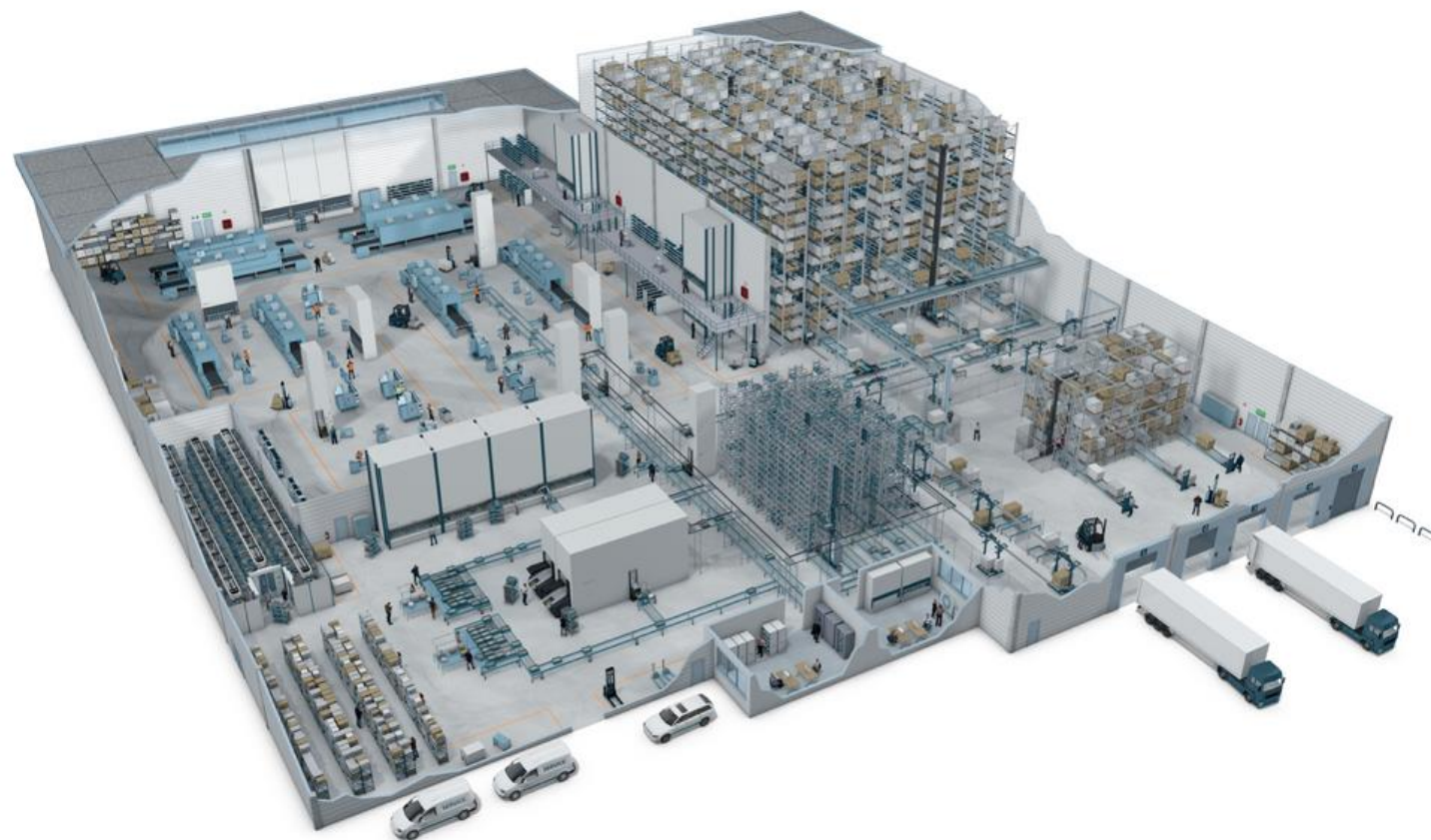
From standardized solutions to individual concepts



New Business



Life Cycle Service



Worldwide competence

Europe

- | | |
|----------------|-------------|
| Austria | Ireland |
| Belgium | Italy |
| Cyprus | Netherlands |
| Czech Republic | Norway |
| Denmark | Poland |
| Finland | Romania |
| France | Spain |
| Germany | Sweden |
| Great Britain | Switzerland |
| Hungary | Turkey |
| Slovenia | |

America

- | | |
|-----|----------|
| USA | Colombia |
|-----|----------|

Asia

- | | |
|-----------|-----------|
| Australia | India |
| China | Singapore |
| Malaysia | |



Kardex Remstar Quality Solutions

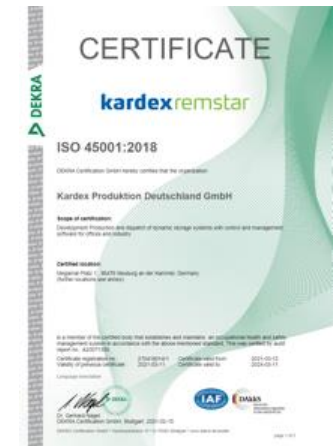
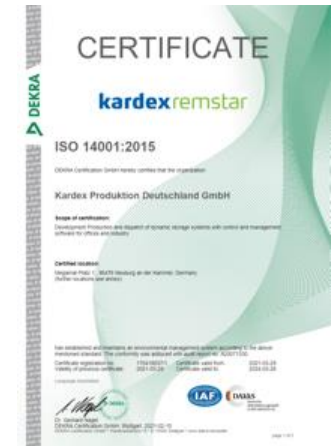
Production & assembly

Certified quality

Our systems are manufactured to the **highest quality standard** in our factories in Bellheim and Neuburg/Kammel (Germany).

Product certifications

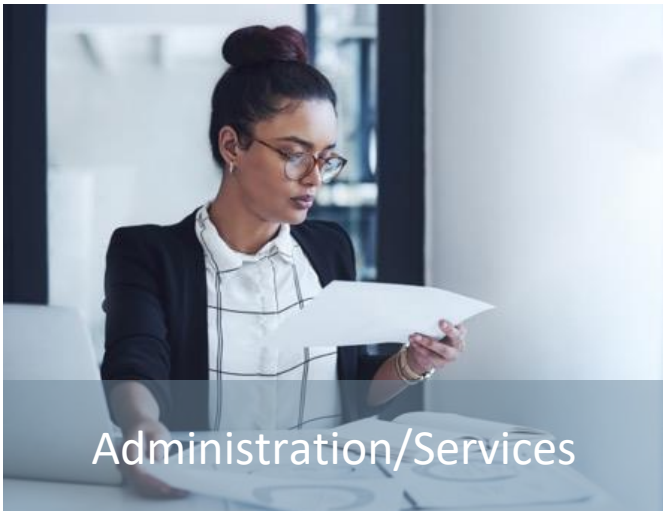
- ISO 9001 – quality management
- ISO 14001 – environmental management
- ISO 50001 – energy management
- ISO 45001 – occupational management
- RAL German based quality standards
- UL/C tested and approved
- CE conformity



Industry Segments

Easy plug & play

Industry segments



Industry segments



Product Portfolio

Dynamic storage- and retrieval systems

Our solutions



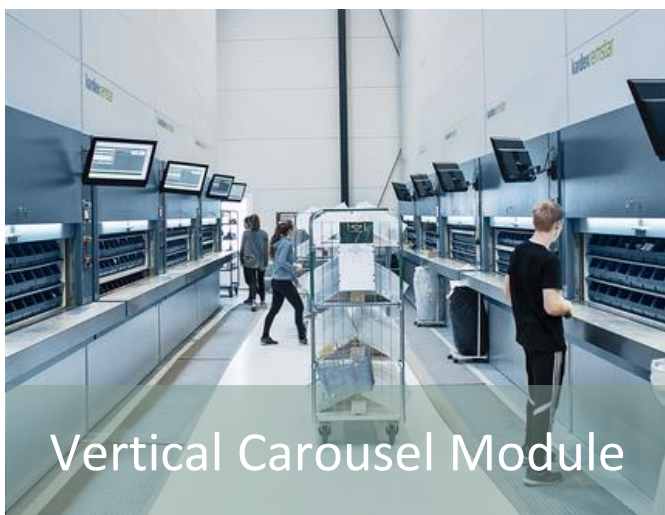
Vertical Buffer Module



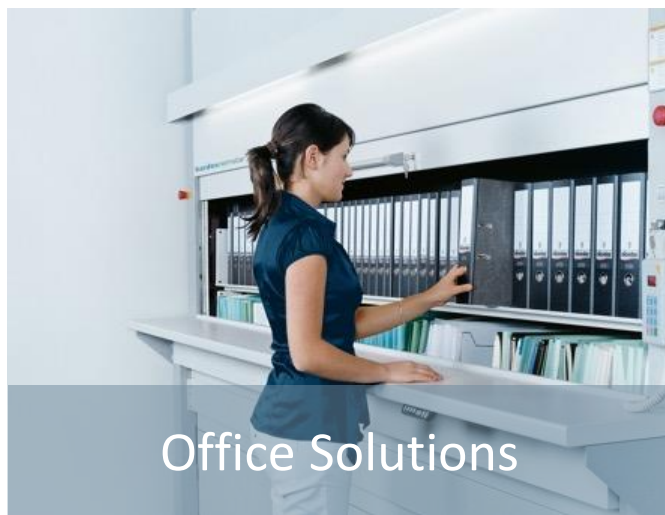
Horizontal Carousel Module



Software & Controls



Vertical Carousel Module



Office Solutions



Vertical Lift Module

Vertical Lift Module

The Vertical Lift Module (VLM) from Kardex features automated high-bay storage systems with modular designs.

Customer needs

- Save space and optimize room height
- Create an ergonomic working environment
- Secure stored goods
- Achieve a high picking accuracy
- Keep systems flexible
- Modular systems



Vertical Lift Module Video

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Benefits at a glance



Vertical Lift Module

- ✓ More storage space in a smaller footprint
- ✓ Fast access times
- ✓ The system shows precise inventory levels
- ✓ Expandable, scalable, and flexible
- ✓ Extremely safe and ergonomic for employees
- ✓ Stored goods stay protected

Vertical Carousel Module

The new Megamat RS from Kardex features automated vertical carousels.

Customer needs

- Fewer picking errors
- More storage capacity in a smaller footprint
- High flexibility and modularity
- Faster and reliable order fulfillment
- Modern design and future-orientated technology
- Reliable intralogistics solutions



Vertical Carousel Video

Benefits at a glance



Vertical Carousel Module

- ✓ High cycle speed – fast access to all stored goods
- ✓ Very high picking productivity and increased picking accuracy
- ✓ Maximum use of space in a minimal footprint
- ✓ Modular system structure enables integration of future technologies
- ✓ Extensive safety features and ergonomic design
- ✓ Intuitive user interfaces and operating concept

Vertical Buffer Module

The Kardex Vertical Buffer Module is the best solution for fast-growing product ranges with limited storage space.

Customer needs

- Precise, simple, and fast order picking
- Ergonomically-friendly working conditions
- Flexible with numerous storage possibilities
- Simple integration
- Modular and scalable
- Controlled access



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Benefits at a glance



Vertical Buffer Module

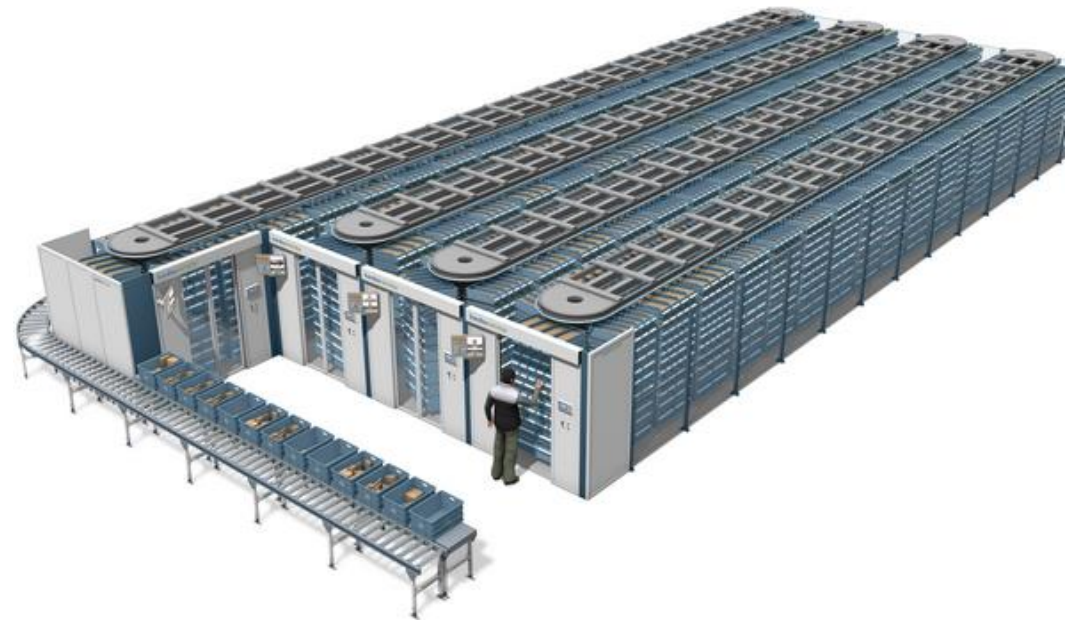
- ✓ Makes order picking efficient
 - ✓ Uses pick-to-light systems to create a precise, simple, and fast order picking process
 - ✓ Eliminates energy recovery times
 - ✓ Picks quickly, regardless of the unit size
 - ✓ Combines high storage capacity and the ability to process a wide range of items with fast access times and minimum storage volume per item
 - ✓ Adapts perfectly to existing processes and building dimensions - it's both modular and scalable
-

Horizontal Carousel Module

Use the Horizontal Carousel from Kardex wherever it is essential to store and retrieve goods quickly, reliably, and cost-effectively.

Customer needs

- Higher throughput and shorter delivery periods
- Reduced warehousing costs
- Optimized storage space
- Guaranteed permanent access to the goods
- More efficient processes
- Less picking errors



Horizontal Carousel Video

Benefits at a glance



Horizontal Carousel Module

- ✓ Batch picking / Paperless picking
- ✓ Variability and flexibility
- ✓ A reliable and compact design
- ✓ Excellent picking performance
- ✓ High payloads and optimal space utilization

Office solutions

The Kardex Lektriever is a software controlled automated media storage and retrieval system that holds thousands of media files, videos, CDs, DVDs, or a host of other media.

Customer needs

- Software-controlled, automated media storage
- Offline or online operation
- Ergonomic work environment
- Access-protected systems
- Controlled access



Benefits at a glance

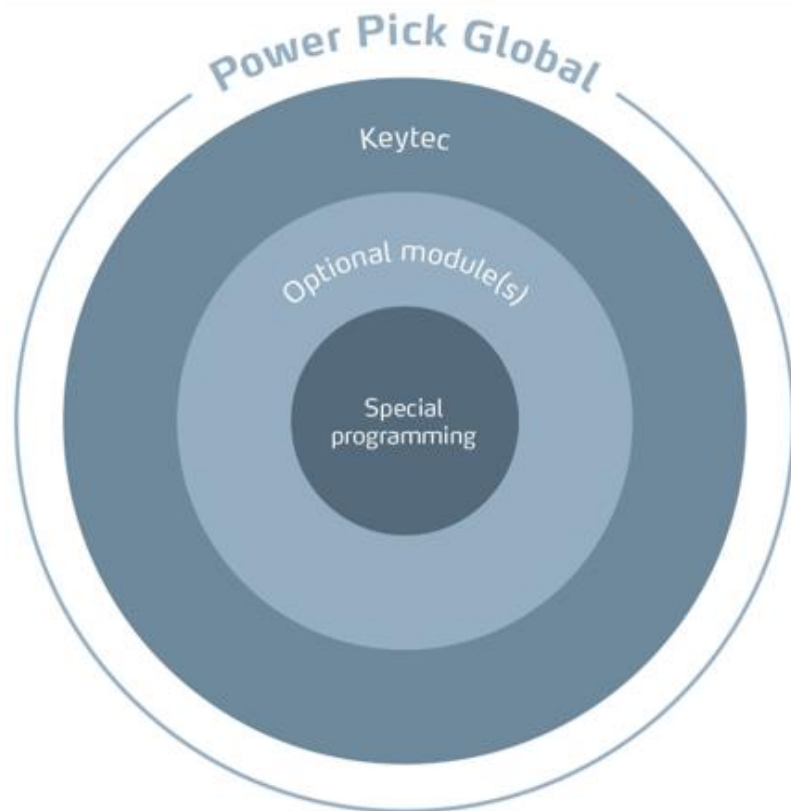


Office solutions

- ✓ Provides an ergonomic work environment
- ✓ Increases productivity
- ✓ Maximizes storage performance
- ✓ Customizes to individual preferences
- ✓ Secures content

Software & controls family

Power Pick Global | Tailored software packages based on professional advice



Keytec

This is the basic package from Power Pick Global and covers the key functions of a flexible warehouse management solution

Optional module(s)

These can be free selected from the list of optional modules and boost the capability and functionality of Power Pick Global

Special programming

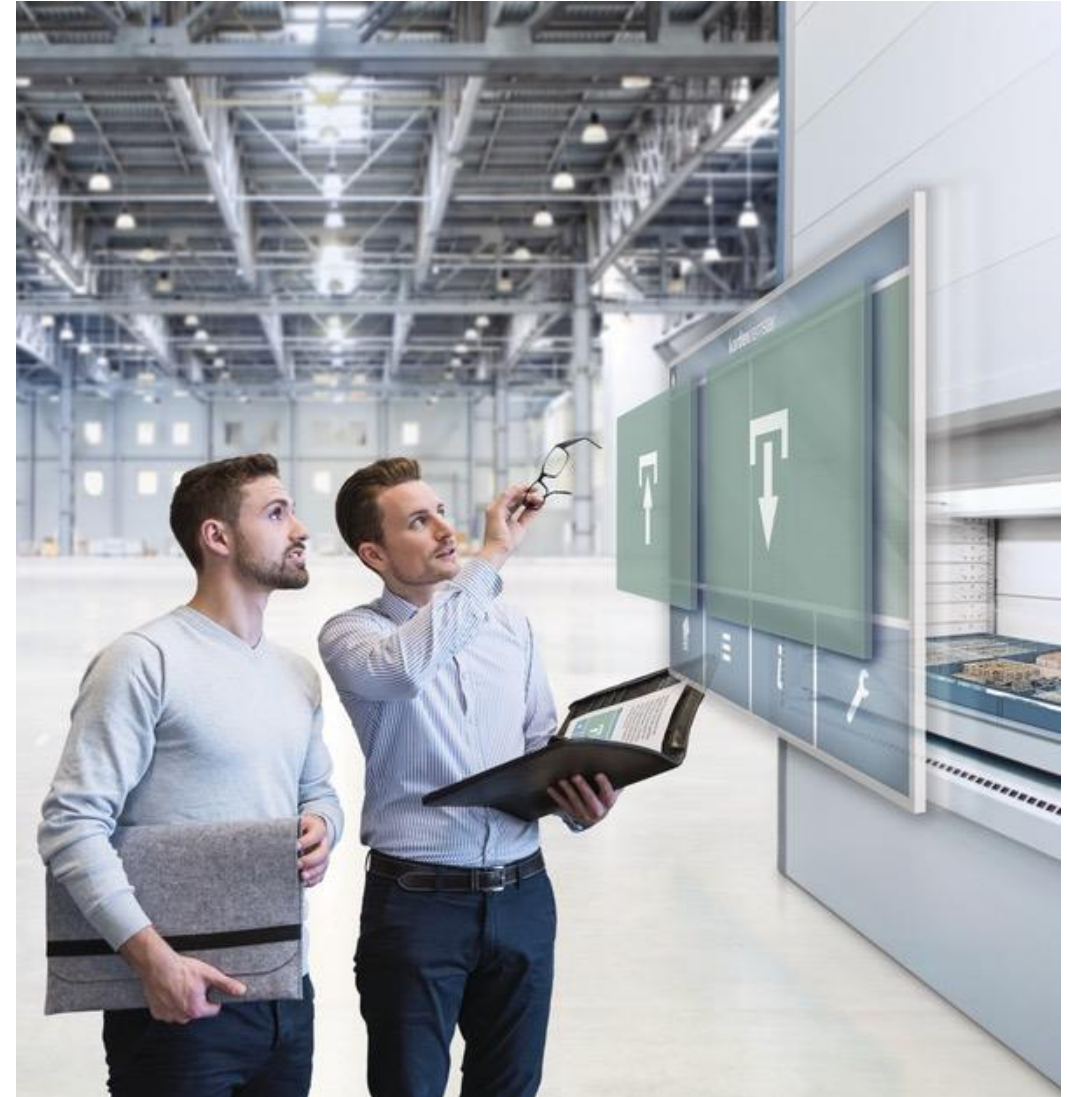
Individual requirements can be programmed on a customer-specific basis

Software & controls family

Power Pick Onboard

Intelligent functions – ergonomically designed

- Rotatable and tiltable control panel
- Host interface for order management
- Position signals: LED, Vario, TIC-Matrix, LED-/Laser pointer
- RFID-Reader for user login



Integration external management systems

Drive Connector

Dynamic storage systems can be controlled and managed directly from SAP

Benefits of the Drive Connector

- Complete integration of Kardex Remstar Drive into SAP®
- Simple installation with no training period
- Easy integration into customer-specific processes and less training time required
- Installed without endangering or influencing existing processes
- Multilingual - available in: German, English, French, and Dutch

Kardex JMIF (Java Machine Interface)

Tool for communication between dynamic storage technology and external systems

Benefits of Kardex JMIF

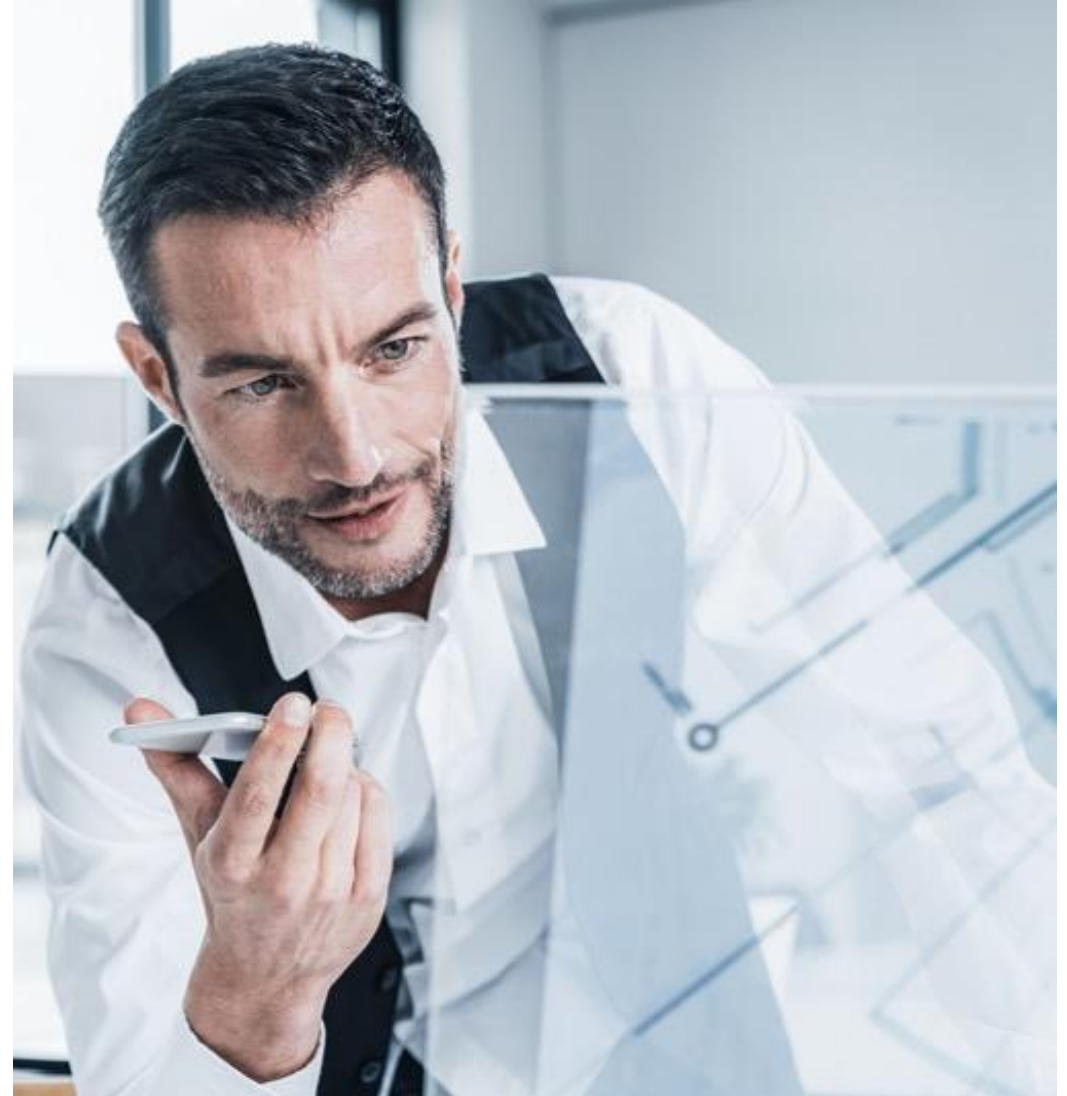
- Use across platforms thanks to Java® technology
- Based on widely used and intensively tested opensource components
- Executable as a service or in a console without a user interface
- Highly paralleled (multithreaded)
- Control several machines without compromising performance
- Highly configurable with a wide range of options

After-Sales Service

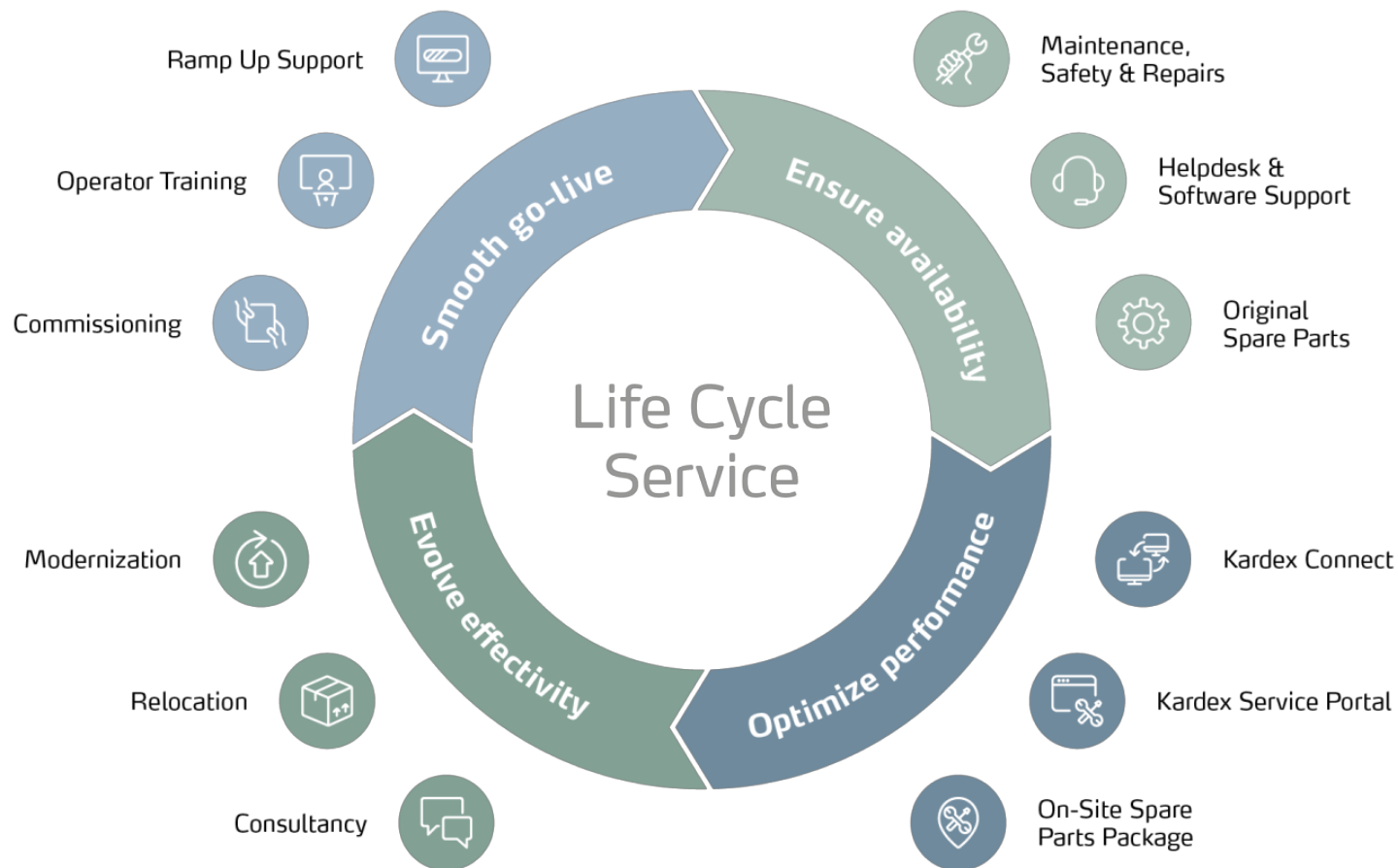
Life Cycle Service

Life Cycle Service benefits

- Get your new system up and running in the shortest possible time
- Minimize downtime
- Timely repair for your machines
- Software check up by experts
- Speed up repairs by holding spare parts on site
- Customized devices to meet new requirements
- Professional moving of your system
- Systematically develop your existing solution
- Individually combinable services



Life Cycle Service portfolio



Service contract portfolio

BASE
Care

"I need reliable and dependable systems."

FLEX
Care

"I need guaranteed rapid response in case of malfunction."

FULL
Care

"I need maximum availability at predictable costs."

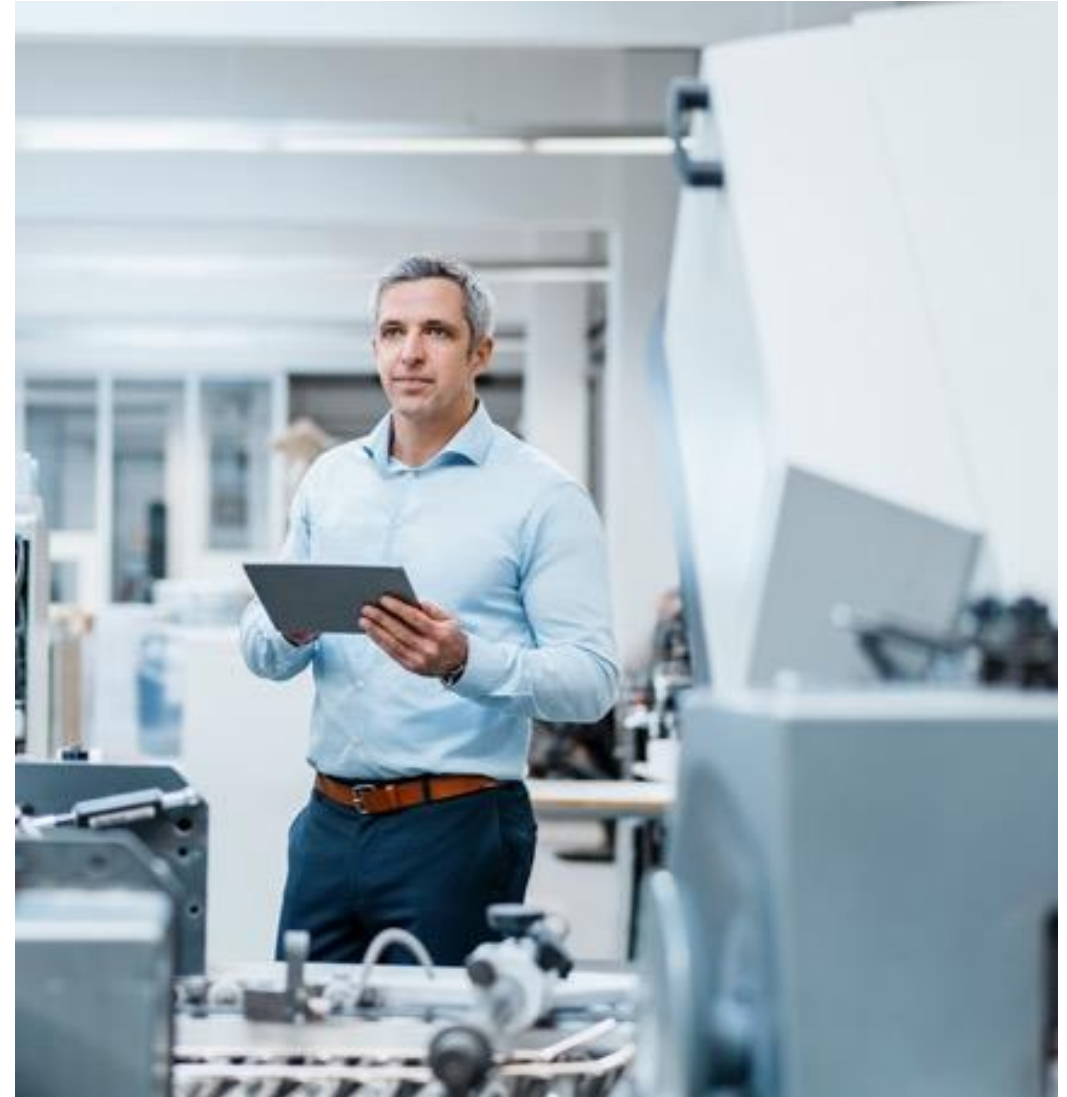
**Soft-
ware**
Care

"I need assistance from IT experts to ensure seamless warehouse management processes."

Extended service

Options

- Advanced phone service priority-managed with 365/24/7 availability
- Electrical safety test according to EN60204
- Additional preventive maintenance
- Remote diagnostics, monitoring and spare parts packages
- Guaranteed response time for on-site-inserts
- Remote Assistance & Analytics



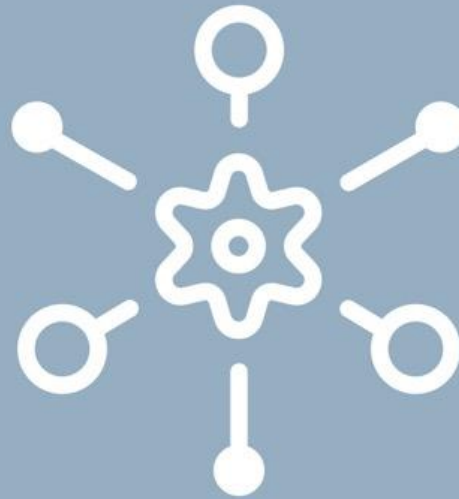
Kardex Connect



Remote Support

Remote Maintenance and Remote Diagnosis of Kardex machines and software with cutting edge security.

Analytics
Visualize KPIs across your warehouse to improve its effectiveness.



Assistance & Conferencing

Use the Assist & Conferencing app to enable a technician's eyes and ears on-site during a remote maintenance.

Smart Monitoring
Monitoring of alerts and warnings, smart processing within the customer's network, for a higher security and peace of mind.



Kardex Connect

Advantages at a glance

- Fewer breakdowns
- Minimal downtime costs
- Maximum security
- Greater reliability
- Early fault detection



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Our promise

- Secure data storage in Germany
- Only unit and hardware information transfers – personal data remains personal
- Two-factor authentication using independent certificates increases protection against unauthorized access
- Remote access to your unit is only possible after an outgoing connection service request is created



References

Customer projects



TATA HITACHI

Reliable solutions



TOYOTA



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Our customer references



For more information **contact us** or visit our website **www.kardex-remstar.com**

Thank you for your attention

For questions we are available for you – contact us!