

Efficient intralogistics

Fit for the future thanks to innovative solutions



Systems from Kardex Remstar: dynamic, practical, economical – for more efficiency and space in production and warehousing

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Your reliable partner for automated
storage and retrieval systems**



Maximum efficiency and ultimate productivity by using dynamic storage and retrieval systems

Whatever goods you store – a reliable and efficient storage and retrieval system significantly reduces personnel resource requirements and warehousing costs. Irrespective of whether your system is operated manually or automatically. From efficient hardware through to fully integrated systems: we develop and install storage and retrieval systems tailored to your individual requirements. Each of our products stands out due to its high productivity, performance and safety, optimized space utilization, enhanced ergonomic design and efficiency.

These are benefits that secure long-term economic efficiency and your success. You will soon come to rely on them completely – every day. Do you want an example? All vertical and horizontal systems from Kardex Remstar run on the goods-to-person principle. This allows goods to be retrieved quickly and minimizes picking times and paths.

Larger warehousing area, better access times

- Raise access accuracy to up to 99 percent
- Improve picking productivity by up to 400 percent
- Achieve stock accuracy of up to 99 percent
- Increase space utilization efficiency by up to 80 percent



Information on other applications can be found by clicking on the “Customer References” area of our website: www.kardexremstar.com

Intralogistics and innovation: Harness the optimization potential of your internal logistics



Systems from Kardex Remstar support all kinds of order picking: ergonomic design, time and space saving.

Retrieval, control and packing into shipping containers are combined into one work operation.

Handling steps can be minimized even more using a combination with modern conveyor systems. Turnaround times are optimized by installing modern warehouse management software, for example Power Pick® Global.

By randomly allocating storage locations, it is possible to perform two-stage picking. Storage can take place simultaneously and the error rate for storage and retrieval is minimized.

Plan, manage, and control excellent logistics processes with Kardex Remstar.



Intelligent product handling and optimized production logistics: your competitive edge!

Excellent logistics processes are expressed in the form of low stock levels, short supply times, on-time delivery and low logistics costs. For manufacturing companies, the task is to plan, control and monitor logistics processes with a very high degree of precision.

The precise application of Kardex Remstar systems in production permits the safe ergonomic handling of heavy tools or moulds centrally on the production machines. The frequent change of variants in small batches is no longer a problem and set-up costs are minimized.

It is even possible to install the systems in the direct vicinity of production machines. The parts for machining are supplied by the Shuttle® XP using automatic attachments, robots or conveyor units.

Further information:
www.kardexremstar.com



Kardex Remstar Shuttle® XP: The intelligent dynamic vertical lift system for high density storage in a compact footprint





The Kardex Remstar Shuttle XP is an automated high-bay warehouse system with a modular design which works in line with the goods-to-person principle – making it ideal for optimum storage density and flexible, efficient intralogistics strategies.

Kardex Remstar Shuttle XP: Optimized Utilization of storage space in a compact footprint



The Kardex Remstar Shuttle XP is an automated high-bay warehouse system with a modular design which works in line with the goods-to-person principle – making it ideal for optimum storage density and flexible, efficient intralogistics strategies.

The Shuttle XP vertical lift system has been designed to meet a broad range of storage and retrieval applications in manufacturing, distribution, retail and warehouse operations. The combination of storage density, flexibility, ergonomics and security makes the Shuttle XP an ideal solution for almost every application.

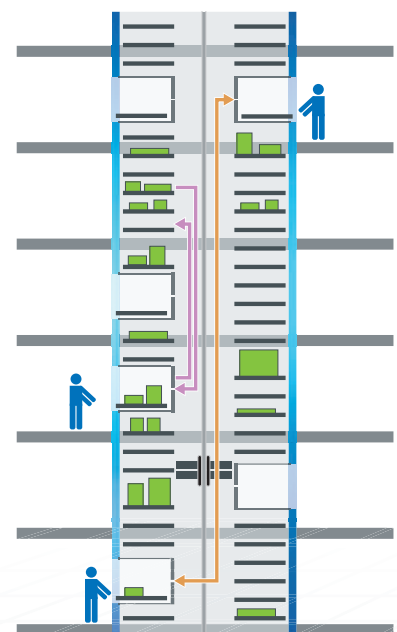
The principle

The modular Shuttle XP vertical lift is an enclosed system on which trays are stored vertically on the front and rear of the unit. There is an extractor device located in the center, which automatically delivers trays with the stored items to the access opening at the push of a button or the scan of a barcode.

The device is modular in its construction with the ability to change its height and number of access openings pre and post construction. Depending on the room height, up to 85 percent less floor space is occupied compared to conventional systems. The Shuttle XP automatically scans every tray with the use of Cubestar technology, finding the ideal storage location within the system in increments of one inch (25 mm). Items are stored in the least possible amount of space.

Flexible efficient storage strategy

The modular design of the Shuttle XP ensures almost unlimited flexibility in the utilization of various ceiling heights. The Shuttle XP's height increases in



We give our customers the opportunity to significantly increase productivity, reduce the size of the footprint required, and optimally manage and control stock levels.



Saving space



Greater safety



Increased flexibility

3.9 inch (100 mm) steps, making it an extremely versatile solution. If you relocate, the system can relocate with you and be adapted to your new requirements by adding or removing modules.

Adapting to the building situation

When installed through several floors, up to six access openings can be integrated at any point on the front or rear of the Shuttle XP. They can even be changed at a later date. The shutter door in every access opening prevents draughts and protects the operators and stored goods.

Faster order picking

The Shuttle XP works according to the principle of "goods to person". Here the required carrier is always positioned at an optimum processing height. The Shuttle XP sorts the goods in optimized sequences to minimize machinery running times, thus increasing order picking speed.

Saving space

The Shuttle XP offers high capacity storage in a small footprint: Up to 85 percent less space is occupied due to the dynamic space management within the unit.

Greater safety

High moving speeds in highly dense warehouses require corresponding safety elements. Whether active or passive safety, either for people, machinery, or stored goods, the Shuttle XP offers maximum protection in all areas. Core elements of the safety equipment include the automatic shutter door in the rear of the access opening and the light barrier in front of the access opening.

Increased flexibility

Each tray can be programmed to meet your needs, including slow speeds for fragile goods, positioning frequently required trays close to the access

opening for fast retrieval and restricted access to individual trays. Further, various weight capacity trays can be stored in one single unit.

Benefits at a glance:

- Faster access times
- Increased turnover of goods
- Increased storage capacity using significantly less floor space
- Precise inventory levels through integration with internal warehouse management systems
- Greater safety and protection for operators and stored goods
- Improved ergonomics
- Modular expandability

Solutions from Kardex Remstar:

For short access times and more storage space with different dimensions

1

Tooth belt drive

Provides faster travel and access times, lower noise levels and greater longevity of your machine.

2

Multiple capacity trays

Various capacity trays can be stored in the same unit, providing reduced acquisition costs and longterm operation flexibility.

3

CubeStar technology

Automatically scans the height of the goods stored on each tray to maximize storage density within the VLM.

4

Internal weight management system

Monitors tray and unit load to prevent the overloading of individual trays or the entire system. The travel speed of each tray can be set individually.

The Shuttle XP series

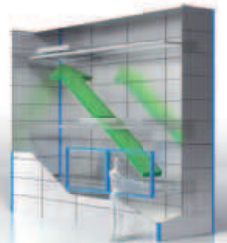
Kardex Remstar Shuttle XP 250/500/700/1000

Ideal for storing goods ranging from small parts up to heavy items.



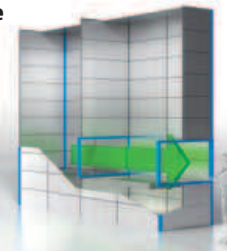
Kardex Remstar Shuttle XPlus

The fast high-volume storage system with lifting beam.



Kardex Remstar Shuttle XPmultiple

Makes optimal use of narrow spaces.



5

Automatic shutter doors

For the safety of operating personnel and goods as well as lower noise emissions. Enables pre-picking by allowing an operator to work with one tray in the access opening while the extractor prepares the next tray for delivery behind the shutter doors.

6

Ergonomic access opening

Delivers trays to the user's specified ergonomic height and also allows two trays in the access opening for increased productivity. The floor level access allows the operator to get close to the unit and work ergonomically.

7

Modular adaptable design

The height of the unit can be modified quickly and easily, and additional access openings can be added, making it a secure investment for the future.

Kardex Remstar Megamat® RS: Reliable, safe and user-friendly storage and retrieval processes





The Kardex Remstar Megamat RS is an automated vertical carousel based on a paternoster design and works in line with the goods-to-person principle – making it perfect for frequently accessed goods.

Kardex Remstar Megamat RS: Maximum capacity with the smallest footprint



The Kardex Remstar Megamat RS is an automated vertical carousel based on the paternoster principle, which uses the “goods to person” concept – perfectly suited for stored goods with a high access frequency.

The principle

Based on the operating principle of a paternoster, the Megamat RS is an automated, vertical carousel which provides fast and accurate access to stored goods. The Megamat RS consists of shelves or drawers which rotate up or down via the shortest path, automatically delivering stored items to an operator at an ergonomically positioned pick window. The design of the Megamat RS offers maximum storage space on a minimal footprint, which means that work processes are organized efficiently and productivity is increased significantly.

The Megamat RS can be easily installed as a free-standing vertical

carousel or integrated into a building over several floors up to a height of 32.8 feet (10 meters) with a number of access openings. Each Megamat RS can be used as a stand-alone solution or integrated with an existing WMS or ERP for maximum efficiency, flexibility and individuality.

Control system and software

The Megamat RS comes with the Logicontrol® machine-based control center, which also provides a simple option to enter the world of software-assisted warehouse management. Logicontrol makes it possible to manage storage locations, goods and inventories – the classic tasks

of warehouse management software – without additional costs or extra hardware.

This means even operators of small, low-complexity warehouses or stand-alone solutions now have the opportunity to optimize their material flow.

The “drive and view” function allows the system to be operated without warehouse management software. In addition, storage space, inventories and order picking performance can be permanently optimized through the optional use of the Kardex Remstar Power Pick® Global software or other warehouse management systems. Orders are navigated securely, quickly and accurately through

Kardex Remstar supplies you with an individual solution which meets your needs.



Megamat RS 180

For light loads (up to 396 lbs/ 180 kg per carrier)

For storing textiles and small parts in various industries such as hospitality, medical, mechanical engineering and electronics.



Megamat RS 350

Great for medium-sized loads (up to 770 lbs/350 kg per carrier).

For retrieving components, tools, and spare parts.



Megamat RS 650

For heavy loads (up to 1430 lbs/ 650 kg per carrier). For integrating in production processes, for instance as interim storage for semi-finished products or as buffer storage during drying phases.

the storage warehouse with the help of Power Pick Global.

Whether used in small, medium-sized, or large companies, in industry or commerce, the Megamat RS represents a responsible and cost-conscious use of resources in the area of production, but also during its entire service life and can be adapted to suit virtually any application. The range of merits which make the Megamat RS so impressive include:

Speed

The Megamat RS features high cycle speed, allowing all stored goods to be accessed quickly.

Individuality and flexibility

The modular Megamat RS system is designed to keep pace with future innovations. In addition, the multipurpose

carrier can be adapted with additional shelves, dividers or drawers to suit virtually any application. The flexible carrier system permits the efficient storage of a wide range of goods.

Efficiency and quality

Save energy instead of recovering it: Due to the perfect interaction of the electric motor, highly efficient gears, and carefully set-up frequency inverter, the Megamat RS now uses up to 40 percent less energy. The result is a significantly lower total cost of ownership (TCO).

Safety for employees and goods

Besides its ergonomic design, the Megamat RS is fitted with an emergency hand crank, automatic chain tensioner, clip system and lightweight sliding door in order to guarantee the greatest possible safety.

Benefits at a glance:

- High cycle speed – faster access to all stored goods
- Increase storage capacity through highly dense storage
- The modular design of the system can keep pace with future innovations
- Maximum use of the space on a minimal footprint
- Extensive safety features and ergonomic design

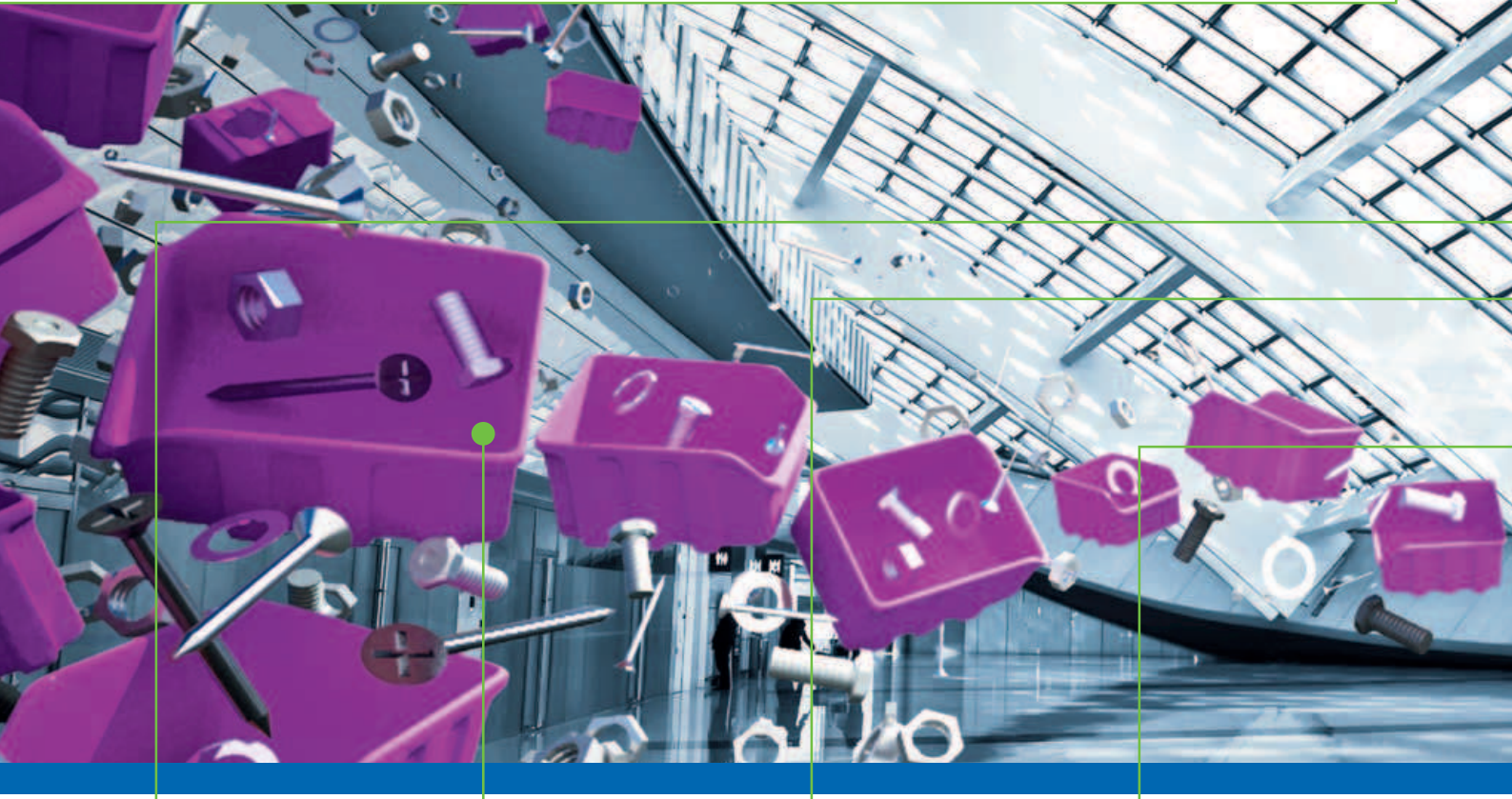
ΕΙΣΗΓΟΥΜΕΝ ΤΗΝ

- ΕΠΙΧΕΙΡΗΣΙΑΚΗ ΑΣΦΑΛΕΙΑ ΚΑΙ ΕΡΓΟΝΟΜΙΑ

ΣΤΗΝ ΠΡΑΞΗ

- ΠΡΟΒΛΕΠΟΜΕΝΟ ΚΟΣΤΟΣ ΚΑΤΑΧΡΗΣΗΣ

Clearly arranged, modular, versatile: Convincing benefits for the efficient and safe storage of your goods



1

Speed and Productivity

- Very high picking productivity
- High running speed
- Optimized Utilization and reduction of storage space
- Reduced picking errors
- Short picking times
- Position indication

2

More space. Better organization

- Up to 75 percent more storage capacity
- Well-organized storage of small parts
- Positioned at the point of use, rapid access
- Suitable for all customary storage containers and storage bins

3

Individuality and Flexibility

- Modular structure
- Flexible carrier concept
- Can be retrofitted in a number of different ways
- Many different options
- Available as a stand-alone or integrated solution

4

Quality and Efficiency

- Noticeably reduced life cycle costs (TCO) – avoid, not reclaim
- Certified quality and environment management systems
- Made in Germany – by specialists in automated vertical carousel systems
- Worldwide service network: Kardex Remstar Life-Cycle-Management





5

Safety

- Emergency hand crank in case of power failure
- Clip system for simple, quick assembly and greater system stability
- Access control
- Optimal protection for personnel and stored goods
- Certified safety



6

Ergonomic Design

- Goods-to-person principle
- "Drive and view"
- Optimized user-friendliness
- Smooth-running sliding doors

7

Technology

- Modern design
- Low-wear operation thanks to the automatic chain tensioner
- State-of-the-art and endurance-tested materials
- Logiccontrol unit management
- Power Pick Global warehouse management software

8

Secure Investment

- Long service life
- Retrofit and conversion packages available as needs change

Kardex Remstar Horizontal Carousel: Efficient order picking and rapid retrieval in a horizontal direction





The Kardex Remstar Horizontal is an automated horizontal carousel system with which goods can be stored and retrieved quickly, reliably and cost-effectively.

Kardex Remstar Horizontal Carousel: Fast retrieval and efficient order picking



Goods are stored and retrieved quickly, reliably and cost-effectively with the Kardex Remstar Horizontal Carousel.

The principle

The Kardex Remstar Horizontal is an automated horizontal carousel system. It is used in all situations where it is important to store and retrieve goods quickly, reliably and cost-effectively. The system makes optimal use of the existing room length.

Like all storage systems from Kardex Remstar, the Horizontal Carousels work according to the goods-to-person principle. The central access opening positioned at the front

of the Horizontal Carousel and the arrangement of the machines into so-called picking stations give order pickers fast access to stored goods on a minimal footprint. This can reduce a large part of the distance covered by employees when picking goods from conventional shelving.

Efficient order picking

Fast reaction times, high throughput and short delivery periods – those are just some of the things that distribution centers require from modern and efficient

storage logistics. This is precisely where the automated Horizontal Carousels from Kardex Remstar come into play: They can be flexibly adapted to deal with all of these tasks and permit optimal processing of picking orders.

A further advantage: All Horizontal Carousels belonging to one picking station work simultaneously. This guarantees permanent access to goods and keeps unproductive waiting times by the warehouse employees to a minimum.

Kardex Remstar Horizontal carousel:
It's all about speed and efficiency.



High accuracy



Flexible storage



Safe operation

Control system and software

A link between a Horizontal Carousel and warehouse management software (e.g. Kardex Remstar Power Pick Global) as well as various optical display elements permit efficient order picking.

If strategies such as "batch picking" are used, order picking performance can be increased even further.

Optimized storage and retrieval

The goods-to-person principle significantly reduces the distance covered by employees. As such, the way time (= the biggest part of the order picking time) is generally reduced from approx. 65 % to approx. 10 %. It also permits fast

and accurate access to stored goods and prevents unproductive search times.

High accuracy

Optical display elements on the machine and in the picking area permit pick-and-put accuracy of over 99 %. All relevant picking information is displayed for the order picker – which prevents pick-and-put errors and incorrectly picked customer orders.

Flexible storage

Loads of up to 119,049 lbs (54,000 kg) per machine also make it possible to store heavy goods. In addition, the height of every carrier can be altered thanks to adjustable shelves. This

permits efficient storage and retrieval of goods of various sizes, including bulky goods.

Safe operation

Extensive safety features, such as automatic sliding doors or a safety fence, prevent accidents and guarantee safe order picking for employees working on the machine.

Benefits at a glance:

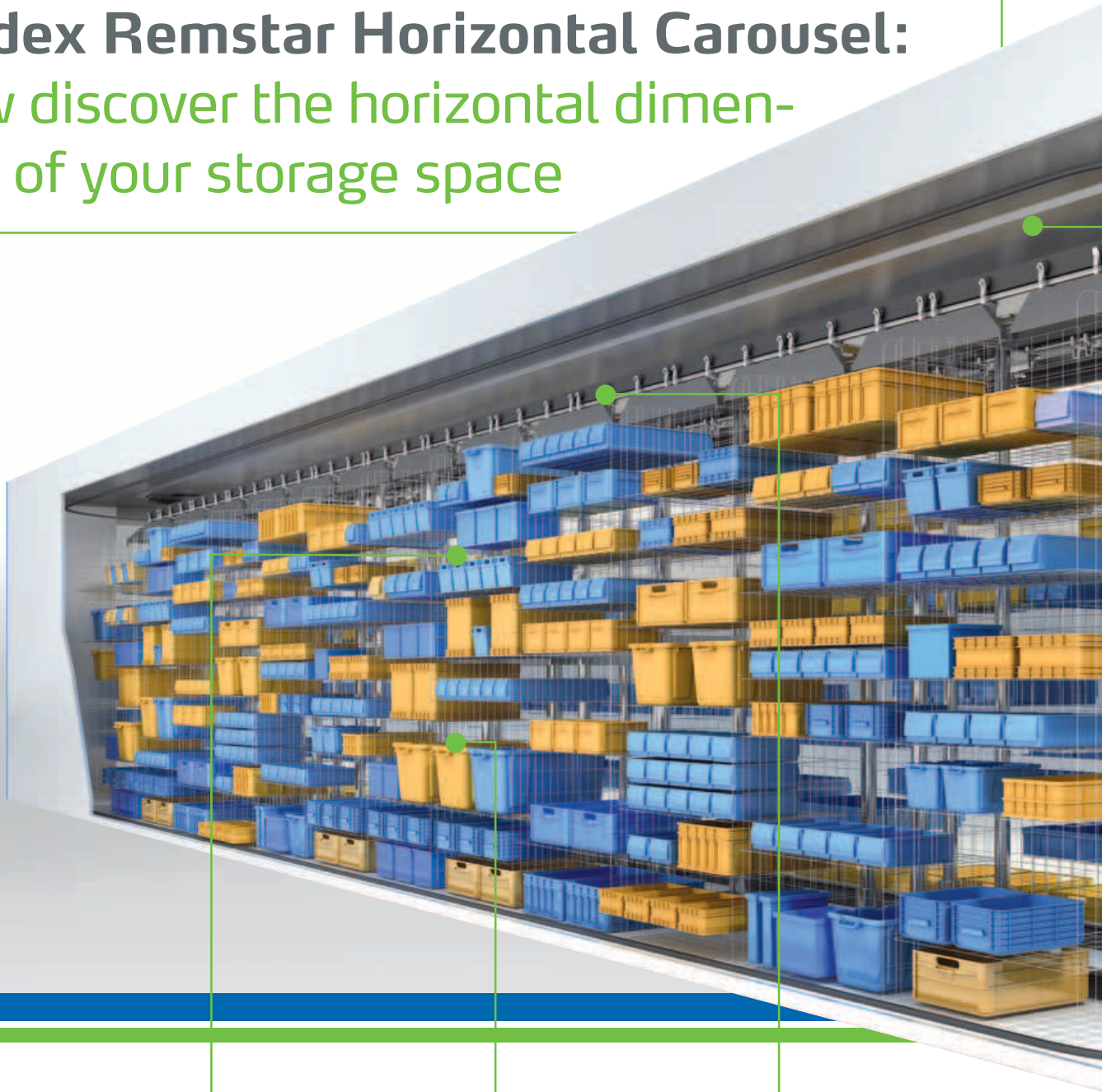
- Increase productivity
- Reduce costs
- Improve flexibility

- Increase productivity

- Reduce costs

Kardex Remstar Horizontal Carousel:

Now discover the horizontal dimension of your storage space



1

Carrier payload:
1,000 lbs (454 kg),
1,500 lbs (680 kg).

2

The effective height of the carriers on the Horizontal carousel ranges from 6 ft (1.8 m) to 12 ft (3.7 m).

3

Robust, reliable and low-maintenance unit due to its self-lubricating bearings.

Examples of picking stations

A picking station consists of a minimum of two and maximum of four Horizontal Carousels. Various layouts are possible depending on the size and design of the units:

Three-carousel station



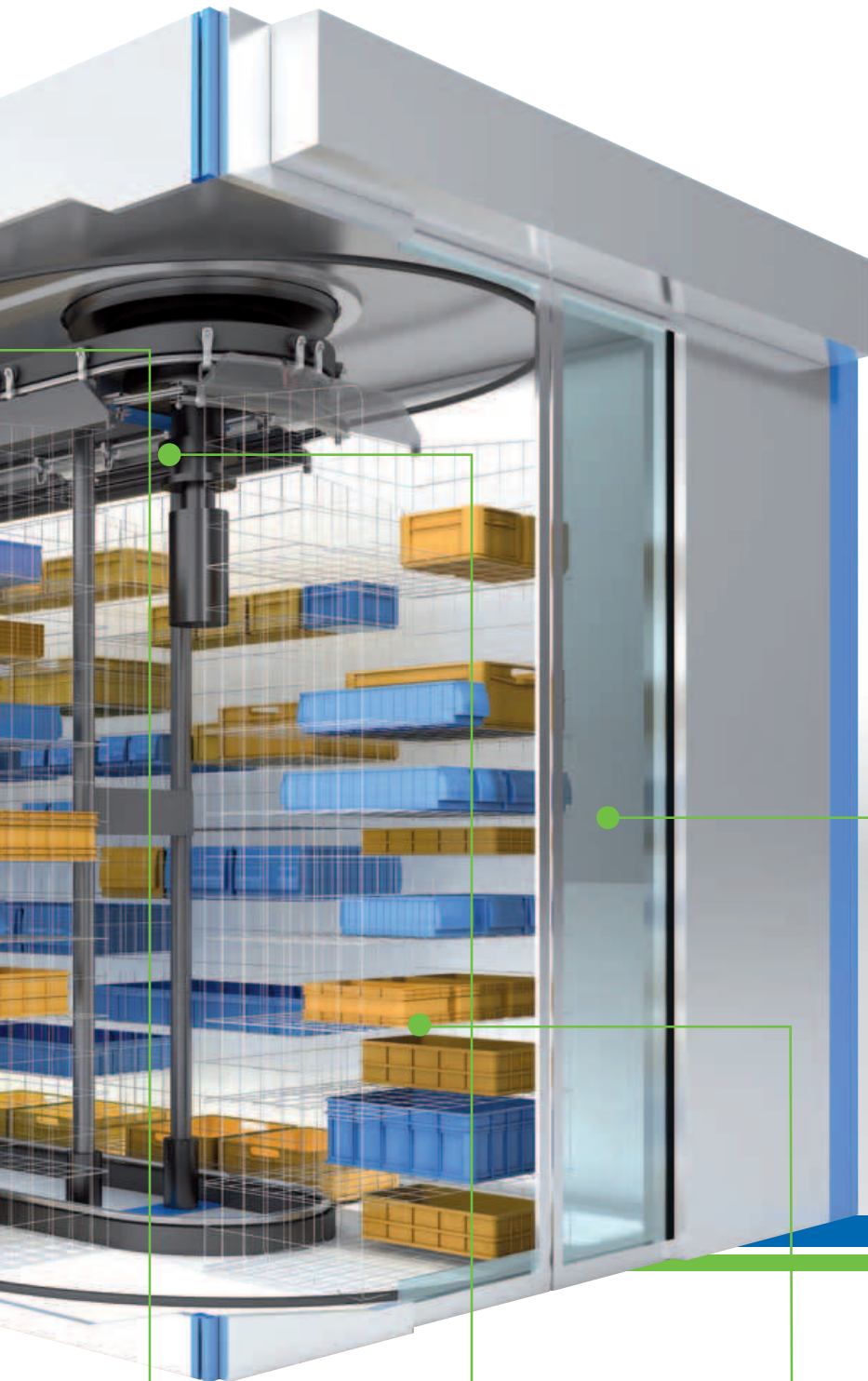
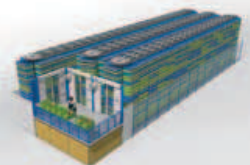
Four-carousel station



Multi-level station



Tall station with lifting platform



4

The Horizontal Carousel is between 7.2 ft and 13.5 ft (2.2 m and 4.1 m) high and between 19 ft and 202 ft (5.8 m and 61.6 m) long.

5

The motor within the unit permits multilevel stacking.

6

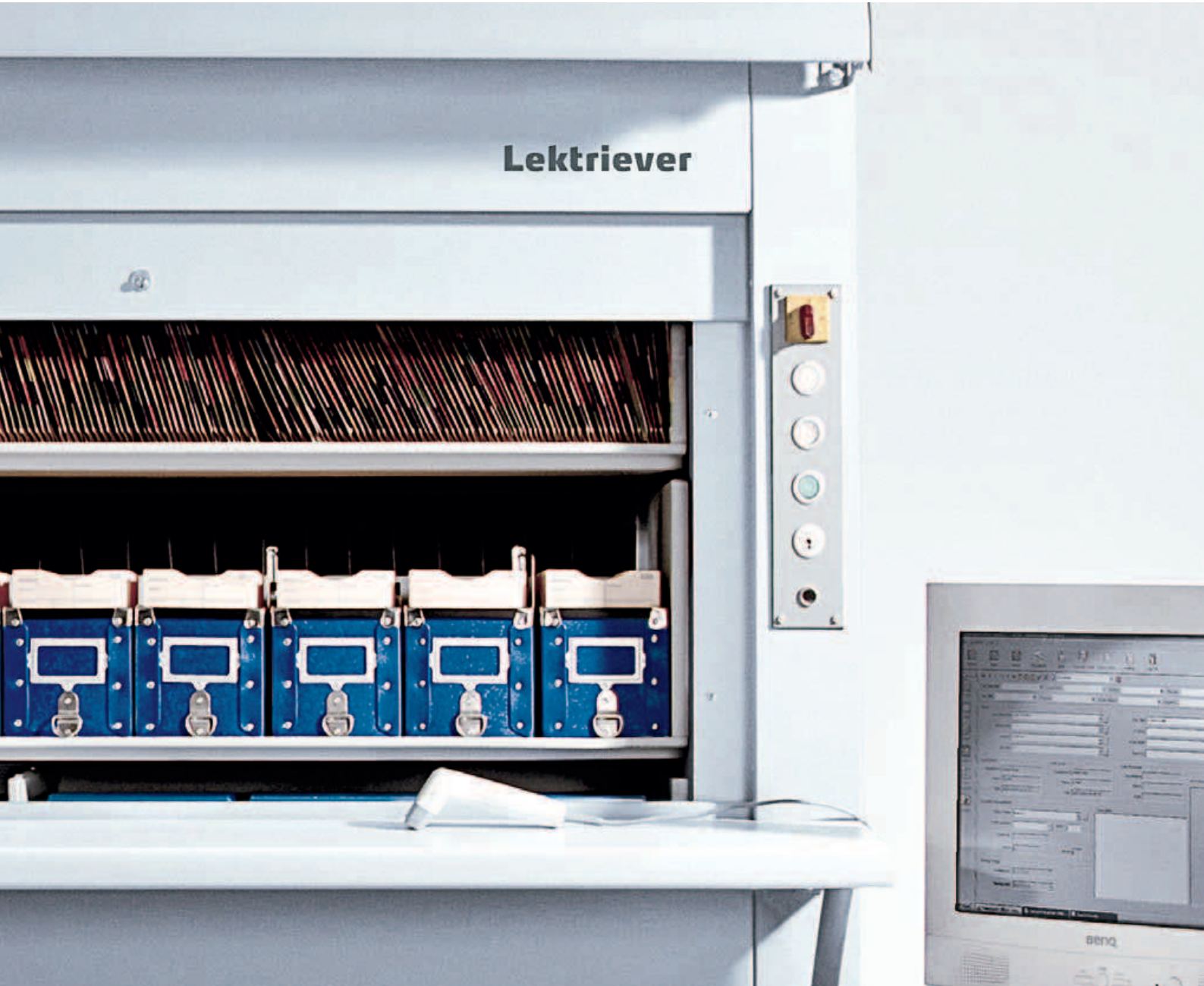
Rotational speed: 85 ft (26 m) per minute.

7

Optional doors available.

Kardex Remstar Lektriever[®]: Space-saving, secure, controlled access to confidential media





Lektriever

The Lektriever is an automated, space-saving media storage system which stores files, index cards and information media of all kinds and makes it easier to manage documents safely.

Features and advantages of the Lektriever from Kardex Remstar: Save time, space and money while increasing productivity



1

Ergonomics and accessibility

- Automated retrieval brings stored items to the user
- Freedom from walking, bending and stretching to retrieve files and media increases users productivity and work accuracy
- Automation ensures that all users have equal ability to access and work with the system irrespective of any personal ability or limitation

2

Work counter options

- Electrically adjustable work counter enables users to alter the height between 30.3 - 39.4 in (770 - 1,000 mm) for personal setting preferences, with up to four pre-set positions
- Mechanically adjustable posting board allows users to select heights at 2 in (50 mm) intervals between 30.3 - 39.4 in (770 - 1,000 mm) for individual preferences
- Static posting boards can be fixed at either 29.5 or 39.4 in (750 or 1,000 mm) for seated or standing access
- Fold down posting board in either a seated or standing position offers additional working space when required

Revolutionize the process of filing and mixed media retrieval in your office with the Kardex Remstar Lektriever.



3

Door options

- Automatic Security Door
 - Level 1: supervisory pass code or PIN allows one individual to open Lektriever
 - Level 2: up to 25 individual user PIN
 - Level 3: restricts users to certain shelves within the unit
- All machine movements are carried out with the doors in the closed position
- Manual Door
- Bi-parting manual door for lower security general use

4

Color and finish options

- Available in a range of standard RAL colors to suit your office decor
- Work counters available in a range of colors and materials, to complement décor or specific applications

Kardex Remstar Lektriever: Simple and safe document management



The Lektriever is an automated, space-saving media storage system which stores files, index cards and information media of all kinds and makes it easier to manage documents safely.

The Lektriever is the perfect space-saving solution for storing away everyday office items and sometimes also extraordinary things. The highly dense storage of important documents gives operating personnel fast and easy access in a clean and tidy environment.

Increased productivity

Productivity is easy to measure: How long does it take to retrieve the necessary information or documents? Does it involve lots of unnecessary movements – such as bending, stretching, or covering long distances? And what happens when something has been lost or mislaid? How much time is wasted looking for it?

Thanks to automation when filing and storing media, the operator can carry out work standing or sitting without having to move away from the workstation. Studies clearly show that people working on the Lektriever are twice as productive as those working on manual systems such as drawers and horizontal cabinet systems, lateral filing units and static or mobile shelving.

Maximum storage space

If the entire room space is used instead of the purely quadratic area, optimal use is made of the footprint with the Lektriever. The units can be installed right up to the ceiling and can even stretch across several floors (as long as this has been taken into consideration when planning the building) without the need for any additional floor space. Compared to other systems, it is the most efficient solution when looked at in terms of lineal meters per square meter of floor space – the Lektriever is almost twice as efficient as drawers and horizontal cabinet systems.

Kardex Remstar Special Solutions: Storing and picking in controlled ambient conditions



Expertise that ensures the highest technical and qualitative standards – storage systems from Kardex Remstar for cold, dry and clean environments.

Dry, air-conditioned, clean – or all at the same time? Room in room or free-standing? No problem. Systems from Kardex Remstar can store your products under controlled conditions. They can be positioned as required without any structural restrictions and can even be attached to existing cleanrooms – for example, only the access opening is located in the cleanroom.

Kardex Remstar Dry Solution

- 10 percent relative humidity achieved by nitrogen flushing
- 5 percent relative humidity achieved by adsorption drying
- ESD-compatible design

Kardex Remstar Clima Solution

- store deep frozen down to -20°C (cold storage in hygiene design)
- store at high temperatures up to $+70^{\circ}\text{C}$
- $\pm 1^{\circ}\text{C}$ temperature consistency

Kardex Remstar Clean Solution for cleanrooms

- Up to Class 10,000 Cleanroom
- Constant temperature $\pm 1^{\circ}\text{C}$
- Overpressure/vacuum
- Smooth surfaces
- Hygiene design

Benefits at a glance:

- Low operating costs
- Absolute safety for the storage of sensitive parts
- Lower investment costs compared with conventional solutions
- Room-in-room solutions, independent cells can be located in grey area
- Flexibility with free positioning, no structural restrictions

Kardex Remstar Power Pick® Global: The software innovation for controlling storage and retrieval solutions



Kardex Remstar Power Pick Global optimizes your intralogistics operations and achieves a high level of efficiency and customer orientation.

For over 15 years, Kardex Remstar has been developing and implementing software solutions for complex logistics tasks to meet the high requirements in your company. Warehousing systems and software combine to become integrated attuned systems.

Our competence and experience now come to your company with a new software generation: Power Pick Global. This modern and user-friendly software, which we subject to continuous development, supplies you with the capabilities of handling your future intralogistics requirements. No matter what branch of industry your company is in, no matter what application Power Pick Global is used for. We round off our portfolio with services such as consultancy, installation, support, special programming and a 24/7 hotline.

Warehouse control

The core of a warehouse management system is the correct identification of goods, their allocation to orders, better utilization of storage capacity and optimized forwarding to the correct destination. Integrate your automated warehousing technology completely in your processes with modern equipment such as Horizontal, Megamat RS or Shuttle XP and Power Pick Global. You can also manage non-dynamic systems, such as high bay warehouse systems using our software – every technology is linked to its specific benefits. In this way, you can make the best possible use of the space available in your warehouse.

Stock control

Having full control over the flow of goods at all times is the main function of warehouse management software. Power

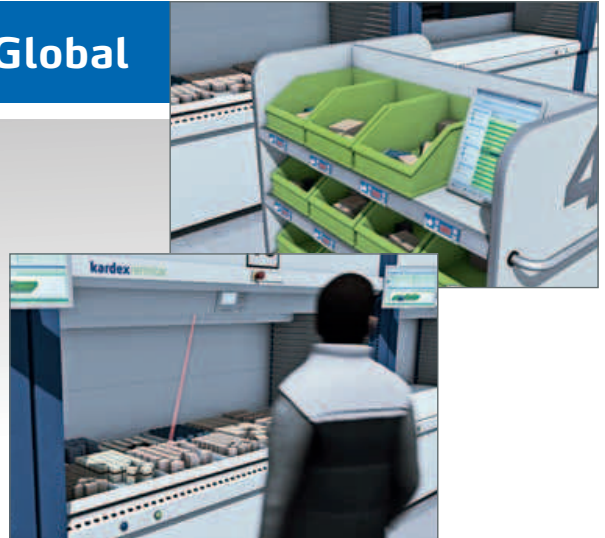
Pick Global gives you the complete overview, not only of specifics such as FIFO, serial and lot numbers or shelf life, you can also verify your stock at regular intervals using the software-assisted inventory process and manage several clients without having to block off part of the warehouse.

Space optimization

Simply installing storage and retrieval systems from Kardex Remstar will improve the capacity utilization of your storage space by up to 35 percent. If you integrate Power Pick Global, you will increase this percentage by another level of magnitude – for example through the use of special algorithms to optimize height and weight combined with various storage location and zone strategies.

Functional, user-friendly and much more – so many reasons for having Power Pick Global.

Functional principle of Power Pick Global



Pick goods in dynamic storage systems quickly and ergonomically, significantly reduce picking times, unlock valuable storage resources, and increase productivity: With Power Pick Global you are perfectly equipped to adapt flexibly to changing demands now and in the future.

Efficiency

Integration of the Power Pick Global software into your processes helps you to increase productivity times. It allows you to optimize batch orders, multiple order picking and time-optimized movement of storage systems to maximize up time and increase throughput.

Accuracy

From the standard validation via barcode, handheld scanner or weight control to a wide range of others such as Pick-to-Light, Put-to-Light, Laser/LED Pointer: Kardex Remstar Power Pick Global reduce operator errors and increase picking accuracy to levels up to 99 %.

Security

Thanks to the software integration, user and group rights can be controlled and managed; each access to the system can be tracked.

Integration

From easy "Plug and Play" and middle-ware to customized solutions – all Power Pick Global software solutions are based on the latest Windows® technology* and can interface with the majority of tier one and tier two WMS and ERP providers.

Modularity

From the smallest store to a complex distribution center: Power Pick Global can be perfectly tailored to your requirements – with future security included in the package. This is because we carry out continuous development and expansion of the Power Pick Global system.

* Windows® is a registered trademark of the Microsoft Corporation.

Besides individual configurations, the software is also available in predefined solution packages:

- **Cleverstore 1000**
Software solution for simple storage and supply
- **Smartpick 5200**
Professional picking with high pick rates – specially for electronic industry

Benefits at a glance:

- Extend storage space by up to 75 %
- Increase storage density by up to 35 %
- Reduce operating errors to 0 %
- Increase precision to 99 %

Kardex Remstar JMIF: Advanced system communication of the simplest kind



The cross-platform plug-in interface for easily connecting your storage systems to a host system.

Connecting storage systems

As a general interface, the Kardex Remstar JMIF allows communication between two or more systems such as dynamic storage systems, conveying technology, or signal lights and host systems (ERP, WMS). Communication takes place via a number of possible communication channels. A database is not needed.

Kardex Remstar JMIF:

The Kardex Remstar JMIF is based on common, extensively tested open source components and works across different platforms thanks to Java® technology*. On a console with no user interface it can be used as a Windows service.

The Kardex Remstar JMIF is highly parallelized, features numerous configuration options and can control several storage systems per channel while maintaining the same level of performance.

Typical utilization scenarios:

- Connecting Kardex Remstar storage systems to a host system
- Connecting Kardex Remstar storage systems to SAP® using a host link
- Connecting the Kardex Remstar Power Pick Global host transfer module to a host system
- Connecting various manufacturers' storage systems to a host system

* Java® is a registered trademark of Sun Microsystems (bought in 2010 by Oracle).

Benefits at a glance:

- Cross-platform solution
- High performance
- Console/service application
- Plug-in interface
- Several machines can be controlled per channel with no loss of performance
- Extensive configuration options

Kardex Remstar Drive: The software package for controlling automatic storage systems with SAP®



The first-class extension of SAP® standard functions for controlling all of your storage systems.

Full integration in the SAP® GUI*

Kardex Remstar Drive is a software package – specially developed for SAP® ECC6.0 (or higher) – which is fully integrated into the SAP® GUI and adds another useful function to the SAP® system. Existing processes relating to standard SAP® functions are not influenced or compromised in any way by implementing the package.

All Kardex Remstar units and other manufacturers' storage systems can be controlled

With Kardex Drive, automatic storage systems can be controlled directly from SAP®. At the same time, the leading SAP® system takes care of the complete management of the storage spaces. Kardex Drive does not manage individual

storage space information and therefore does not require an additional database to memorize storage spaces outside the SAP® logic.

Simple installation and minimal training required

The installation of Kardex Drive is very easy and can be done by the SAP® administrator. Configuration and any alterations can be done by Kardex via a remote connection. Seamless integration of Kardex Remstar Drive into the SAP® user interface keeps staff training to a minimum.

* SAP® is a registered trademark of SAP SE.

Integration of customer-specific processes

Customer-specific processes such as RF terminals can easily be integrated. Additional alterations can be made at any time later on.

Benefits at a glance:

- Control directly from SAP®
- No additional middleware necessary
- Simple installation and minimal training, maintenance, and support required
- Existing processes are not influenced

Kardex Remstar Logicontrol® 100/200: The machine-based control center for Kardex Remstar storage systems



Innovations at the touch of a button: The intelligent generation of control centers for automated storage and retrieval systems from Kardex Remstar.

The Logicontrol 100/200 machine-based control center significantly improves the ergonomics and user-friendliness of automated storage and retrieval systems from Kardex Remstar. This is made possible by a simple touch screen which can be operated intuitively. On the Shuttle XP and Megamat RS automated storage systems, storage space management and basic-level reporting are just as much part of the new features as the state-of-the-art design, which has been optimized for both the touch screen and the keyboard.

Logicontrol gives the customers – who require no enterprise resource planning (ERP) system – an alternative, machine-based solution. This means:

- No additional hardware is needed
- A PC workstation is not necessary
- If a PC-based solution is installed at a later date, data and investments are preserved.

Benefits at a glance:

- No additional hardware needed
- Intuitive operation
- Ergonomic and user-friendly
- Inventory management for up to three automated storage units at the same time
- No loss of data or investment when a PC-based solution is installed at a later date



The intelligent, reliable and secure machine-based control center for smaller storage setups or stand-alone solutions.

The machine-based control center, consisting of hardware, software, and a control unit with touch screen, is a highly efficient solution for fast order picking and retrieval. The required article can be stored and retrieved in just a few clicks. The Logicontrol system combines various functions in one panel and – depending on requirements – is available in two versions:

Logicontrol 100 – “Pen & Paper”

The standard function on the Kardex Remstar control center, the Logicontrol 100, replaces classic paperwork. Error-free storage and retrieval is made easy for the user thanks to a simple article list. An article just has to be given an allocated storage space. A fully alphanumeric keyboard is optionally available.

Logicontrol 200 – warehouse and inventory management

The Logicontrol 200 is based on the functions of the Logicontrol 100, but it also has a simple storage space management feature which allocates the articles either a fixed or variable space, giving the user an overview of the material flow and inventory at all times.

A total of up to 8,000 different articles, 8,000 different storage spaces, seven box sizes and a network of up to three machines can be managed at the same time. An external Ethernet interface for connecting a PC or laptop is included in this control center version. The Logitools application can be launched using the Web browser, allowing data and other information to be imported and exported in the simplest manner.

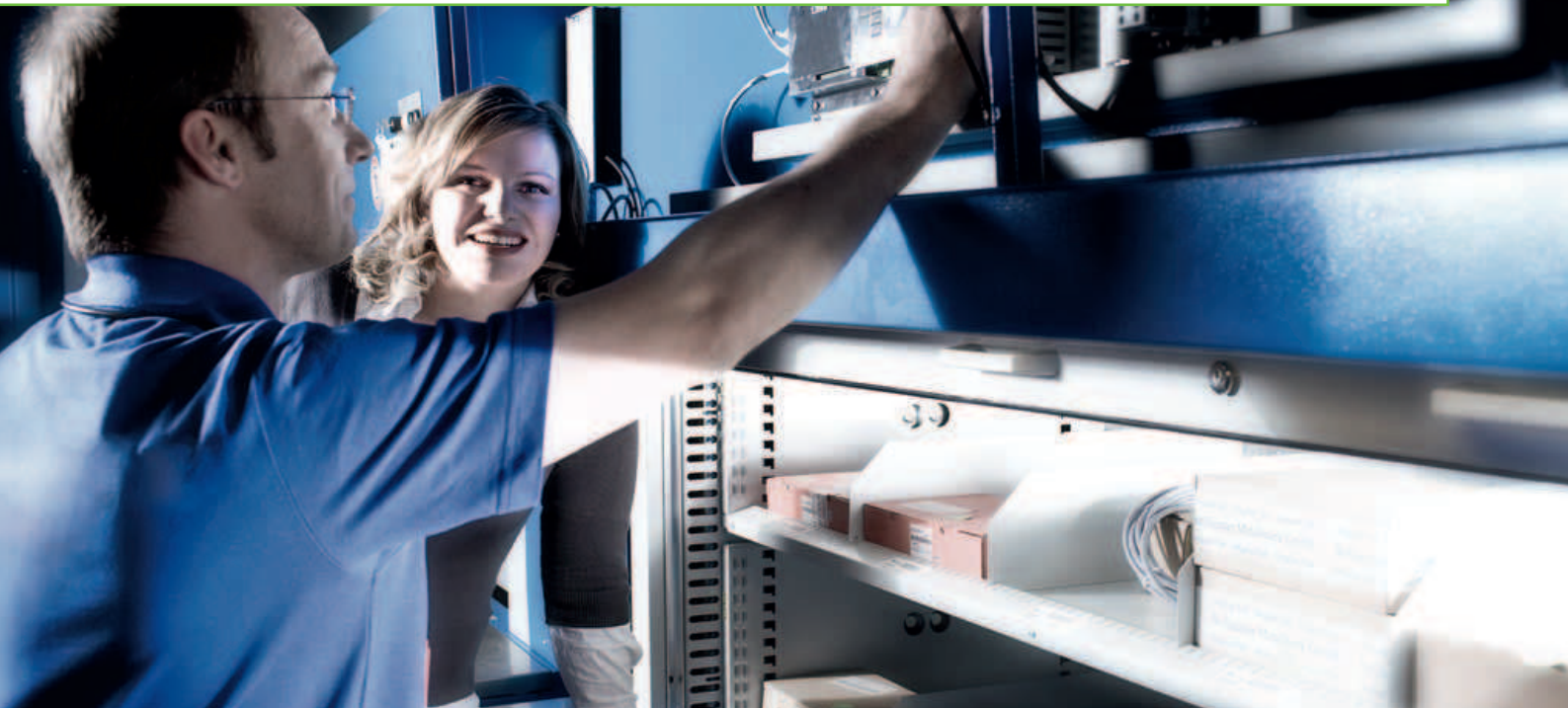
Logitools – the administration tool for Logicontrol 200

The Logitools Web application for administrative purposes can be accessed via a Web browser and allows the database to be edited. The following functions can be managed in the database using the tool:

- Backup and recover
- Import, export, migration
- Edit, delete

In addition, activities can be tracked and data can be searched, sorted or printed using the integrated journal and list function.

The Kardex Remstar service principle: 3 levels for your success – and more efficiency, sustainability, safety



Kardex Remstar is always there for you – with over 500 factory trained technicians available 24 hours a day, 7 days a week... this is the Kardex Remstar service commitment. To achieve this, we have devised three practical service packages for you:

ESSENTIAL

The ESSENTIAL Service sets the foundation stone for a long-term and efficient operation of your dynamic storage systems. Qualified service technicians integrate Kardex Remstar expertise to protect and retain the value of your machines.

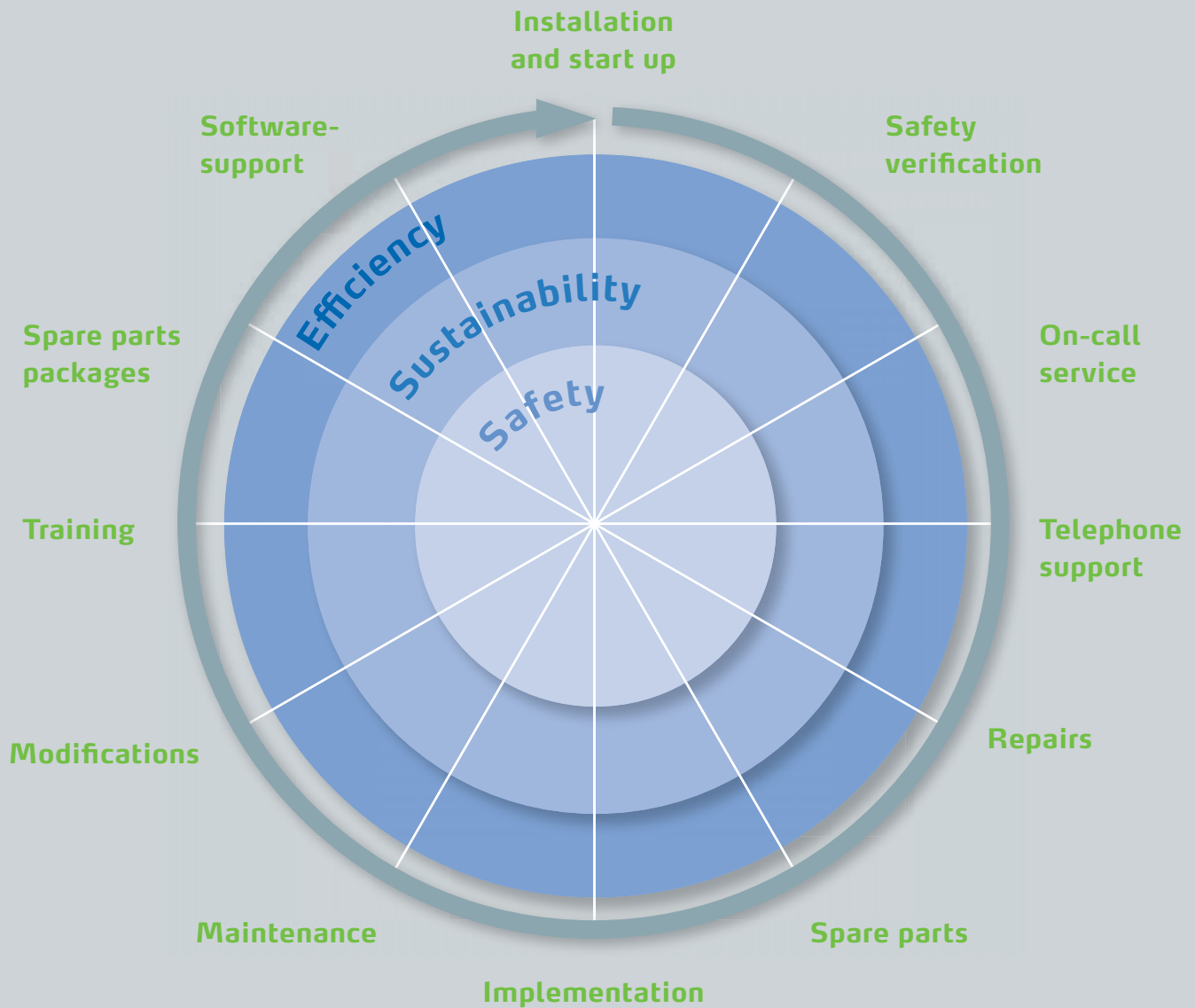
PLUS

The PLUS Service secures the sustainability and economic efficiency of your dynamic storage systems. In addition to maintenance, priority-based telephone support with 365/24/7 availability and an efficient spare parts management system are the supporting pillars of the PLUS Service.

EXTRA

If you require a little bit more, the EXTRA Service package is just right for you. Active maintenance management, implementation, modifications, training courses and regular software support make our services into a complete all-round package for you.

Active management over the complete life cycle of Kardex Remstar intralogistics solutions.



Further information:
www.kardexremstar.com

Do you want more service?

No problem:
Our service management will develop
an individual concept together with you.
Give us a challenge!

Kardex Group:

Your reliable partner for automated storage and retrieval systems



kardexgroup

The Kardex Group is one of the world's leading manufacturers of automated warehouse and office logistics systems.



Our organization is specialized in the development of innovative products, services and customer consultancy. In close co-operation with you, we work towards strengthening your competitive position significantly by exceeding your expectations and requirements.

Through the successful implementation of our business aims, we offer our employees a portal full of opportunity and prospects for challenging and lively careers.



kardexremstar

Kardex Remstar is one of the world's leading manufacturers of automated storage and retrieval systems. Since 1973, we have installed over 140,000 systems successfully in the "Office", "Warehouse" and "Commerce" segments.

Each of our products has been developed with the aim of increasing your productivity and improving the efficiency of your work processes. Our tailor-made solutions allow you to make the best use of your warehouse space.



kardexmlog

Mlog Logistics GmbH, with its head office in Neuenstadt am Kocher, is one of the leading providers of automated storage and material flow systems. Since May 2010, it has been part of the Kardex Group and has over 40 years of experience in the planning, implementation and maintenance of fully automated logistics solutions. Whether modernization in service is required or the installation of new turnkey installations, Kardex Mlog has the best logistics concept for your high bay warehouse.

Thanks to innovative and proven products and complete logistics concepts based on experience gained from more than 800 successfully implemented projects, Kardex Mlog can respond to your requirements quickly and flexibly.

Kardex Remstar: Always close to you – Worldwide



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Further information:
www.kardexremstar.com