

# Kardex Remstar Horizontal Carousel

An efficient solution for fast storage and picking





# Kardex Remstar Horizontal Carousel:

## Save time through rapid, direct and reliable access



The Kardex Remstar Horizontal Carousel is used everywhere where fast, reliable and cost-efficient storage and picking of goods is vital. Whether in production or distribution, for applications requiring high throughput or for medium and slow-movers:

Horizontal Carousels are the perfect solution.



Further information:  
[www.kardex-remstar.com](http://www.kardex-remstar.com)

## Kardex Remstar Horizontal Carousel: Because fast access and efficiency matter.



### Efficient storage and retrieval system

Fast reaction times, high throughput and short delivery periods – these are only a few of the criteria distribution centres require for modern and efficient warehouse logistics. It is exactly at this point where the automated Horizontal Carousels from Kardex Remstar come into action: They can be flexibly adapted to all kinds of tasks and allow picking orders to be efficiently processed.

Using the Kardex Remstar warehouse management software, you exactly know if everything runs smoothly. The result: more efficient process flows, increased transparency and more flexibility are added to the storage and retrieval of items – even in peak times.

### “Goods to person” principle

Whatever you store – a reliable and efficient storage and retrieval system significantly reduces labour and warehouse costs. Like any other storage system from Kardex Remstar, Horizontal Carousels work according to the “goods to person” principle and thus ensure an increased efficiency, optimum utilisation of the storage space and prevention of picking errors. And: By batch picking, the quantitative throughput can be significantly increased once more.

One more benefit: All the units that belong to one station work simultaneously. This guarantees permanent goods access and reduces waiting times to a minimum.



### Benefits at a Glance:

- High picking performance and no waiting times through batch picking
- High picking accuracy through Pick- and Put-to-Light technology
- 24/7 availability

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# Kardex Remstar Horizontal Carousel:

## Discover the horizontal dimension of your storage space



1

Carrier payload:  
450 kg, 680 kg,  
900 kg

2

Flexible carrier concept:

- Spacing 38 mm
- Multifunctional shelf through 180° rotation
- High stability through a shelf thickness of 26 mm

3

The useable carrier height of the Horizontal Carousel is between 1.80 m and 3.65 m.

4

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



## Technical data:

### Unit dimensions

#### Carousel length:

5,900 mm to 46,700 mm

#### Number of carriers:

Max. number depends

on the carrier width (CW)

CW 622 mm: 16 to 120 carriers

CW 825 mm: 14 to 100 carriers

CW 960 mm: 12 to 90 carriers

### Carrier

#### Carrier width:

622 mm, 825 mm, 960 mm

#### Carrier depth:

460 mm, 560 mm, 610 mm

#### Carrier height:

1,854 mm to 3,658 mm

### Load capacity

#### Carrier payload:

450 kg, 680 kg and 900 kg

Payload per shelf: 90 kg

### Performance data

#### Rotational speed:

24 m/min

Motors: 1.5 kW or 2.7 kW

### Shelf spacing

Standard: 38 mm

Special spacing available on request

### Options

Carrier with closed rear wall  
and/or side walls made of  
perspex

Shelf lock

Closely meshed shelf

**5**

The height of the  
Horizontal Carousel  
can be between  
2.20 m and 4.10 m.

**6**

The rotational speed  
is 24 m per minute.

**7**

The motor inside the  
unit allows multilevel  
stacking.



# Kardex Remstar Horizontal Carousel: the carrier concept for maximum flexibility



**The modular carrier and shelf concept by Kardex Remstar provides supreme comfort, increased stability, as well as maximum security.**

## **Carrier design with 38 mm spacing**

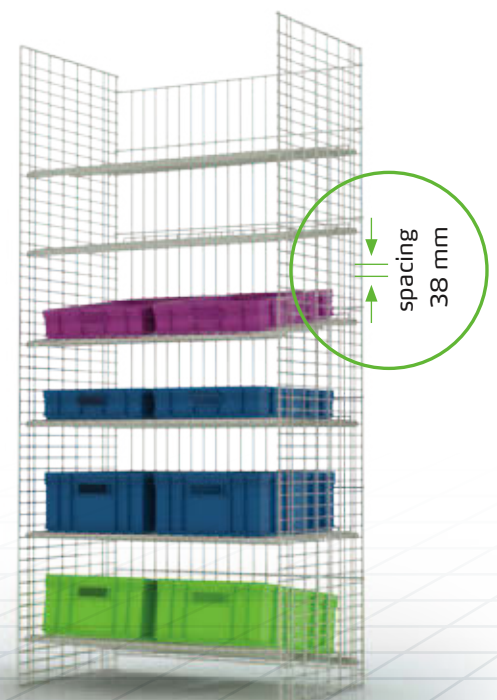
A smaller spacing of 38 mm and twice this number of hook options for shelves: This is the formula for success of the Horizontal Carousel for increased warehouse capacity and flexibility. With a determined shelf spacings and using standard bins, you can gain one or several shelf levels.

### **Example 1:**

Bin height 130 mm - 160 mm  
and carrier height 1,854 mm  
**1 additional shelf level**

### **Example 2:**

Bin height 130 mm- 160 mm  
and carrier height 2,159 mm  
**2 additional shelf levels**



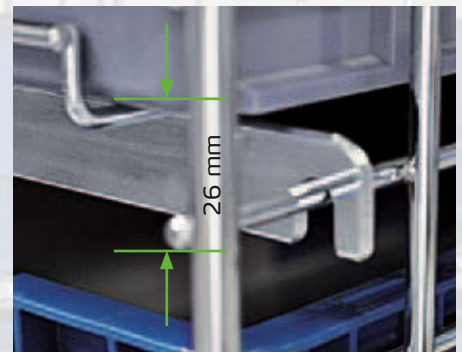




38 mm spacing



Shelf with 180° rotation



Shelf thickness 26 mm

## EXCLUSIVE:

### Shelf with 180° rotation

Each product is different, each customer is different and has his own always renewing challenges. It's perfect when he can rely on a modular concept for standard carriers and shelves. And it's even better when he can hook the shelves in the way that suits him best. This is all accomplished by the Horizontal Carousel. Through the 180° rotation, the shelves can be used in multifunctional ways – for a significantly improved handling of the goods and, thus, more flexibility in storage and retrieval.

Mounting the shelves:

- **tilted forwards (NEW)**
- **horizontal (NEW)**
- **tilted backwards**

The 14 mm front lip on each shelf prevents slipping of the stored goods. Thus, the stored goods are optimally secured also in a horizontal and tilted forward position.

## EXCLUSIVE:

### Shelf thickness of 26 mm

Shelves need to be able to carry and withstand a lot. The robust shelf helps to reduce shelf deflection against higher concentrated loads.

A shelf lock can be installed as an option. This minimises the vibration noise of unloaded shelves, since they are connected to the carrier at the cross bar. Another plus: Safety and installation availability are increased, since autonomous disengagement is prevented for empty shelves.

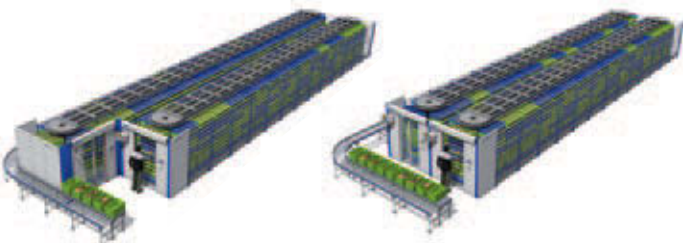
# Kardex Remstar Horizontal Carousel:

## For higher performance and fast delivery times



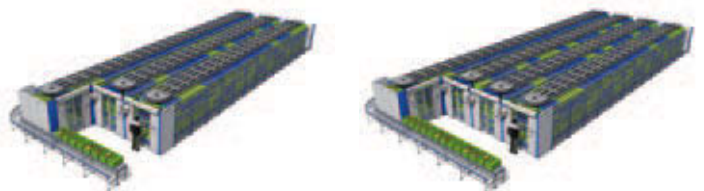
**For higher picking performance, Horizontal Carousels are usually arranged in stations. Depending on the installation size and conception, a number of different layouts are possible:**

### Dual station



The L-shaped dual station with its access openings arranged in a right angle to each other is suitable for a room height of up to 3 meters and can be comfortably operated by just one person. Moreover, the L-shape reduces the distance travelled by the picker by 1 meter compared to the I-shape, which facilitates handling and saves time.

### Triple and Quadruple stations



For triple and quadruple stations – they are ideal for a wide range of items that require frequent access –, the layout is usually L-shaped. Alternatively, the layout can be U-shaped or – if all machines have the same length – I-shaped. This allows for picking with several operators.





## Multilevel stations

### Multilevel stations



### Tall station with lifting platform



For more comprehensive systems, multilevel stations can meet the requirements of a great variety of different material flow strategies. In multilevel stations with protruding platforms – here, two or three Horizontal Carousels of a height of 2.5 meters are stacked one above the other – allow for picking and putting on different floor levels. Each level operates independently; the operating and picking stations are located on the respective floor level. A conveyor system can be installed in order to ensure the material flow between the different levels. The multilevel stations are suitable for a maximum room height of 9 meters.

With a tall station, an existent warehouse height of 4.5 meters is put to optimum use. A lifting platform always brings the operator to the appropriate height for ergonomic picking. To optimise time management, the height of the installation is divided into two to three picking zones by the Power Pick Global warehouse management system: All items in one zone are picked before the lifting table moves to the next zone.

As you can see: The variety of possible combinations with Horizontal Carousels from Kardex Remstar is virtually endless. Our experts will gladly meet with you to find the solution best suitable for your individual requirements.



# Kardex Remstar Horizontal Carousel: high operating comfort – high accuracy



## Increase your success and optimise your throughput with Pick-to-Light technology by Kardex Remstar!

### Paperless picking

Pick lists on paper, excessive time spent searching, incorrect deliveries and stock shortages are a thing of the past: The operator panel and touch screen, screens with all relevant picking information, Pick-by-Light/Pick-to-Light displays, and confirmation buttons allow for fast, easy and paperless picking. Furthermore, peripheral devices such as printers, scanners and other displays can be integrated into the system with the appropriate software.

### No leeway for picking errors

Every pick counts. Unfortunately, every mistaken pick does, too – for this costs time and money. The direct way to efficient picking and putting are Pick- and Put-to-Light technologies. They are used anywhere where high picking speed with a low error rate is required, and facilitate the allocation of goods and orders for the operator.

### Put / Batch Lights

No matter if it's about storage or retrieval of goods: The crucial factors for the outcome of the working process are accuracy and speed. By using Put- and Pick-to-Light techniques, you can optimise your workflows – which in turn results in an improved profitability.





**Information on the exact position and quantity of items to pick is communicated to the operator through screens and optical displays.**

**The Kardex Remstar Pick-to-Light technologies impress with five main functions:**

1. Storage and retrieval of items
2. Allocation of articles and orders
3. Information flow  
(quantity, description, etc.)
4. Process confirmation
5. Multi User Picking

**Vertical shelf LED**

The vertical shelf LED integrated into the side of the door shows the operator from which shelf level he needs to pick. For optimum adjustment to the bin height, the LED position can be moved at a distance of 76 mm.

**Pick- and Put-to-Light displays**

Information on the exact position and quantity of the items to be picked is conveyed to the operator via LED lights.

**Information on other applications can be found on our website by clicking of the reference area: [www.kardex-remstar.com](http://www.kardex-remstar.com)**



# Kardex Remstar Horizontal Carousel:

## 9 good reasons for optimum picking performance

**Kardex Remstar's formula for success: optimising your productivity and increasing your throughput while reducing space requirements and achieving greater transparency in your warehouse.**



### Benefit: **Productivity**

With the "goods to person" principle, the requested items are transported to the operator – fast, directly and reliably – without any unproductive travel and search times. For that, the Horizontal Carousel always takes the shortest path to the access opening. The display-tool-feature shows the operator which goods and what quantities to pick from which storage location.



### Benefit: **Picking performance**

Simultaneous, independent moving Horizontal Carousels of a station allow for a very fast overall system and high pick performance. One operator can work off 200 to 400 positions per station and hour. Optical displays on the machine and on the picking station allow for a pick and put accuracy of over 99%.



### Benefit: **Batch picking**

Paperless picking is possible while delivery notes and other relevant documents can continue to be printed. The warehouse management system combines several orders into a picking batch via PC control, allowing operator to pick multiple orders with reduced movements.



### Benefit: **High payloads**

The Horizontal is ideally for storage and retrieval of small and medium sized items. Moreover it is capable of storing items with a maximum payload of 54 tons. The load capacity is chosen according to the application.





## Benefit: **Optimum space utilisation**

Items are stored compactly in a confined space; this eliminates unproductive travel and picking routes within the warehouse. The actual picking zone is as small as 5 to 10 square meters.



## Benefit: **Reliability and compact design**

From development, manufacturing to customer service: The Horizontal Carousel is a compact, reliable, low-maintenance unit with nearly 100 % availability – ensuring consistent and long-term operational safety.



## Benefit: **Variability**

To achieve high throughput during peak times and meet seasonal picking requirements the system can be divided into different stations at the push of a button. Thus, it's possible, for example, to have a system of four Horizontal Carousels operated not only by one person, but by several persons simultaneously.



## Benefit: **Safety**

The Horizontal Carousels meet the highest safety requirements: The systems are closed all around and are surrounded by a safety fence which prevents accidents and protects from unauthorised access at the same time. Furthermore, the access opening on the station front side is equipped with safety doors that open and close automatically.



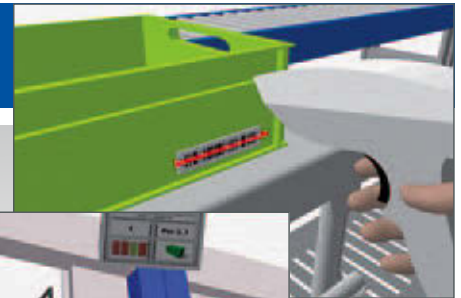
## Benefit: **Flexibility**

The Horizontal Carousel is suitable for a variety of different applications and items to be stored. Within the carriers, you can choose individual shelf distances and adapt them to the respective goods to be stored. Thus, even the efficient storage of bulky items is possible – up to the entire carrier height.

# Kardex Remstar Power Pick Global:

## The software innovation for controlling storage and retrieval solutions

### 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

Several pickers can work simultaneously on a Horizontal Carousel (multi-user picking). Productivity is additionally increased by the integration of Power Pick Global in your workflows: It allows you to optimise batch orders, multiple order picking and time-optimised movement of storage systems (HoriOpt) to maximise 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 middleware to customised 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 centre: 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:**

- **Smartpick 6000**  
Software package for professional picking with high pick rate
- **Smartpick 5200**  
Professional picking with high pick rates – specially for electronic industry

#### Benefits at a Glance:

- High picking performance
- At peak times, you can flexibly react to the increased requests
- Increase of picking accuracy to 99%

to 99%

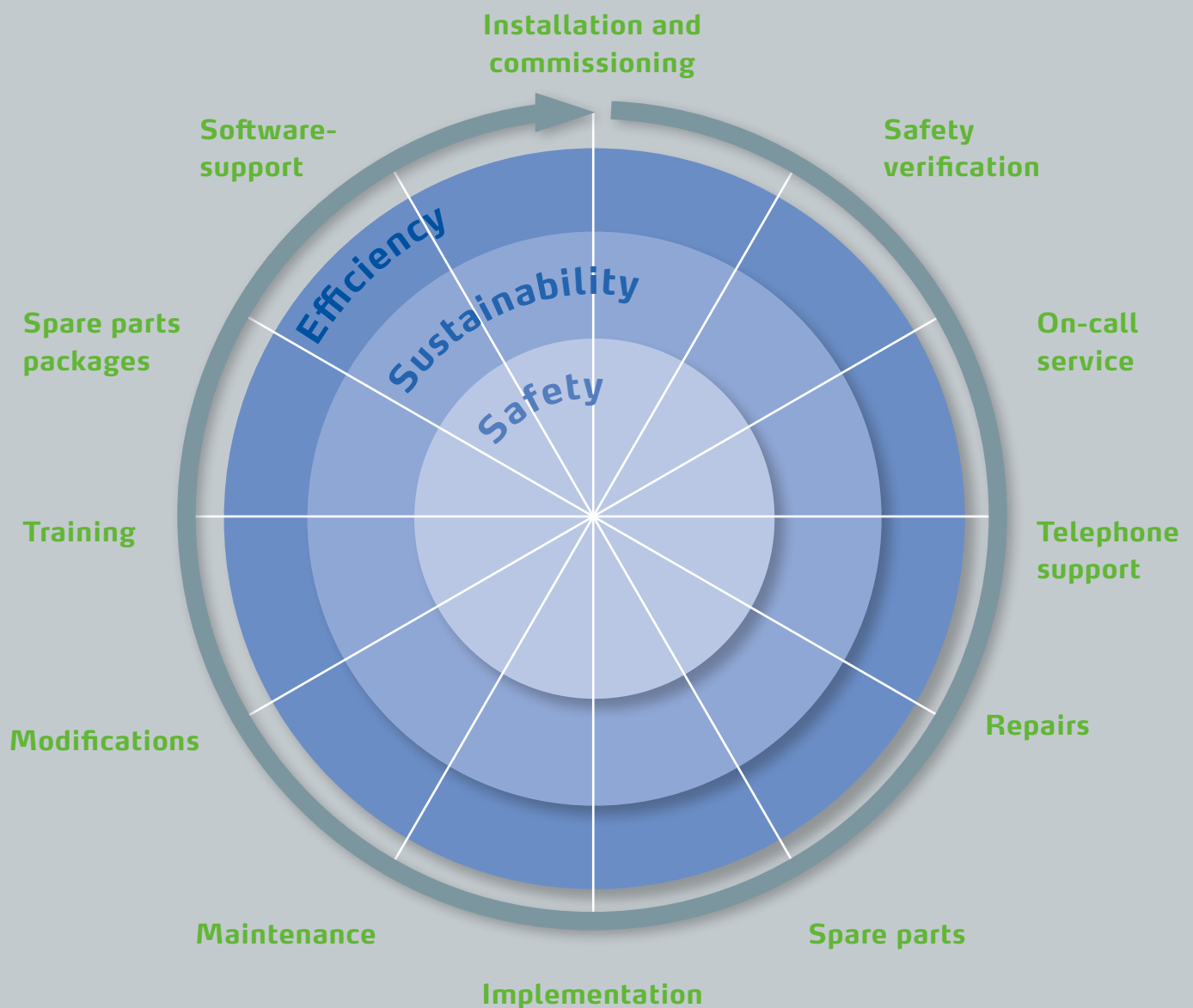
– Increase of picking accuracy to 99%

to 99%

to 99%



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



Further information:  
[www.kardex-remstar.com](http://www.kardex-remstar.com)

#### Do you want more service?

No problem:

Our service management will develop  
an individual concept together with you.  
Give us a challenge!

# Kardex Remstar:

## Always close to you – Worldwide



Australia  
Austria  
Belgium  
China  
Cyprus  
Czech Republic  
Denmark

Finland  
France  
Germany  
Great Britain  
Hungary  
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**Further information:**  
**[www.kardex-remstar.com](http://www.kardex-remstar.com)**