

# Warehouse equipment.

Racking and systems —  
the backbone of your warehouse.



 **JUNGHEINRICH**



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The ideal solution for all goods. 03

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# Customised warehouse equipment.

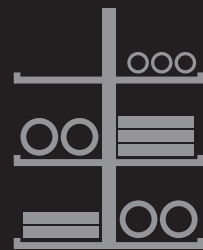
The ideal solution for all goods.



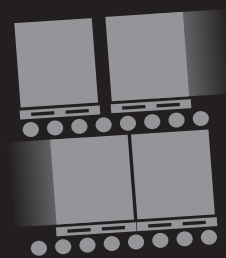
Static pallet storage



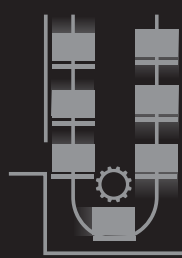
Static small parts storage



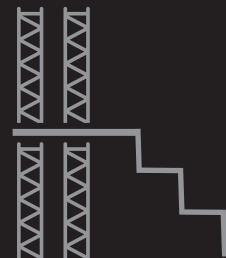
Long good storage



Dynamic pallet storage



Dynamic small parts storage



Platforms

As a leading intralogistics system provider, Jungheinrich develops custom-fit solutions for every conceivable type of stored goods. This includes not only racking, but also industrial trucks, stacker cranes and, of course, the right warehouse software. The result is a perfectly coordinated, expandable intralogistics system that always operates according to the latest standards. Put your trust in over 60 years of experience – and in forward-looking ideas, for example in the field of automation.

# New distribution centre for logistics provider.

GLX Global Logistic Service opts for a holistic solution from Jungheinrich to expand capacities.

## CHALLENGE

The GLX Group delivers a full logistics service for customers in various sectors across the globe. Dynamic growth saw the existing warehouses in Berlin-Marzahn and Augsburg reach their limits; a new distribution centre implemented as a green-field project aims to set the course for the future. The aim was to increase warehouse capacity while simultaneously boosting the efficiency of picking processes. The fact that a large number of different items are handled posed a particular challenge.

## SOLUTION

GLX sought a full-service provider for the new distribution centre and opted for Jungheinrich, the company whose industrial trucks GLX has been relying on for many years. A close exchange with GLX resulted in a holistic solution that also encompasses a special fire protection concept.

A 15,000 m<sup>2</sup> area is now used to process the entire spare parts logistics and the after-sales services for a major customer of the GLX Group. It was possible to deliver a significant increase in the volume of goods and in overall capacity, with optimised processes and shorter picking times significantly increasing efficiency. The warehouse is therefore in an ideal position to adapt to future dynamic growth.

## PROJECT IN FIGURES

**15,000+**

**pallet locations,** supplied in the form of a wide-aisle pallet racking system.

**20**

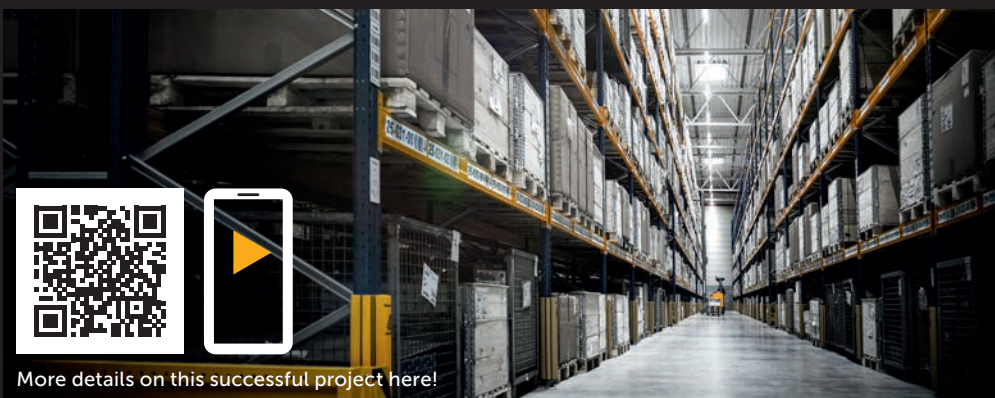
**Jungheinrich reach trucks** used to transport goods.

**10,500**

**storage locations for small-part containers,** distributed over 3,500 shelves in a high-bay shelving.

**2**

**wire-guided Jungheinrich medium / high level order pickers, (EKS)** for storing and picking small and very small containers.



More details on this successful project here!

# Wide-aisle & narrow-aisle multi-bay racking.

Our solutions for large quantities of palletised items, flexible configuration for bay loads of up to 45 t.

## WIDE-AISLE MULTI-BAY RACKING

Wide-aisle multi-bay racking can hold a great number of containers of various dimensions and weights as well as offering flexible expansion. With automated operation, the standard heights of 8 to 10 m can be increased to up to 45 m. Additional depth supports also provide the option of crossways storage.

- ▶ Direct access to all items.
- ▶ Increased capacity thanks to double-depth storage.
- ▶ Optimum ability to adapt to your needs.
- ▶ Jungheinrich industrial trucks / stacker cranes are the perfect addition.

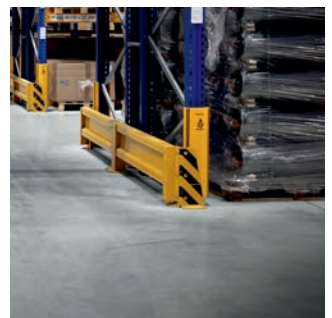
## NARROW-AISLE MULTI-BAY RACKING

The narrow-aisle warehouse version combines low aisle widths with the benefit of extreme lift heights. This enables high throughput levels with a low footprint, making the best possible use of the room height. Rail or wire guidance, semi-automated or fully automated very narrow aisle truck (VNA) are used for operation, and sometimes stacker cranes as well.

- ▶ Narrower aisle widths for greater utilisation of space.
- ▶ Greater efficiency thanks to double-depth storage and freely adjustable beam heights.
- ▶ Direct access to all items.
- ▶ Jungheinrich VNA trucks with lift heights of up to 18 m.



System bore holes for quick and easy adaptation to new circumstances.



Bumper to avoid collision damage, e.g. in corner areas or at rack uprights.

# Single-bay racking & drive-in / drive-through racking.

Small items in large quantities – or vice versa: Jungheinrich offers the appropriate solution.

## SINGLE-BAY RACKING

Single-bay racking is ideal for lattice boxes with large quantities of items and for storing heavy goods. The accessible configuration of the load units enables order picking directly from the lattice box or pallet, either manually using trucks or fully automated using stacker cranes. Depth supports make direct access to any load unit quick and easy, with secure high stacking providing an additional benefit over block storage.

- ▶ Efficient storage of items of varying heights.
- ▶ User-friendly order picking.
- ▶ Direct access to all items.
- ▶ Goods can be stacked up to great heights to ensure optimum space utilisation.
- ▶ Suitable for the FIFO method.

## DRIVE-IN / DRIVE-THROUGH RACKING

This solution is suitable for large quantities of heavy, similar goods. It combines the benefits of a space-saving block warehouse with those of racking storage. Operation is via industrial trucks (side-ways-seated stackers) that drive directly into the racking. The aisle space saved provides additional room for storage purposes. The system requires a fixed sequence for storage and retrieval. Drive-in racking should be chosen for the LIFO method and drive-through racking should be used for the FIFO method.

- ▶ High utilisation of space through compact storage and doing away with aisles.
- ▶ Easily expandable for maximum flexibility.
- ▶ Safe storage of pressure-sensitive goods.
- ▶ Suitable for large volumes of identical items.
- ▶ Particularly suitable for seasonal warehouses.



Single-bay racking: angle profiles arranged in the depth direction take on the beam function, permitting extra space height wise.



Bumper protection is used to protect racking from truck collisions.

# Holistic warehouse planning for Internorm.

Jungheinrich erects racking system to increase warehouse capacity.

## CHALLENGE

Internorm (Damme / Lower Saxony) has been producing high-quality plastic products for industry since 1987. The company's constant growth made it necessary to uncouple production from storage. As well as small parts, Euro pallets and long goods, the detailed planning also had to factor in the storage of lattice boxes, all while observing the enhanced fire protection requirements applicable to the plastics industry.

## SOLUTION

Jungheinrich planned and developed the new warehouse from start to finish and developed a custom-fit racking system. As well as 4,000 new pallet storage locations, there is also multitier shelving and cantilever racking for storing long goods. Perfectly tailored to the goods, the racking systems achieved more efficient storage of all goods and a flawless order picking process. The end result speaks for itself: a customised racking system for increased flexibility and greater warehouse capacity.

## PROJECT IN FIGURES

**4,200 m<sup>2</sup>**

**warehouse area**, planned and implemented by Jungheinrich.

**4,000**

**new pallet locations** in the wide-aisle multi-bay pallet racking with eight aisles.

**4-storey shelving**

**system** with 1,120 shelves.

**870 m**

**cantilever racking** for storing long goods.

**1**

**reach truck** for space-saving transportation of long goods.



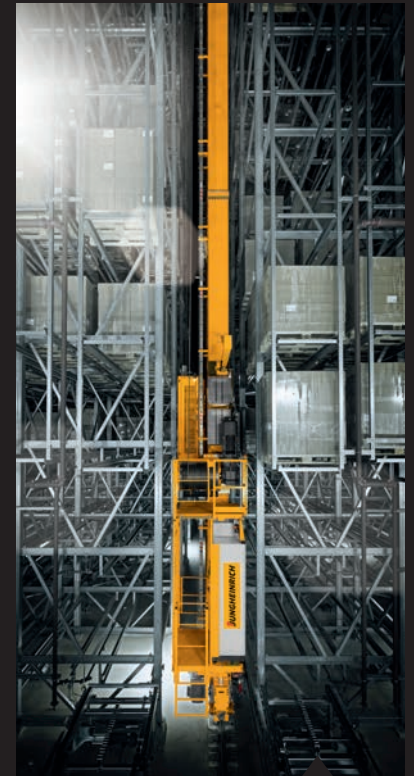
More details on this successful project here!



Automated processes transform your warehouses into high-performance environments. Jungheinrich offers you future-proof concepts from a single source as well as outstanding technology such as patented, corner-negotiating stacker crane.



WMS connection, SAP integration – via the award-winning Jungheinrich Logistics Interface, all processes in the automated warehouse are perfectly coordinated.



High-rack silo warehouses are giants among racks. Combined with the right stacker crane, they enable fully automated movement of goods at record speed.

Wire guidance combines with RFID transponders to enable precise positioning at the storage location as well as automatic aisle changes.



# Automatic pallet warehouse & high-bay silo.

Automated holistic solutions from Jungheinrich.  
For maximum performance and optimum space utilisation up to 45 m high.

## AUTOMATIC PALLET WAREHOUSE

Wherever a wide variety of items needs to be moved under corresponding performance requirements, an automatic pallet warehouse is the right investment choice. Jungheinrich offers complete tailored solutions in this area from warehouse equipment, Automated Guided Vehicles, pallet conveyor technology, stacker crane and software – all from a single source and of proven Jungheinrich quality. The future-proof system grows along with your requirements and enables maximum efficiency in the flow of goods as well as high throughput.

- ▶ Configurable as integrated or free-standing silo warehouses with heights of up to 45 m.
- ▶ High efficiency thanks to single to multi-depth storage.
- ▶ Compatible with pallets, lattice boxes, individual carrier systems.
- ▶ Cold store warehouse solutions possible.

## HIGH-BAY SILO WAREHOUSE

Fully automated high-bay silo warehouses are controlled using stacker cranes, with warehouse heights of up to 45 m possible. They always show their strengths when large quantities need to be stored and retrieved where space is short and performance requirements are high. Individual load handlers enable stacker crane to be customised to the respective goods being stored. One major benefit is the speed at which these silo warehouses. Uprights and beams are used as load-bearing elements for roof and wall elements.

- ▶ Optimum degree of space utilisation by expanding upwards.
- ▶ High throughput thanks to fully automated operation via stacker cranes.
- ▶ Efficient and cost-effective design through self-supporting construction including roof and wall elements.



Experienced Jungheinrich experts offer you advice in the planning and implementation of your automated solution.



Powerful and fast: Jungheinrich stacker cranes has a capacity of up to 7.5 t.

# Pallet live storage & push-back racking.

Dynamic solutions for the FIFO and LIFO methods following the goods-to-person principle.

## PALLET LIVE STORAGE FOR FIFO

Dynamic solutions are ideal when identical palletised goods need to be stored and retrieved quickly. Pallet live storage is ideal for the FIFO method as the items are stored on one side and retrieved from the other. The pallets move independently on a slightly inclined roller conveyor towards the operator. This saves travel distance, energy and enables fast order picking.

- ▶ Up to 50% space saving thanks to dynamic block storage.
- ▶ Shorter internal transport routes for greater efficiency.
- ▶ Separation of loading and removal ensures safety.
- ▶ Best utilisation of space for FIFO method.

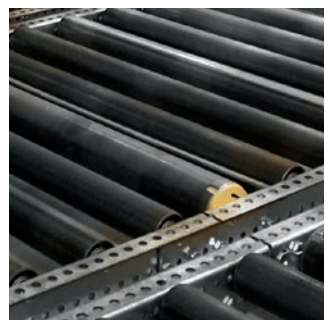
## PUSH-BACK RACKING FOR LIFO

Push-back racking is an outstanding compact storage solution that is suitable for the LIFO method. It is frequently used as a buffer warehouse for seasonal goods. Unlike pallet live storage, goods are stored and retrieved from the same side. A sloping principle is also operated here: the pallets move automatically along the roller conveyor and need to be pushed against the incline when storing.

- ▶ Optimum use of space through dynamic block storage.
- ▶ Flexible expansion.
- ▶ Shorter internal transport routes.
- ▶ Best utilisation of space for LIFO method.



The three-piece design of the floor coating with a run-out height of approx. 66 mm ensures gentle pallet removal.



With pallet live storage, brake rollers control the speed of pallet transportation.



The push-back racking has the highest warehouse density with the lowest proportion of travel routes. Loading and unloading is 30 to 35% faster than with drive-in racking.

A 4% gradient ensures that pallets are transported via rollers from the loading point to the retrieval point. A separator at this point makes sure that the last pallet is not pushed in by following load units.



With push-back racking, storage is typically in a longitudinal direction by forklift truck or reach truck.

The automatic separator makes sure that products do not get jammed and that the front pallet is never pushed in by following pallets.





# Clever automation solution for Maintrans Logistik GmbH.

Space-saving warehouse logistics for Erfurter Teigwaren GmbH, Germany's largest pasta plant.

## CHALLENGE

Production never stops in the new finished-goods warehouse at Erfurter Teigwaren GmbH, operated by Maintrans Logistik GmbH. 24/7 operation is essential in order to achieve the high production output required to meet the demand for penne, fusilli etc. The aim of the project was to boost process efficiency and productivity considerably – despite the restriction on space available. Automating and digitising processes should provide the way through.

## SOLUTION

Jungheinrich developed an innovative system solution for Maintrans, the project's general contractor. The solution comprised semi-automated shuttle compact storage system and Automated Guided Vehicles. Shuttles and trucks are connected via WLAN to enable significant increases in efficiency. The workload of personnel is also relieved through the use of fully automated industrial trucks. The award-winning Jungheinrich logistics interface provides flawless communication between the WMS and the warehouse components.

## PROJECT IN FIGURES

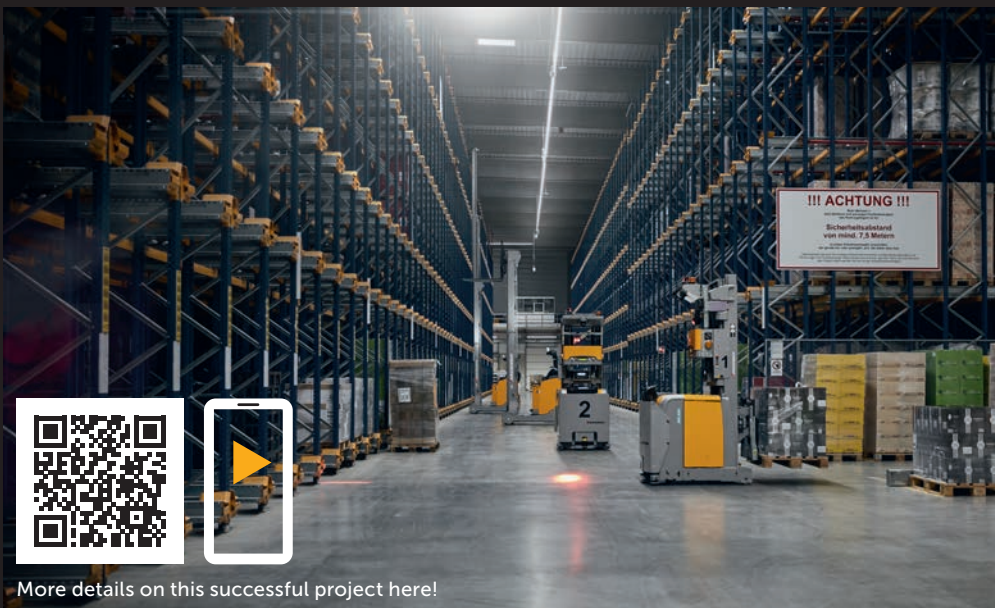
**7,150 m<sup>2</sup>**  
warehouse hall.

**26,000**  
pallet storage locations  
in the semi-automated shuttle compact storage system.

**6**  
Under Pallet Carriers  
for efficient storage and retrieval.

**2**  
Automated Guided Vehicles of type EKS 215a for automated pallet transport.

**3**  
reach trucks of type ETV 320 with semi-automatic rack height select.



More details on this successful project here!

# Shuttle compact storage system & mobile racking.

Smart system solutions for maximum utilisation of space.

## SHUTTLE COMPACT STORAGE SYSTEM

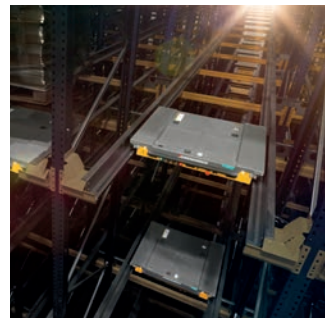
Shuttle compact storage system combines optimum space utilisation with very high item throughput. The basis for this is a system with channel racking and under pallet carriers that drive into the channel, as well as carrier trucks for storing and retrieving goods. Shuttle systems ensure high throughput rates in high-growth environments with a low to medium variety of items. Typical applications include cold stores, buffer warehouses and restocking warehouses.

- ▶ Compact storage for optimum utilisation of space and area.
- ▶ High throughput.
- ▶ Different pallet types can be used in the same racking system.
- ▶ Careful load handling.
- ▶ Both LIFO and FIFO are possible.
- ▶ Simple connection to your Warehouse Management System via our Jungheinrich Logistics Interface.

## MOBILE RACKING

Aisles between rack units drive up your space requirements. Mobile rack units provide an effective remedy and leave more space for storage use. With mobile racking, only one aisle is opened at any given time. The racks are mounted on electrically driven bases (carriages). Simple operation ensures direct access to any item. The system can be used with pallet, shelving and cantilever racking systems.

- ▶ Optimum space utilisation with up to 90% space saving.
- ▶ Compact storage system reduces energy and operational costs.
- ▶ Access to single location.
- ▶ Enhanced safety thanks to light barriers, release switch and emergency disconnect.



The Jungheinrich Under Pallet Carrier goes under the pallets and can be adapted to suit your needs.



Greater efficiency: with mobile racking with WMS connection, the aisle is already opening on approach.

# Shelving & high-bay shelving.

Efficient warehouse solutions for lots of different small parts and picked goods.

## SHELVING

Shelving provides an optimum solution wherever lots of different small parts need to be stored. The extensive range of accessories enables adaptation to a wide variety of goods, industries and applications. The clear organisational principle allows quick access and thus a more efficient way of working. Jungheinrich shelving is designed to be easy-assemble, boltless racking. The height of the shelves can be adjusted in 25 mm increments.

- ▶ Quick access to any item.
- ▶ Boltless system for easy expansion.
- ▶ Can be adapted to all manner of requirements with a wide range of accessories.
- ▶ Easy to assemble.
- ▶ Low investment costs.

## HIGH-BAY SHELVING

If you have limited space available and want to get the most out of it, high-bay shelving is recommended. Up to 14 m high, it makes perfect use of your room heights. As an order-picking store, high-bay shelving provides expansion for a narrow-aisle warehouse for pallets as you can use the same truck for both. The comprehensive range of accessories ensures tailored adaptation to your goods.

- ▶ Quick access to any item.
- ▶ Can be adapted to all manner of requirements with a wide range of accessories.
- ▶ Excellent space utilisation.
- ▶ Easy to assemble.
- ▶ Combines with our EKS medium / high level order pickers to form a perfect complete system.



The shelving can be adapted to the goods using compartment dividers or recesses.



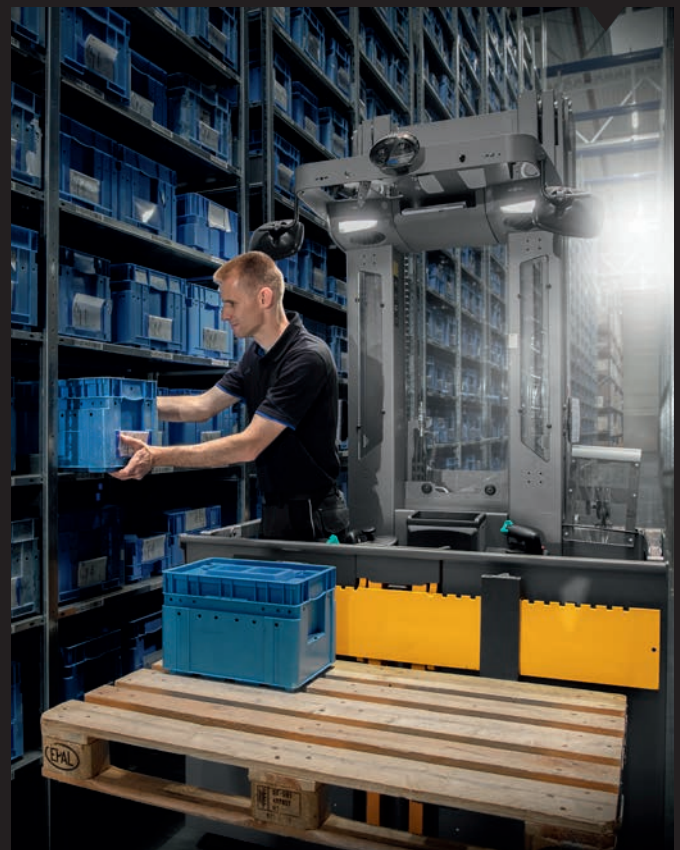
Easy, boltless assembly for simple construction.





Custom options for your purpose: Jungheinrich shelving can be equipped to form fully encased cabinets with doors and drawers.

If you value maximum picking performance, you can combine our high-bay shelving with the EKS medium / high level order pickers.



Our system consultants support you when choosing the appropriate racking system, along with suitable trucks as required.



# Highly efficient spare parts warehouse solution for Syncreon.

Four-storey pick tower for maximum utilisation of space.

## CHALLENGE

The Dutch subsidiary of third-party logistics service provider Syncreon has to store and retrieve a large number of constantly changing goods on a daily basis. The new distribution warehouse predominantly deals with high-tech products of varying shapes and sizes, requiring sensitive handling and therefore manual storage and order picking. The company sought a space-saving, cost-effective solution for this, plus the option for future expansion.

## SOLUTION

A four-storey pick tower makes maximum use of the hall's height. Continuous solid-wall frames and solid-sheet rear panels protect the goods being stored. A sophisticated walkway construction shortens routes and quickens order-picking processes, meaning delivery times are much shorter. The tower design allows for flexible expansion so that the company is also in a position to deal with future growth.

## PROJECT IN FIGURES

**700 m<sup>2</sup>**

four-storey pick tower.

**10,000**

**shelves** that can hold 150 kg each.

**1,250**

**bays** divided over further shelving that can hold 150 kg each.

**5,000**

**versatile dividers** for optimum separation of goods.

**24,000**

**storage locations** for efficient pallet storage.



# Multitier shelving & automatic small parts warehouse.

Future-proof solutions for maximum efficiency when storing and picking small parts.

## MULTITIER SHELVING

If you need to store lots of small parts, the floor space available is often insufficient. Multitier shelving helps you make optimum use of the hall height and allows your employees to order pick at multiple levels simultaneously in order to increase throughput. A comprehensive system allows customisation of the system to meet your industry and requirements exactly – with the option of adding further storeys later on.

- ▶ Efficient use of room height.
- ▶ Order picking at multiple levels for greater performance.
- ▶ Short picking routes boost productivity.
- ▶ Easy to assemble.
- ▶ Full flexibility in the event of order fluctuations: handling high throughput volumes with the use of additional staff.

## AUTOMATIC SMALL PARTS WAREHOUSE

Maximum process speeds, direct access and full utilisation of available room height: all these goals can be achieved with an automatic small parts warehouse. With powerful stacker cranes, goods can be stored and retrieved at heights of up to 25 m. For the storage itself, containers, boxes and trays are used – stored either on shelves or angular supports.

- ▶ Short access times.
- ▶ High level of process reliability.
- ▶ Maximum utilisation of space.
- ▶ Direct access to every item.
- ▶ Single and multi-depth configurations possible.
- ▶ Highly dynamic stacker cranes for maximum performance.



Railings and fall protection offer maximum safety for personnel and picked goods.



Automatic small parts warehouses are the first choice for high-performance environments such as spare parts stores and distribution centres.



# Vertical lift system & vertical paternoster racking system.

Dynamic compact storage with low space requirement and optimum utilisation of height space.

## VERTICAL LIFT SYSTEM

The vertical lift system enables high-density storage on a small footprint, be it in production or in the warehouse. The closed goods-to-person system uses a vertical lift to transport the goods to an ergonomically positioned service opening on trays. This results in fast order picking.

- ▶ High-density storage thanks to vertical lift system (up to 30 m).
- ▶ Flexible expansion capability guarantees future investment security.
- ▶ Pick-to-light systems (optional) minimise picking errors.
- ▶ Simple connection to various warehouse management systems via Jungheinrich logistics interface.
- ▶ High safety levels and protection for operator and goods.

## VERTICAL PATERNOSTER RACKING SYSTEM

Vertical paternoster racking systems function according to the circulation principle. Similarly to a carousel, the items rotate towards the service opening, where they can be easily and safely removed by the operator. Vertical paternoster racking systems are suitable and ideal for both production and warehouse environments in order to store a large number of items over a small footprint. It can be set up as free-standing carousel racking or connected to the structure of levels in the building, up to 10 m in height and with multiple service openings.

- ▶ Rapid access to all stored goods thanks to high circulation speed.
- ▶ Ergonomic design combined with extensive safety features.
- ▶ Simple connection to various warehouse systems via Jungheinrich logistics interface.
- ▶ Permanent access to goods using the emergency manual crank (e.g. in the event of power failure).



Vertical lift systems require only a small footprint and are compatible with a wide range of warehouse systems.



The vertical paternoster racking system provides a quick and secure way to transport goods to the operator.

# Central distribution warehouse for Fahrzeugbedarf Kotz.

Complete intralogistics concept for more efficient spare parts management.

## CHALLENGE

Up to now, Fahrzeugbedarf Kotz & Co. KG operated a decentralised structure for storing parts for commercial vehicles. The right parts were in stock, but often in the wrong location. The aim of the new distribution centre was to solve this problem. One of the main challenges was to be able to process 75 to 80% of all parts deliveries within Austria from here so that any part can be delivered anywhere in the shortest time possible.

## SOLUTION

Jungheinrich was tasked with developing all the warehouse equipment, including the industrial trucks, the conveyor technology and the connection to the Jungheinrich WMS. It was possible to raise overall capacity significantly at the new warehouse. Jungheinrich developed a three-storey shelving system with 6,000 storage locations for storing small parts and also two vertical lift systems for 1,200 storage locations. This increased the utilisation of space: lots of different items are stored using just a small footprint. The perfectly coordinated processes also reduce the number of errors and speed up delivery times.

## PROJECT IN FIGURES

2

**vertical lift systems** for 1,200 storage locations for storing small parts, plus cantilever racking.

6,000

**storage locations** divided over a three-storey shelving system.

2,000

**pallet storage locations** in a wide-aisle, high-bay warehouse.

2

**reach trucks** for the high racking.

4

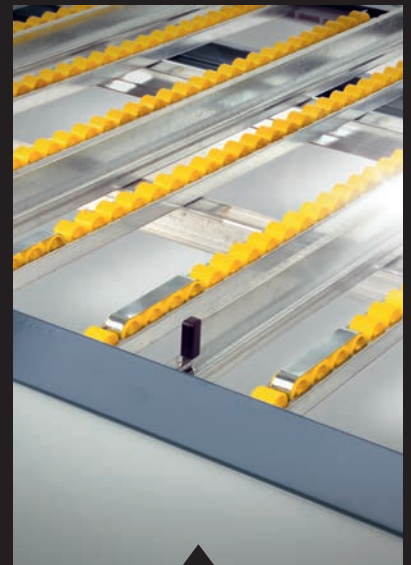
**pallet trucks** for transporting goods internally.



More details on this successful project here!



Flexible integration: carton live storage is effortlessly integrated into pallet racking in both single and double-depth systems.



Guide rails with live storage provide a problem-free flow of goods wherever products of differing dimensions need to be moved.



Mobile shelving can be equipped to form fully enclosed cabinets with doors and drawers. Ideal for storing files.



# Mobile shelving & carton live storage.

Our solutions for space-saving storage and for optimum transport flow in small parts warehouses.

## MOBILE SHELVING

Mobile shelving serves as compact, space-saving storage for items that are not constantly required, such as files, boxes or non-palletised goods. The rows of racks can move apart at the required point, thereby opening up a flexible aisle and providing access to the required item. The user-friendly controls are located directly at the required rack.

- ▶ Efficient space utilisation through reduction in rack aisles.
- ▶ User-friendly controls.
- ▶ Variable adaptation to goods with a comprehensive range of accessories.
- ▶ Up to 85% more storage volume than stationary racks.
- ▶ Access to each individual position with high utilisation of space.

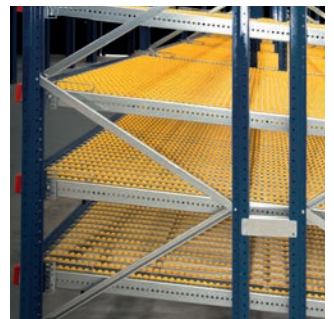
## CARTON LIVE STORAGE

Carton live storage is often used to increase efficiency when order picking small parts and packages. The items are transported directly to the picking station via an inclined roller system. This saves both time and travel distance. Because loading and removal are separate, items can be replenished without disruption. Pallet live storage is popular in areas such as the groceries sector, where strict compliance with a sequence focusing on best before dates plays an important role (FIFO).

- ▶ High storage density with low space requirements.
- ▶ Time saved through goods moving up automatically.
- ▶ Operated by hand or with order-picking trucks.
- ▶ Multi-level solutions ensure optimum usage of available room height.
- ▶ Versatile application and flexible expansion capability.



The FIFO principle of the carton live storage makes it possible to monitor batches and best before dates.



Individual configuration: carton live storage allows for flexible adjustment of height and tilt angle.

# Cantilever racking & steel construction platform.

Flexible-expansion solutions for long goods and quick space gains by utilising height.

## CANTILEVER RACKING

Bulky long goods such as rods, tubes or sheets are in good hands with flexibly extendible cantilever racking. Each racking upright is equipped with multiple cantilever arms, the number and spacing of which is tailored to the weight of the goods stored. Optional roll-away protection provides an additional safeguard for the goods. If you wish to store long goods or pallets using the same rack, connection via galvanised mesh or shelves is an option.

- ▶ Can be extended to any length.
- ▶ Rapid adaptation to changes in product range.
- ▶ Direct access to all goods.
- ▶ Mobile solution to save even more space.
- ▶ Also suitable for outdoor use.

## STEEL CONSTRUCTION PLATFORM

A steel construction platform is a quick way to gain space upwards without having to make costly structural changes to the floor plan. The self-supporting, walk-on and optional drive-on steel construction creates space at multiple levels: when new storage and work areas are provided, the lower level can be used for production, for example. Order-picking platforms can also be integrated.

- ▶ Additional storage space without changing the building fabric.
- ▶ More efficient use of room height.
- ▶ Flexible adaptation to existing needs.
- ▶ Many individual design options.



End pieces (optional) prevent long goods rolling off the cantilever racking.



The self-supporting, walk-on and optional drive-on construction of the steel construction platform creates additional space on multiple levels.



Cantilever racking is ideal for storing long goods. It continually adapts to individual requirements.



Whether for block storage, office space, production area or order picking: a steel construction platform adapts to your individual needs.



Comprehensive range of safety accessories: Railings, bumpers, support guard and more deliver maximum protection for personnel and equipment with the steel construction platform.



# Certified inspectors to keep you safe.

Legislators require regular inspection of racking to ensure continual safety in the warehouse. Our team of accredited inspectors is on hand for this purpose.

Your warehouse equipment withstands high loads on a daily basis and should be able to keep adapting to your needs. If your range changes, for example, the loads may also change and as a result the structure. Jungheinrich ensures that you remain flexible while staying safe: with standard-compliant warehouse equipment and annual rack inspections as a guarantee for sustainable productivity.

## INSPECTION AS PER DIN EN 15635

Our accredited rack inspectors have the necessary expertise to conduct qualified expert inspections in accordance with European standard EN 15635. The annual inspections take place during operation so that you remain productive at all times. The inspection sticker documents that you as an operating company have implemented this safety-relevant measure required by employment protection law.

### Your customer benefits:

- ▶ Inspection sticker certifying the inspection.
- ▶ Immediate repair using original spare parts.
- ▶ Increased safety and productivity in the warehouse.

## RAL QUALITY MARK: ENHANCED SAFETY

As well as meeting legal requirements, Jungheinrich consistently undertakes to guarantee maximum quality and safety standards. We can demonstrate this through the RAL quality mark. It shows that we have our work monitored by an independent institute right from the production of our warehouse equipment. We also operate our own test centre in Norderstedt near Hamburg so we can put our products through their paces.





# THAT'S HOW INSPECTION GOES.



Racking system inspection in accordance with DIN EN 15635 (use and maintenance of warehouse equipment).



Comparison of the load capacity signage with the actual rack structure.



Check of the construction of the racking system in accordance with the assembly drawing (where available).



Visual inspection of uprights and beams for visible deformation and damage, carried out from the warehouse floor.



Test sticker is issued to certify successful inspection.



Test report is provided.



Offers are submitted as necessary for replacement of damaged parts.

# A leader in intralogistics.

## There for you across the globe.



● Our own direct sales companies in 40 countries.

○ Partner companies in more than 70 other countries.

Over 18,000 employees.

More than 5,500 service engineers across the globe.

Founded in 1953, Jungheinrich is one of the world's leading providers of intralogistics solutions. With a comprehensive portfolio of industrial trucks, automated systems and warehouse equipment and services, we offer tailor-made solutions that allow you to devote your full attention to your core business. With our unique direct sales and service network, you can call upon a reliable partner who is at your side at all times, wherever you may be in the world.





### **AUTOMATED SYSTEMS**

Based on our comprehensive process knowledge and extensive experience in a wide range of industries, we can provide you with tailor-made automated systems, ranging from semi to fully automated solutions. We will thus work together to raise your efficiency and productivity to a whole new level.



### **NEW TRUCKS**

Lifting, stacking, transporting, order picking – electrically, by combustion engine or by hand? Our product portfolio contains the perfect trucks for your needs.



### **WAREHOUSE EQUIPMENT**

From pallet racking to automatic small parts warehouses, we have the right solution for every item and warehouses of all sizes. Combined with Jungheinrich industrial trucks and IT solutions, the result is a future-proof, holistic intralogistics concept of unique quality.



### **RENTAL**

Forklift truck rental is not just an ideal solution for addressing short-term or seasonal requirements. Jungheinrich offers "power on demand" for all companies, regardless of their size or industry. There are rental solutions available to suit all requirements, with trucks available instantly in a wide number of variants across the globe.



### **USED TRUCKS**

JUNGSTARS are used trucks from Jungheinrich, which are among the best on the market. With high-end reconditioning according to our 5-star principle, every truck is returned to an outstanding technical and visual condition to satisfy the highest safety and sustainability standards.



### **DIGITAL SOLUTIONS**

With intelligent software and sophisticated hardware components, we ensure complete digital networking within your warehouse. All processes can be monitored centrally and controlled with utmost efficiency. Systems from different manufacturers can also be integrated with ease.



### **CONSULTING**

Products and services must meet your exact requirements. That is why our consulting combines a high level of technical know-how with process knowledge and in-depth industry expertise. We can thus work together to identify the perfect complete solution.



### **FINANCING**

Jungheinrich Financial Services is your reliable partner throughout the entire life cycle of your Jungheinrich product. We offer individual solutions for trucks, racking, warehousing and system solutions, while taking your budget and the special requirements of your business into account.



### **AFTER SALES**

The trouble-free operation of your intralogistics solution is our top priority. That is why we offer reliable, global support for your trucks and systems with more than 5,400 qualified service engineers. This allows us to be on-site within a very short time frame to restore the availability of your trucks and systems.

**ISO 9001** The German production facilities  
**ISO 14001** in Norderstedt, Moosburg  
and Landsberg are certified.

 Jungheinrich trucks  
conform to the European  
Safety Requirements.

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