

EKS medium/high-level order pickers

Where man and machine combine for peak performance.

A worker is operating a Jungheinrich EKS order picker in a warehouse aisle. The picker is a tall, narrow machine with a platform at the top where the worker is standing. The aisle is lined with high industrial shelving units filled with blue plastic bins. The lighting is focused on the worker and the picker, creating a sense of depth and scale.

JUNGHEINRICH

INTRO

HIGHLIGHTS

EKS medium/high-level order pickers for greater efficiency in wide or narrow-aisle warehouses. 03

WIDE-AISLE: LOW & MEDIUM PICKING HEIGHTS

SERIES 1**EKS 110**

The first choice for single-shift operation in wide aisles. Powerful and energy-efficient. 04–05

SERIES 2**EKS 210**

Slim, compact design – for high productivity with excellent manoeuvrability. 04–05

WIDE-AISLE: MEDIUM & HIGH PICKING HEIGHTS

SERIES 3**EKS 310**

Impressive picking performance and energy efficiency at picking heights of up to eight metres. 06–07

SERIES 4**EKS 412**

The wide-aisle powerhouse. Safe operation at heights of up to eleven metres. 06–07

EKS IN NARROW AISLES

EKS 310s

High precision, rapid speed, perfect agility. With innovative synchronous reluctance motor. 08–09

EKS 412s

The flagship in the medium/high-level order picker range. Unrivalled performance and picking height. 08–09

OPTIONS AND ADDITIONAL INFORMATION

LITHIUM-ION ENERGY

Rapid charging times, zero maintenance, high availability. With pioneering lithium-ion power from Jungheinrich. 10–11

ASSISTANCE SYSTEMS & PERFORMANCE PACKAGES

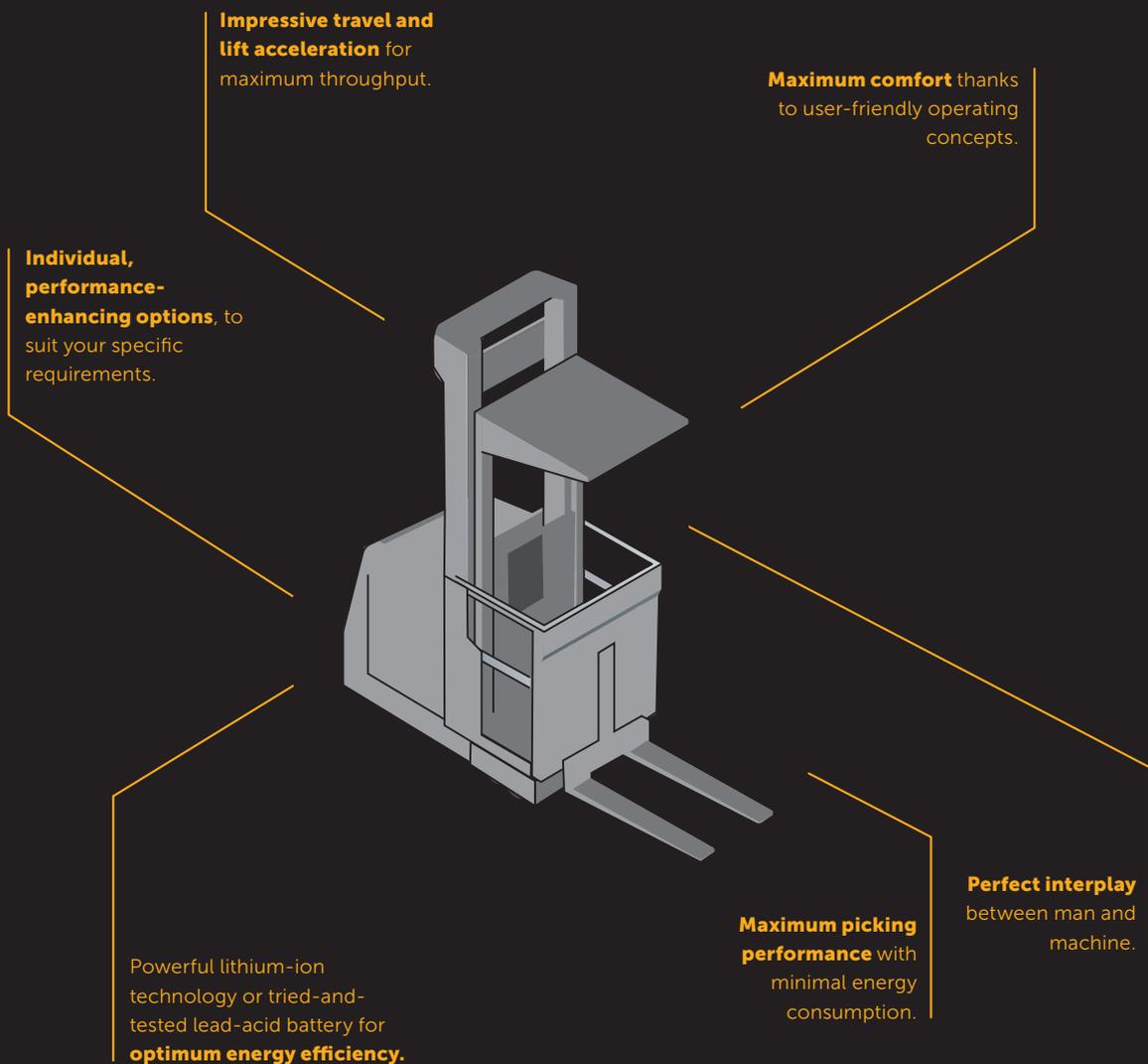
For enhanced performance, ergonomics and safety: optional equipment features. 12–13

JUNGHEINRICH FACTS

Interesting facts about the leading provider of intralogistics solutions along with information regarding our products, systems and services. 14–16

Lift your warehouse performance to new heights.

The strengths of EKS medium/high-level order pickers.



The versatile EKS medium/high-level order pickers from Jungheinrich enable for perfect interplay between man and machine. Outstanding performance, intelligent assistance systems and digital integration in your warehouse environment ensure utmost efficiency and maximum picking performance.



With its impact-resistant drive panel, the EKS 110 is extremely robust.



The EKS series 2 boasts outstanding manoeuvrability thanks to the narrow frame size of just 900 mm.



The EKS 110. Ideal for order picking up to the third rack level.



Energy recovery with regenerative braking. Standard from series 1.

SERIES	ENTRY-LEVEL SEGMENT	
	EKS 1	EKS 2
Model name	110	210
Picking height (mm)	4,600	6,550
Capacity (kg)	1,000	1,000
Travel speed (km/h)	13	10
Max. lift speed (m/s)	0.3	0.3

The perfect entry point. The EKS series 1 & 2.

Greater efficiency and higher throughput in your warehouse with an optimum price/performance ratio.

EKS 110

The EKS series 1 represents a quick and simple solution for boosting productivity in your warehouse. It is designed for single-shift operation, with the 3.2 kW drive impressing with its low energy consumption. It features a compact design, while the impact-resistant drive panel makes the EKS 110 extremely robust in daily use. With a platform height of up to three metres, it is the perfect order picker for flexible working and manoeuvring up to the third rack level.

- ▶ Boost performance with the drivePLUS option: up to 13 km/h.
- ▶ Optional jetPILOT multifunction steering wheel for enhanced comfort.

EKS 210

The EKS order pickers of series 2 are characterised by their narrow frame size of just 900 mm and thus boast impressive agility and manoeuvrability in wide aisles. Depending on your choice of battery, you can use the model in one or two-shift operation. The EKS 210 offers outstanding flexibility at low to medium order picking heights.

- ▶ Modular truck construction, adaptable to your requirements.
- ▶ Slim and agile for greater performance in tight spaces.



For fatigue-free working: clearly arranged display and height-adjustable control panel.



Perfect all-round visibility allows the operator to maintain a clear overview at all times.

Maximum picking performance in wide aisles. The EKS series 3 & 4.

These powerful entry-level models impress with outstanding travel and lifting performance as well as high efficiency levels.

EKS 310

The EKS 310 easily handles order picking heights in excess of eight metres. With energy-saving 24 V 3-phase AC technology and performance-enhancing equipment options, the EKS 310 is ready to face any challenge. The new mast offers excellent all-round visibility, while the side windows further extend the field of view.

- ▶ Ergonomic workstation with individual adjustment to suit any operator.
- ▶ Optional triplex telescopic mast for optimum picking performance.

EKS 412

The most powerful model in our range of wide-aisle order pickers. The three-stage mast allows it to reach heights of almost eleven metres. Optional assistance systems and ergonomics packages allow the operator and machine to interact with even greater levels of safety, efficiency and comfort. Like the EKS series 3, the EKS 412 is available either with innovative performance-oriented lithium-ion technology or with a reliable lead-acid battery.

- ▶ Utmost efficiency from the first rack level up to heights in excess of 10 metres.
- ▶ Optimised residual capacity to ensure maximum utilisation of warehouse capacities.



Lithium-ion batteries enable 24/7 truck availability.

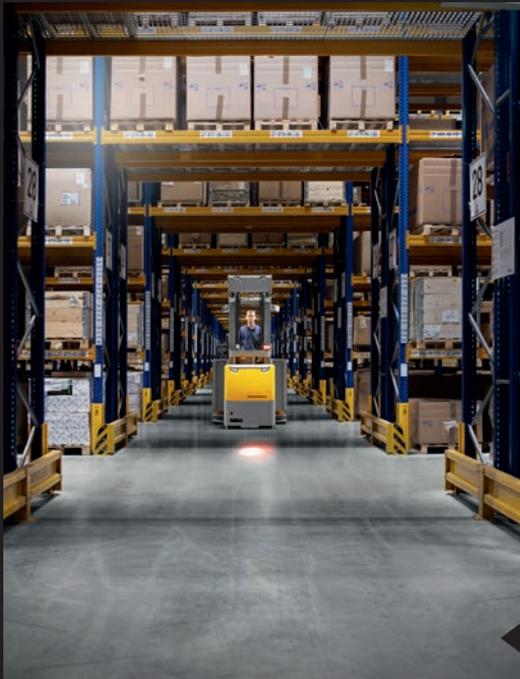


Perfect for the eCommerce sector with high product diversity.



Thanks to the transition-free triplex telescopic mast, the operator is not subjected to any impact loads.

Utmost stability, even on uneven floors, ensures safe working at all times.



The EKS 310 offers above-average picking performance in wide-aisle warehouses.

SERIES	ENTRY-LEVEL SEGMENT	
	EKS 3	EKS 4
Model name	310	412
Picking height (mm)	8,845	10,845
Capacity (kg)	1,000	1,200
Travel speed (km/h)	10	10
Max. lift speed (m/s)	0.3	0.3



Simply depress the accelerator and the warehouseNAVIGATION system guides the operator to the destination via the shortest route.



Maximum narrow-aisle performance in multi-shift operation with the EKS.



Maximum availability of all trucks – thanks to rapid intermediate charging and recharging.



Where high levels of pedestrian and vehicle traffic come together, avoiding collisions is paramount. This is where the optional personal and collision protection system (PPS) comes into play.

SERIES	PERFORMANCE SEGMENT*	
	EKS 3s	EKS 4s
Model name	310s	412s
Picking height (mm)	8,845	14,345
Capacity (kg)	1,000	1,200
Travel speed (km/h)	11	12
Max. lift speed (m/s)	0.5	0.5

* Suitable both for narrow and wide-aisle applications.

The narrow-aisle experts. EKS 310s & 412s.

Agile, powerful, flexible: The s models offer outstanding performance in multi-shift operation.

EKS 310s

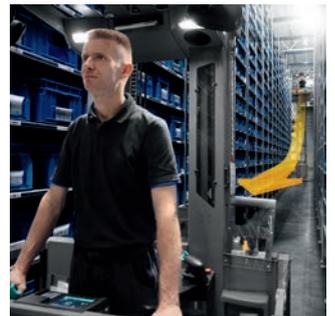
This narrow-aisle order picker completes all tasks with maximum speed and precision – even in the tightest spaces. In addition to the 48 V control concept, the truck features a newly developed synchronous reluctance motor, which maximises efficiency while keeping energy losses to an absolute minimum.

- ▶ Optional safety and personal protection systems for greater safety, even during peak operation.
- ▶ Intelligent system connection via the logistics interface ensures significantly faster processes.

EKS 412s

The flagship in our range of narrow-aisle order pickers sets new standards with maximum picking performance up to heights of 14 metres. No other order picker worldwide can match this figure. Lithium-ion power allows you to exploit the full potential of the new motor generation, while our lead-acid batteries guarantee two shifts with just a single charge. Seamless integration with your warehouse system ensures that both s models deliver maximum efficiency.

- ▶ Up to 25% increase in throughput performance thanks to warehouseNAVIGATION.
- ▶ capacityPLUS (optional) for increased residual capacity.



When speed is of the essence: With outstanding travel and lift acceleration, you can complete more picks every hour.



Greater comfort and individuality thanks to wide entry, height-adjustable control panels and a clearly arranged 4-inch display.



Significantly higher stamina in multi-shift operation.



Three times longer service life than with lead-acid batteries.

0.0
Zero maintenance.



Up to 8 years of warranty.



Up to 20% lower energy consumption than lead-acid batteries.



50% charge in just 30 minutes, and fully charged in 80 minutes.

Lithium-ion energy – your competitive edge. 100% satisfaction. Guaranteed.

ADVANTAGE: LITHIUM-ION TECHNOLOGY

With Jungheinrich lithium-ion batteries, you can enjoy the benefits of what is by far the longest-lasting energy source. Jungheinrich develops and produces the batteries, chargers and all-important truck components in-house. This ensures perfect interplay between all parts of the system, thus ensuring optimum performance at all times. Ultra-fast charging times and zero maintenance requirements enable virtually uninterrupted deployment of lithium-ion trucks. Power is always available, with no signs of fatigue. This outstanding durability is backed by a warranty of up to 8 years. We are certain that you will be impressed. That is why we guarantee that you can quickly and easily revert to the original technology within six months of delivery – without having to give any reasons.

ADVANTAGE: GREATER PERFORMANCE, LOWER CONSUMPTION.

Your new medium/high-level order picker masters all tasks in an efficient, energy-saving manner – even during peak operation. The beating heart of the latest generation is the synchronous reluctance motor, which maximises efficiency while minimising energy losses. Our EKS allows you to achieve maximum throughput performance with optimum energy efficiency.



LI-ION
technology



Perfect interplay between man and machine.

Maximum efficiency is only possible if all elements of the warehouse work together in perfect harmony. Our assistance systems, performance packages and integration solutions allow you to get the very best out of your EKS.

ASSISTANCE SYSTEMS

driveCONTROL (standard)

The truck speed is adjusted automatically based on the current lift height. The higher the lift height, the greater the reduction in speed. This ensures that the raised load is always transported safely.

curveCONTROL (standard)

When cornering, the truck speed is actively reduced based on the current load and according to the current steering angle. This ensures maximum travel stability and safety for the transported load – while also boosting throughput performance.

positionCONTROL

The programmable rack height facilitates rapid stacking and retrieval. Includes SNAP function for automatic stopping at the next rack level. The objective is semi-automatic activation of the lift height.

speedprofilePLUS

With load-dependent control of the speed profiles, the EKS always travels at the ideal speed for maximum safety. The lower the load, the higher the speed.

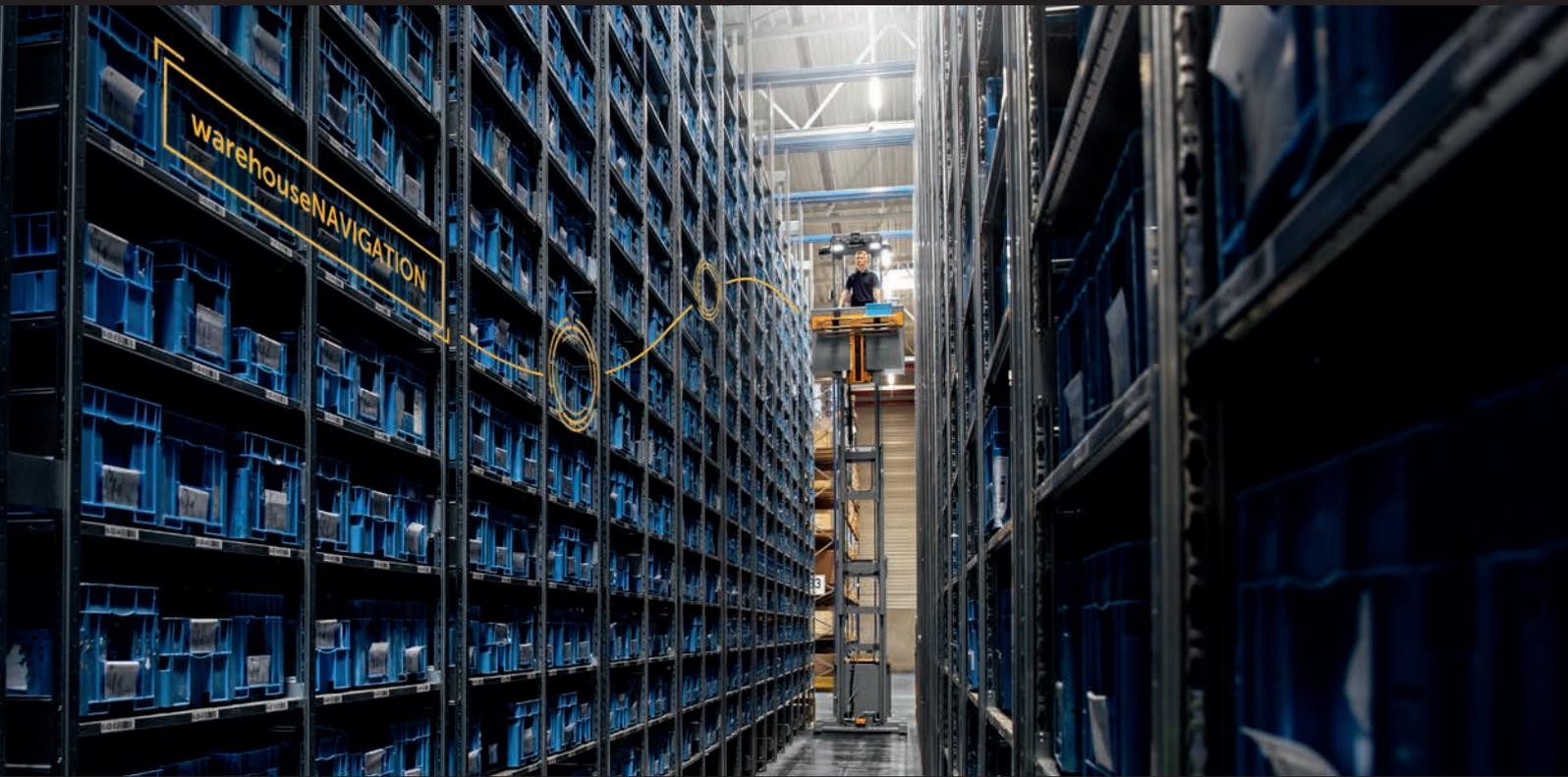
PERFORMANCE PACKAGES

drive&liftPLUS

By offering greater travel/lift speeds, the drive&liftPLUS package exploits the full technical capability of the medium/high-level order picker. This ensures maximum performance and the highest throughput speeds.

capacityPLUS

capacityPLUS optimises the residual capacity of the medium/high-level order picker. The full load capacities of the EKS can thus be exploited during each duty cycle.



SYSTEM INTEGRATION (NARROW-AISLE)

warehouseNAVIGATION

For the most efficient order picking processes on the market: The WMS transmits the information regarding the next rack location to be visited to the logistics interface on the truck terminal. The truck then switches to diagonal travel to approach the target location (semi-)automatically and with utmost precision. Throughput performance is thus boosted by up to 25%.

- ▶ Connection to warehouse management system (WMS) via radio data terminal or scanner.
- ▶ Direct loading of the destination in narrow aisles on the truck display.

RFID technology

The transponder for narrow aisles allows the EKS to deliver optimum performance in the tightest of spaces – even during peak operation.

- ▶ Truck control with transponder technology.
- ▶ High level of safety thanks to lift/travel cut-outs.
- ▶ Optimisation of travel speed profiles according to floor topology.

SAFETY/OPERATOR PROTECTION SYSTEMS (NARROW-AISLE)

Personal protection system PPS Anti Collision

Ideal during intensive operation, when multiple trucks are used in a single aisle and effective collision protection is required. Personal protection system with obstacle detection using laser scanner technology as well as automatic speed reduction or braking before obstacles.

Personal protection system PPS Standard

This is an integrated personal protection system with a warning and protection field. Inside this field, people and obstacles are identified and the truck adjusts its speed automatically or brakes to a stop.

Personal protection system PPS Plus

Offers the same benefits as PPS Standard, but with up to eight warning and protection fields instead of just one.

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 5,500 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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