

INTRO **HIGHLIGHTS** Electric stacker trucks. The powerful assistants for every application. 03 **ENTRY-LEVEL MODELS EJC M AND EMC 1** Our entry-level models. The alternative to hand pallet trucks. 04-05 SHORT-DISTANCE EJD 1i AND EJD 1 & 2 Pedestrian-operated double-decker trucks. The versatile all-rounders 06-07 over short distances. EJC 1 & 2 Sturdy packers for intensive use even at height. 08-09 MEDIUM-DISTANCE ERD 1 & 2 Electric pedestrian-controlled trucks with integrated stand-on platform. For greater efficiency through double-deck transport. 10-11 ERC 2 Electric pedestrian-controlled trucks with fixed or folding stand-on platforms. For storage and retrieval at height. 12-13 **ERD 2i AND ERC 2i** The innovative truck concept with lithium-ion technology. For maximum performance in the smallest of spaces. 14-15 LONG-DISTANCE **ESC 2 & 3 AND ESD 1 & 2** Powerful electric sideways-seated stackers with high levels 16-17 of operator comfort. **OPTIONS AND ADDITIONAL INFORMATION LITHIUM-ION TECHNOLOGY** For greater performance and fast charging times. 18-19 **GREATER PERFORMANCE** Improved safety, improved ergonomics and improved functionality for your application scenario. 20-21 **JUNGHEINRICH FACTS** Leading provider of complete intralogistics solutions: 22-23 information on products, systems and services.

The right assistant for every job.

Electric stacker trucks. The benefits at a glance.



Electric stacker trucks are powerful assistants, whether in the warehouse or in the sales room. Excellent build quality, an intuitive operating system and high productivity are key features of the stacker trucks, particularly the doubledecker versions. Whether as a pedestrian or passenger, over short, medium or long distances: at Jungheinrich you will find a tailor-made solution for your needs.

Versatile.

Suitable for transporting, storage, retrieval and order

Fast, easy charging thanks to on-board charger.







The EMC 110 is ideal for transporting in more confined spaces.



The mono-mast version of the EJC M offers an optimal view of the fork tips and easy manoeuvrability thanks to its compact dimensions.

The entry-level model is also available in the EJC M10b wide-track version.

	ENTRY-LEVEL SEGMENT	
SERIES	EJC M*	EMC*
Model name	M 10 E M 10b E M 10 ZT M 13 ZT	110 B10
Lift height (mm)	1,540-3,300	1,540
Capacity (kg)	1,000-1,300	1,000
Travel speed (km/h)	5	5
Lift speed (m/s)	0.22	0.16

^{*} These models are available with Duplex mast (ZT), mono mast (E), ramp comfort or as wide track version (b).

Entry-level electric stacker trucks. EJC M and EMC 1.

The alternative to the hand pallet truck: greater efficiency on the go with electric drive.

EJC SERIES M

M 10 E | M 10b E | M 10 | M 13 ZT

A worthwhile purchase: the EJC M pedestrian stacker masters light stacking tasks in no time and is made for occasional use over short distances and with low loads. Even in narrow warehouses or sales rooms, it can be manoeuvred effortlessly thanks to its compact dimensions. The model has an on-board charger.

- ▶ Quickly ready for use: can be charged at any conventional 230 V socket.
- ► Electric drive for ergonomic operation when transporting and stacking.
- Available in different versions (mono-mast, duplex-mast, wide-track with duplex telescopic mast).
- ► Can also be used as a lift/work table.

EMC SERIES 1

105 | 110 | B10 | 110 with ramp comfort

The powerful EMC 1 stacker truck is a flexible assistant for spontaneous use. It is suitable for stacking, storing or transporting light goods over short distances and can also be used as a work table. Compared to conventional hand pallet trucks, it scores highly with increased performance and excellent ergonomics.

- Quickly ready for use: can be charged at any conventional 230 V socket.
- ► Extreme manoeuvrability thanks to its short front end length, ideal for tight spaces, lifts and mezzanines.
- Automatic adjustment of the lift height with intelligent lift positioning (optional).
- Thanks to ramp comfort, thresholds and uneven floors are safely mastered.



The EJC M: All important control instruments are arranged centrally: battery discharge indicator, hourmeter, emergency disconnect and key.



EMC 110: 2-inch truck display including discharge indicator and hourmeter (optional).

Pedestrian-operated double-decker transport. EJD 1i and EJD 1 & 2.

All-rounders over short distances: powerful, robust and versatile.

EJD SERIES 1i

118i

The shortest universal forklift in its class with a range of battery capacities not only impresses with its compact dimensions: the front end length of the EJD 118i with the innovative lithium-ion battery system is just 572 mm. Its light weight also qualifies it for use in HGVs. Thanks to different mast variants with a lift height of 1,000 mm or 1,520 mm, the EJD 118i can be used as a lift platform that positions goods at an ergonomic height and makes sorting and order picking easier.

- Flexible adaptation to the handling volume thanks to double-deck transport.
- Lithium-ion technology for short intermediate charging times.
- Extremely compact dimensions for high manoeuvrability even in the smallest of spaces.
- ▶ Ideal for use in branch offices.
- ► Transport by HGV possible.

EJD SERIES 1 & 2

120 | 222

The all-rounders in this series are sturdy and compact, ideal for loading and unloading an HGV via loading ramp. They combine the strengths of pallet and stacker trucks in one and reach lift heights of up to 2,905 mm. Using two pallets enables productivity to be doubled immediately. Even inexperienced operators can quickly get to grips with the EJD; the long tiller makes manoeuvring easier and ensures the necessary safety distance.

- ► Manoeuvrable, efficient, multifunctional trucks with low energy consumption.
- ► Double-deck operation for further performance maximisation in goods throughput.
- ► Thanks to their small dimensions they can be used in tight spaces, e.g. sales rooms with narrow aisles.
- Safe travel on ramps and over thresholds thanks to the ProTracLink support wheel system with caster wheels connected via a torsion bar.
- ► Safe pedestrian operation: long tiller with 4-step foot protection.



Quickly ready for use again: the on-board charger enables recharging at any 230 V socket.



Ergonomic lift platform: order picking of goods of all kinds at a comfortable height.



Twice as productive in the same time: the EJD 220 can accommodate two pallets in a double deck.



Compact, agile and powerful, even in narrow aisles: the EJD 118i with an innovative lithium-ion battery.



The EJD 118i offers maximum flexibility and increased ground clearance thanks to the integrated support arm lift.

	SHORT-DISTANCE, MULTIFUNCTIONAL	
SERIES	EJD 1i	EJD 1 & 2
Model name	EJD 118i	120 222
Lift height (mm)	1,000-1,520	1,500-2,905
Capacity (kg)	1,800	2,000-2,200
Travel speed (km/h)	6	6
Lift speed (m/s)	0.27	0.25-0.3



Large lift heights and high residual capacities make the EJC 216 a powerful assistant – with low energy consumption.





The EJC 110 is our flexible all-rounder with compact dimensions. The optional proportional hydraulics enable precise load handling.

The EJC 216b is optimally designed for handling special loads. Closed pallets or transverse pallets can also be picked up using the laterally offset support arms.

	SHORT-DISTANCE, INTENSIVE USE
SERIES	EJC 1 & 2*
Model name	110 112 112z 212 212z 212b 214 214z 214b 216 216z 216b 220 220z 220b
Lift height (mm)	2,400-6,000
Capacity (kg)	1,000-2,000
Travel speed (km/h)	6
Lift speed (m/s)	0.22-0.34

^{*} These models are available with support arm lift (z) or as wide-track versions (b).

Powerhouses over short distances. EJC 1 & 2.

Versatile, electric, pedestrian-controlled trucks for intensive use even at height.

EJC SERIES 1

110 | 112 | 112z

The EJC series 1 trucks are strong and at the same time extremely manoeuvrable thanks to their compact design. When it comes to daily stacking and transporting, they are powerful packers that impress with their ease of use. The intuitive multi-function tiller is suitable for left and right-handers, and the battery can be quickly recharged at any 230 V socket. All variants are also available with efficient lithium-ion batteries.

- ► Effortless, efficient work even in confined warehouse environments.
- Version with support arm lift available for driving over ramps and thresholds.
- Crawl speed function when the tiller is raised provides greater safety.
- Available with different masts to adjust the lift height.
- ► Double-deck transport possible to maximise productivity.

EJC SERIES 2

212 | 212z | 212b | 214 | 214z | 214b | 216 | 216z | 216b | 220 | 220z | 220b | 230

Series 2 is a sturdy, extremely versatile solution for pedestrian operation. Ideal for storing and retrieving heavy loads at height. Various safety features guarantee protection of the operator, e.g. the foot protection tiller and optimum fork visibility. The proportional hydraulics enable gentle lifting and lowering of even large loads.

- ▶ Made for long, multi-shift operation.
- ► Many versions available, e.g. with support arm lift or as a wide-track variant.
- Particularly powerful with high residual capacity at lift heights of up to 6,000 mm.
- positionCONTROL: select rack height for quick and easy storage and retrieval
- operationCONTROL: assistance system uses audible and visual warning signals to ensure that maximum capacity is not exceeded.



With on-board charger for quick and easy intermediate charging at any 230 V socket.



Everything under one roof – work documents are safely stowed in the EJC and always at hand.

The double-deck professionals for greater throughput. ERD 1 & 2.

Electric, pedestrian-controlled truck with stand-on platform – for pedestrian or passenger use.

ERD SERIES 1

ERD 120

Whether for goods transport, storage and retrieval, or safely loading and unloading of an HGV: the ERD 120 is an agile all-rounder that can be flexibly adapted to the application scenario. A wide range of options for the choice of platform, drive and mast ensure individual configuration. Thanks to its double-deck transport, productivity can be scaled up, while energy consumption remains low.

- ► High throughput with low consumption.
- ► Four stand-on platform variants: folding, spacious, compact, and order-picking platform.
- Also available with advanced lithium-ion technology.

ERD SERIES 2

ERD 220

The ERD 220 shows its particular strengths when there are extremely high demands on the throughput speed. It combines efficient double-deck transport, in which two pallets are moved at the same time, with excellent acceleration rates and travel speeds of up to 12 km/h – with the option of more when you choose drivePLUS. At the same time, operator protection is guaranteed through comprehensive safety systems.

- ▶ Designed for the highest throughput and efficiency demands.
- ► With drivePLUS: increase in travel speed of up to 14 km/h.
- ► Load-dependent curveCONTROL for safe cornering, even at high speed.



All important parameters always in view, e.g. charge state or operating hours.



Spacious stand-on platform for maximum ergonomics and operator safety. Optional foot protection sensor.

The ERD 220 enables agile, fast manoeuvring, e.g. when loading and unloading HGVs. The fixed stand-on platform offers the operator security.





The ERD 220 with folding platform. The space-saving, flexible solution for a narrow warehouse environment.





Well prepared for every application scenario. The ERD is available with four platform versions: folding, spacious, compact or as a picking platform.

The side-entry platform allows for quick entry and exit and is therefore well suited for order picking.

	MEDIUM-DISTANCE, FLEXIBLE	
SERIES	ERD 1 & 2	
Model name	120 220	
Lift height (mm)	1,500-2,905	
Capacity (kg)	2,000	
Travel speed (km/h)	9–14	
Lift speed (m/s)	0.32	



With the drivePLUS option, up to 11 km/h can be achieved instead of 9 km/h — for faster travel.



The ERC 216z is suitable for transporting goods over longer distances and for storing and retrieving them on higher rack levels up to 6 m.



In the wide-track variant, the forks can be lowered to the ground, which makes it easier to pick up transverse pallets or special loads.

	MEDIUM-DISTANCE WITH STAND-ON PLATFORM
SERIES	ERC 2*
Model name	212 212z 212b 214 214z 214b 216 216z 216b 220 220z 220b
Lift height (mm)	2,400-6,000
Capacity (kg)	1,200-2,000
Travel speed (km/h)	11
Lift speed (m/s)	0.3-0.4

^{*} These models are available with support arm lift (z) or as wide-track version (b).

The top performers for medium distances. ERC 2.

Powerful electric pedestrian-controlled trucks for storage and retrieval at higher rack levels.

ERC SERIES 2

212 | 212z | 212b| 214 | 214z | 214b | 216 | 216z | 216b | 220 | 220z | 220b

The versatile ERC electric pedestrian-controlled trucks with a folding stand-on platform impress with their economical transport of goods over longer distances and their storage and retrieval at higher rack levels. The precise lift motor ensures gentle lifting and lowering of the load at lift heights of up to 6,000 mm. With the optional support arm lift, they are ideally equipped for double-deck transport; the wide-track version is suitable for lifting closed pallets or Euro transverse pallets. The four-wheel concept guarantees a stable position, the platform suspension is easy on the operator's back.

- ▶ Powerful acceleration and excellent consumption values optimise efficiency.
- ▶ operationCONTROL (optional) shows load weight and lift height, warns against overloading with audible and visual signals (accuracy +/-100 kg) for greater safety in everyday warehouse operations.
- ► Safe cornering thanks to the curveCONTROL assistance system.
- ▶ positionCONTROL: select rack height for quick and easy storage and retrieval.
- ► Effortless operation over ramps and thresholds. The optional added support arm lift allows the double-deck transport of two pallets at the same time, thereby significantly accelerating goods throughput.



Many storage options and a reader-friendly 6-inch display for operationCONTROL or curveCONTROL make everyday work easier.



Thanks to the support arm lift, obstacles such as ramps, thresholds and uneven floors can be handled more easily.

A revolution in compact format. ERD 2i and ERC 2i.

The innovative truck concept with lithium-ion technology. For maximum performance in the smallest of spaces.

ERD SERIES 2i

220i

The particularly adaptable and powerful stacker truck ERDi impresses with safety, compactness and comfort. It has an innovative design which, in combination with the compact structure, enables versatile use even in narrow storage spaces. The ERDi is 30 cm shorter than comparable models and is therefore even more manoeuvrable. Thanks to its powerful acceleration, which allows a driving speed of up to 14 km/h, it also guarantees maximum effectiveness and performance.

- Particularly efficient in double-deck operation.
- ► Two platform variants suitable for any warehouse layout.
- Optional HGV detection with automatic speed reduction.

ERC SERIES 2i

214i | 214zi | 214bi | 216i | 216zi | 216bi

Thanks to the revolutionary combination of compact vehicle design and lithium-ion power, the ERCi transports goods particularly economically, even over longer distances. The optional added support arm lift allows double-deck transport of two pallets at the same time, thereby significantly accelerating goods throughput. Storage and retrieval at heights of up to 6,000 mm is easy thanks to the powerful and extremely precise lift motor.

- Wide-track models are ideal for bulky goods, including special loads and Euro transverse pallets.
- Wide range of assistance systems for optimal safety and even greater efficiency.
- Can be used for medium and long distances.



The optional panoramic overhead guard offers additional protection against falling loads while at the same time providing optimal upward visibility.



The smartPILOT electric tiller steering enables precise and easy steering with one hand.



Compact powerhouse with additional lift – for increased throughput and efficiency.



ERD 220i: optional HGV detection automatically reduces speed, thereby improving safety when accessing the loading ramp and when manoeuvring.



Optional assistance systems ensure safety when storing at high lift heights.



Comfort charging system for the ERD 2i and ERC 2i: the charging interface is ergonomically easy to reach – for quick and frequent intermediate charging.

The fixed stand-on platform with 3-sided protection offers safety and ergonomics for the operator.

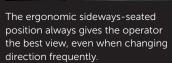
	MEDIUM-DISTANCE, LITHIUM-ION DRIVE	
SERIES	ERD 2i	ERC 2i
Model name	220i	214i 214zi 214bi 216i 216zi 216bi
Lift height (mm)	3,760	2,400-6,000
Capacity (kg)	2,000	1,400-1,600
Travel speed (km/h)	12.5	12
Lift speed (m/s)	0.37	0.35



ERC 316z: the support arms can be raised independently of the forks (support arm lift). Ideal for transport on uneven ground.











Throughput is increased quickly with double-deck transport.

	LONG-DISTANCE	
SERIES	ESC 2 & 3	ESD 1 & 2
Model name	214 214z 216 216z 316 316z	120 220
Lift height (mm)	2,800-6,200	1,660-1,960
Capacity (kg)	1,400-1,600	2,000
Travel speed (km/h)	9.1	9.1–12
Lift speed (m/s)	0.23-0.24	0.22-0.39

Electric stand-on/ sideways-seated stacker for the long haul. ESC 2 & 3 and ESD 1 & 2.

The powerful packers with high travel and acceleration performance and maximum operator comfort.

ESC SERIES 2 & 3

214 | 214z | 216 | 216z | 316 | 316z

The ESC shows its strengths in intensive long-haul operations. It is sturdy, manoeuvrable and compact and can reach heights of up to 6,200 mm. The sideways seating position ensures excellent operator visibility at all times. Series 2, with a width of just 820 mm, is particularly recommended in tight spaces. If the floor is uneven or there are obstacles such as ramps to be negotiated, series 3 with support arm lift is the perfect choice.

- Excellent acceleration and low consumption.
- ► Ergonomic operator position for maximum comfort.
- ► More efficiency thanks to high residual capacities and a powerful lift motor.
- Suitable for storage and retrieval at height.

ESD SERIES 1 & 2

120 | 220

The ESD models are versatile, powerful and particularly suitable for loading and unloading HGVs. The double-deck pick-up enables high throughput rates to be achieved, and the low-consumption, powerful 3-phase AC motor shows its strengths when transporting over longer distances. While the ESD 120 with its folding seat enables pallets to be positioned on HGVS' drop sides, the operator enjoys full comfort in the slightly wider ESD 220.

- ► High throughput thanks to double-deck loading.
- ► Ergonomic seating position for perfect all-round visibility.
- ► Electric steering for easy manoeuvring.
- ► Short front end length for narrow storage areas.



Thanks to its flexible multifunctional lever and folding seat, the ESD 1 guarantees ergonomic, comfortable and fatigue-free working while sitting and standing.



The smooth electric steering and the easily accessible controls of the ESD 2 offer full control over all driving functions, without needing to change your grip.

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Much greater stamina in multi-shift operation.

1341

LICON



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

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Zero maintenance.



Up to 8 years of warranty.



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



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

# Lithium-ion – 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. With the Jungheinrich Li-ion Guarantee Plus, we promise a lasting performance of up to 8 years.

### **ADVANTAGE: CONVENIENT CHARGING. QUICKLY READY FOR USE AGAIN**

Combine the power of your lithium-ion trucks with the advantages of the Jungheinrich convenience charging system. You can charge your electric stacker truck quickly and reliably without opening the hood. This ensures that downtimes are minimised, the battery capacity is fully utilised, and your trucks are ready for use again in no time at all.



Perfect interplay: convenient charging plug and charging interface on the truck.







### Play it safe with Jungheinrich.

It is our aim to make your processes as efficient as possible while protecting people, machines and goods. Even as processes are becoming increasingly complex and dynamic: there can be no compromise on safety. Here you will find a selection from our wide-ranging portfolio, which can be perfectly adapted to your application scenario.



### PERFECT PROTECTION

### Overhead guard

With the ERC 2i models and ERD 2i, the retrofittable DIN ISO 6055 overhead guard offers the best protection against falling loads. Optionally available with cross struts or visibility-optimised panoramic overhead guard, which allows for upward visibility, thereby giving the operator full control over the situation.

### 3-sided platform

ERDi and ERCi models: the platform encloses the operator on three sides and offers optimal freedom of movement despite the compact truck dimensions.

### Foot protection tiller

The operator's feet must be well protected during every travel manoeuvre. Depending on the tiller inclination (4-stage), the travel speed is therefore automatically adjusted or the truck comes to a complete stop.

### **OPTIMAL ERGONOMICS**

### **Intuitive controls**

Optimally arranged control with numerous options allow the operator to concentrate fully on the task at hand. A spring-loaded lift / lowering mechanism ensures that loads are gently and safely lifted and then set down again.

### Clever storage system

Jungheinrich stacker trucks offer practical storage compartments for stowing important information or other helpful resources for your application scenario.

### **Ergonomic seating**

In the sideways-seated, long-distance stackers, the comfort seat with weight adjustment, padded armrest and padded knee area ensures fatigue-free work and the best possible visibility.

### **Convenient charging function**

The combination of convenient charging plug and convenient charging socket ensures that the truck is quickly ready for use again – in just a few simple steps.



### **ASSISTANCE SYSTEMS**

### positionCONTROL

Programmable rack height selection enables quick and easy stacking and retrieval. Includes SNAP function, i.e. automatic stop at the next rack level.

### **operation CONTROL**

The operationCONTROL assistance system records both the current load weight and the lift height and issues a warning signal (tactile, audible and visual) as soon as the residual capacity of the truck is exceeded. This prevents the truck from tipping and enables quick operation with increased security.

### curveCONTROL

Master every curve with confidence, adapted to the current load and the current steering angle: made possible with curveCONTROL. The smart solution for greater safety in the warehouse automatically lowers the speed when cornering depending on the load and steering angle, thereby ensuring maximum safety on every journey.





# 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. In this way, we will work together to raise your efficiency and productivity to a whole new level.



### **NEW TRUCKS**

Lifting, stacking, transporting, order picking – electric, combustion engine, or hand-powered? 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. This allows us to 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, and warehousing, as well as system solutions, while taking your budget and the specific 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 in Norderstedt, Moosburg and Landsberg are certified.



Jungheinrich trucks conform to the European Safety Requirements.

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