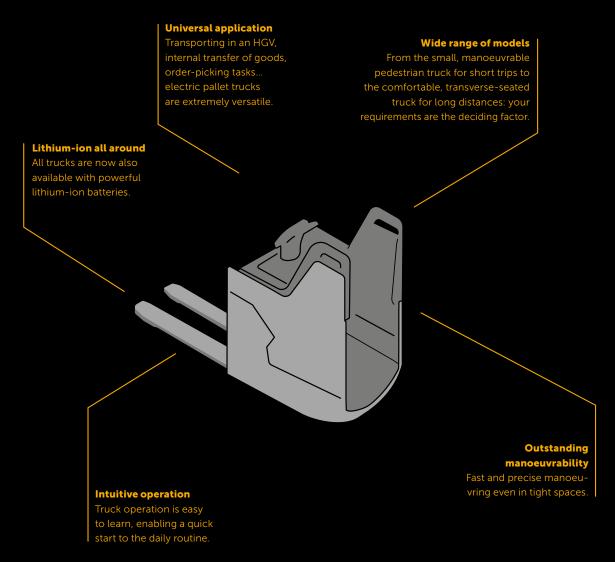


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# A match for any task.

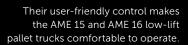
# Electric pallet trucks. Their strengths at a glance.



Electric pallet trucks offer practical assistance in any warehouse environment. Whether used as a pedestrian truck in a chain store, for loading and unloading HGVs, for order picking or for transport: they will speed up any transport task. They boast the best possible efficiency and impressive energy consumption, take up little space and provide a high level of ergonomic comfort for operators. The POWERLINE trucks with integrated lithium-ion battery are a particular highlight of the Jungheinrich range, combining ultra-compact design with a small carbon footprint unrivalled elsewhere.



The compact AME 13 offers the perfect combination of agility and safe operation for your warehouse.







The integrated support wheels on the EJE M15 make it suitable even for curved routes in your warehouse.

	SHORT DISTANCE	
SERIES	AME	EJE M
Model name	13   15   16	M13   M15
Aisle width (mm)	from 1,783	from 1,843
Lift height (mm)	110-115	120
Capacity (kg)	1,300-1,600	1,300-1,500
Travel speed (km/h)	5	5

# Fast routes boost efficiency. AME and EJE M.

# Electrification, the easy way.

# AME ENTRY-LEVEL SERIES 13 | 15 | 16

An ergonomic replacement for the hand pallet truck, this model offers market-leading quality at an attractive price. Both models are suitable for transporting pallets in warehouses or chain stores. The compact, manoeuvrable trucks are safe and easy to use, with both left- and right-handed operators able to control the ergonomically shaped tiller. While the AME 13 is aimed at light applications indoors, the medium-class AME 15 is somewhat more powerful and is also ideal for use outside.

- ▶ With lithium-ion battery as standard
- Ergonomically shaped tiller suitable for both left- and right-handed operators
- ► Compact and light for ease of use
- Perfect for transporting by HGV

## **EJE M SERIES**

### M13 | M15

The EJE M13/M15 electric pallet trucks are ideal for transporting goods internally within small and medium-sized enterprises. Their compact design allows them to move pallets and goods quickly and cost-effectively in the tightest of spaces. The ergonomically shaped tiller head makes the operator's task easier. With a powerful three-phase AC motor and modern battery technologies, both models offer impressively low levels of energy consumption.

- ► Maintenance-free lithium-ion batteries
- Built-in charger for convenient charging at any 230 V socket
- Support wheels for outstanding stability when moving and cornering
- ► Entry rollers make it easy to pick up pallets



AME 13/15: fast, safe battery exchange for maximum availability.



Transport and weigh in a single work step with the optional scales (EJE).

# Impressive performance on short routes and in HGVs. EJE series 1 and C20.

Agile, economic and versatile.

# **EJE SERIES 1**

114-120 | 114i-118i

EJE series 1 includes versatile, all-round trucks that are light yet robust. They are ideal for day-to-day tasks such as transporting pallets over short distances and loading and unloading HGVs. They are agile, easy to steer and have support wheels for driving stability. The lithium-ion trucks have a battery case that can be removed vertically in just a few steps. The ultra-compact size of the 114i–118i variants is another impressive plus point. The defining feature of all lithium-ion models is their unwavering availability. This makes the EJE series 1 perfect for multi-shift operation.

- ► Ideal for loading/unloading HGVs and transporting with the goods
- ► Low overall weight
- Outstanding driving stability for transporting pallets on a daily basis
- Lithium-ion models: fast charging possible at any 230 V socket

# SOLUTION WITH ORDER-PICKING LIFT

EJE C20

The EJE C20 with order-picking lift makes it easier to pick goods, e.g. within food retail. It is also suitable for light stacking work. The support arm lift on this model has been supplemented with a simplex mast to enable goods to be raised to an ergonomically acceptable height. Employees can therefore pick up pallets and put away goods in comfort without placing stress on their backs. The EJE C20 also offers good acceleration with low consumption. The foot-protection tiller ensures that there is sufficient distance between the tiller and operator in every position to protect the operator's feet.

- Additional mast lift for ergonomic working
- ► Agile and compact thanks to low front end length
- ► Full manoeuvrability with upright tiller
- ► Powerful acceleration and high speed



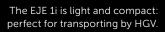
The battery can be removed and replaced in just a few steps.



silentDRIVE (optional) ensures quiet travelling and lifting. Perfect for relaxed working in shops and noise-sensitive environments.



The short front end length makes the EJE C20 super easy to use even in tight spaces.







The EJE 1 series boasts integrated support wheels linked via a torsion bar for outstanding driving stability.

	SHORT DISTANCE	
SERIES	EJE 1	EJE C20
Model name	114i   116i   118i   114   116   118   120	C20
Aisle width (mm)	from 1,762	from 2,288
Lift height (mm)	122	540
Capacity (kg)	1,400-2,000	2,000
Travel speed (km/h)	5-6	6



The compact dimensions of the EJE 222r enable agile and fast manoeuvring when loading and unloading HGVs.

The three-phase AC drive used in EJE series 2 enables maximum performance under load and no load.





The short front end length of the EJE 2 makes it extremely manoeuvrable in even narrow areas of use.

	PERFORMANCE PEDESTRIAN MODELS
SERIES	EJE 2
Model name	222   225   230   235   222r   225r
Aisle width (mm)	from 1,977
Lift height (mm)	122
Capacity (kg)	2,000-3,500
Travel speed (km/h)	6

# High performance for use in industry and production. EJE series 2 and 2r.

# Powerhouses for demanding applications and operation on ramps.

## **EJE SERIES 2**

EJE 222 | 225 | 230 | 235

The robust models in series 2 are designed for challenging applications where powerful momentum matters. They achieve this through their powerful three-phase AC motor and lift motor, enabling even heavy loads to be transported and raised at maximum speed. And safety? As high as ever: the optional foot-protection tiller automatically maintains a sufficient distance between the operator and the pallet truck. The steel chassis, reinforced fork and lowwearing support wheels make series 2 the first choice for anyone wishing to increase throughput speed and boost productivity.

- Powerful three-phase AC technology for maximum performance
- ProTracLink system for outstanding driving stability
- Robust steel chassis for maximum durability
- ► Short front end length for speed and manoeuvrability

### **EJE SERIES 2r**

EJE 222r | 225r

When loading and unloading HGVs on a daily basis, precision and speed are critical. The ramp traversing involved also places particular demands on trucks. The electric pallet trucks in series 2r have tailored equipment that makes them ideal for use with an HGV. Their powerful three-phase AC motor and patented ramp lift help operators to tackle gradients of up to 15 % with ease. The optional safety tiller with four-level foot protection helps to maintain sufficient distance.

- Level adjustment with additional ramp lift
- ► Long safety tiller with four-level foot protection
- ProTracLink system for outstanding driving stability
- ► Robust steel chassis for high durability
- ► Short front end length for speed and manoeuvrability



The built-in charger with the safety advantage: the immobiliser prevents the truck from setting off while the plug is connected to the socket.



Patented ramp comfort: the first row of pallets is easy to load and unload when there are height differences between the hall and the HGV.

# Built to deliver more. ERE series 1 and 2.

Impressive performance and comfort – thanks to HGV extras.

### **ERE SERIES 1 AND 2**

ERE 120 | 125 | 225 | 230

With ERE series 1 and 2, the possibilities are almost endless: choose from a wide range of features to configure an individual truck that is perfect for its purpose. One thing that can always be relied on: the high-performance three-phase AC motor delivers powerful acceleration torque and enables energy savings of up to 33%. The ERE demonstrates incredible power and combines this with all the benefits you get from the compact class: agile, dynamic and highly ergonomic.

- Robust steel chassis for tough applications
- ► Individually configurable with a wide range of equipment options
- ► Four different stand-on platforms available for adjustable comfort
- ► Fast and productive with a maximum speed of 14 km/h (with drivePLUS package)
- ► Intelligent assistance systems for enhanced safety

# **POWERLINE MODEL**

ERE 225 i

These pioneering trucks have an integrated lithium-ion battery, making them even shorter and more agile than before. The ERE 225i has the perfect setup for demanding applications with high throughput. Its ultra-compact dimensions allow it to move confidently in tight spaces, and it exudes manoeuvrability and power when loading and unloading HGVs. Operators also have an optimum forward-looking view of the goods. The spacious stand-on platform and three-sided protection provide full safety in any situation. A whole host of smart details and options make the ERE 225i the top truck for customisation; it has yet to find its match on the market.

- ► Shortest electric low lift truck in its class
- ► Two comfortable platform variants
- ► Robust steel chassis and three-sided protection provide high level of operator protection
- ► Optional HGV detection with automatic speed reduction and illumination



The spacious stand-on platform with individually adjustable suspension to suit body weight delivers maximum ergonomics.



Intuitive handling through a perfect view of the forks.

The ERE 225i detects the HGV environment automatically and adapts by reducing speed and illuminating the interior.





The shortest, most compact electric pallet truck in its class, ERE 225i fits in any HGV.



Performance that astounds: move up to 20 % more pallets per hour with the ERE 225i. Its agile handling also enables it to manoeuvre quickly and with precision even in tight spaces.

STANDING RIDE-ON MODELS
ERE 1 AND 2
225i   120   125   225   230
from 2,288
122
2,000-3,000
6–14



The operator stands facing sideways in relation to the travel direction on the ESE 120 to keep both the fork and the working environment in sight.

The ergonomic transverse seat on the ESE 220–320 affords the operator the best view at all times, even when frequently changing direction.





The narrow dimensions of the ESE 220–320 make it ideal for manoeuvring in narrow areas of the warehouse and driving on ramps.

	STANDING AND SEATED RIDE-ON MODELS, MEDIUM APPLICATIONS
SERIES	ESE 1–3
Model name	120   220   320
Aisle width (mm)	from 2,259
Lift height (mm)	125
Capacity (kg)	2,000
Travel speed (km/h)	12.5

# Robust hand pallet truck for longer trips. ESE series 1–3.

For transporting heavy loads at high speed.

# ESE SIDEWAYS-STANDING PALLET TRUCK

**ESE 120** 

Series 1 with optional suspension stand-on platform provides a high level of comfort over medium and long distances and when loading and unloading your HGV. The travel position is sideways in relation to the travel direction to allow outstanding all-round visibility and relaxed working, even when frequently changing direction. The powerful three-phase AC motor delivers impressive acceleration even under maximum load. The lithium-ion version of this pallet truck is perfect for multi-shift applications too, as it can undergo quick booster charging during breaks.

- Sideways travel position for ergonomic working
- ► Ideal for loading and unloading HGVs and for longer distances
- ► Electric steering for easy manoeuvring
- ► High speeds and acceleration
- ► Display with steering position indicator and travel program selection

# ESE TRANSVERSE-SEATED PALLET TRUCK

ESE 220 | 320

The models in series 2 and 3 with suspension transverse seat are recommended for more intensive applications with heavy loads. Sitting sideways in relation to the travel direction provides a clear all-round view for more ergonomic working. When frequently changing direction, the joystick operation combined with the convenient multiPILOT proves to be hugely helpful to the operator. Looking for maximum availability in multi-shift operation? Then the lithium-ion versions are the choice for you.

- ► Sideways travel position for ergonomic working
- Compact design for flexible use and low aisle widths
- ► Ideal for loading and unloading HGVs and for longer distances
- ► High speeds and acceleration
- ► Display with steering position indicator and travel program selection



Optimally positioned controls enable intuitive, ergonomically pleasant operation.



The power of lithium ion paired with the benefits of the Jungheinrich comfort charging system – simply plug in and charge!

# Maximum power plus endurance. ESE series 4 and 5.

The powerhouses for maximum throughput thanks to multi-pallet transport.

## **ESE SERIES 4**

**ESE 430** 

Series 4 is available as a transverse-seated model. It is typically used for multi-pallet transport over longer shifts and long distances. The powerful 48 V three-phase AC motor allows working processes to be dynamic, and also provides high top speeds even with heavy loads. The version with lithium-ion batteries delivers maximum performance and maximum availability. An optimised steering-wheel position and the multifunctional display ensure a relaxed working atmosphere for demanding applications.

- Multi-pallet transport with up to three pallets
- ► High travel speeds up to 14 km/h thanks to 48 V three-phase AC technology
- Available with advanced lithium-ion technology
- ► 180°/360° steering for agile changes in travel direction
- ► Ergonomic operator position with high level of comfort

### **ESE SERIES 5**

**ESE 533** 

The top power class for low-lift pallet trucks, designed for extremely demanding applications transporting heavy loads over long distances – without slowing down your processes. The two powerful three-phase AC motors with powerful acceleration torque help you achieve this. Lithium-ion batteries are practically a must in order to maximise the potential. The cab is spacious with easy-to-reach controls and customisable travel programs to make your employees feel at home.

- Multi-pallet transport with up to three pallets
- ► High travel speeds up to 20 km/h thanks to 48 V three-phase AC technology
- Available with the latest lithium-ion technology
- ► 180°/360° steering for agile changes in travel direction
- ► Ergonomic operator position layout



Both models have an extremely spacious, ergonomic workplace with all the key controls in direct reach



The Floor-Spot (optional) uses a light signal on the ground to announce the approach of the ESE 4 and 5 from a great distance away, boosting safety in dynamic working environments.



Where the best meets the best: threephase AC technology delivering top acceleration, combined with lithium-ion performance. Ideal for long shifts too.

Mobile workplace, yet everything in place: with lots of space for operators, all controls in sight and a perfect view of the travel paths.





The heavy-weight champion: lifts up to three pallet layers and delivers maximum throughput even over long distances.

	STANDING AND TRANSVERSE-SEATED RIDE-ON MODELS,
	HEAVY-DUTY APPLICATIONS
SERIES	ESE 4-5
Model name	430   533
Aisle width (mm)	from 4,050
Lift height (mm)	115
Capacity (kg)	3,000-3,300

# Lithium-ion technology.

# Maximum power without compromise.

As an intralogistics pioneer, we bring innovative technologies to the warehouse to enthuse our customers, make processes more efficient and to create an optimum working environment for operators. It is now 70 years since we sent the first electric trucks to the floor and in doing so began a true success story. Then ten years ago we ushered in a new era with the first lithium-ion trucks: for the first time it was possible to combine extremely powerful trucks with high levels of energy efficiency, low levels of maintenance and great ease of use because battery exchanges were no longer required. This was a huge step forward, one that we have built on over the years: continuous optimisation, a widening truck portfolio for every application scenario and a level of innovation that continues to surprise. The best example is the POWERLINE trucks with their ultra-compact dimensions.

# TOP EXPERTISE COMBINED WITH CUSTOMER KNOWLEDGE.

The advantages of choosing us:



# Always the latest technologies

thanks to in-house R&D and production.



# **Networked overall system**

of truck, battery and active load-management solution.



# **Expert consulting**

guarantees a customised solution.



# **Huge range of applications**

covered by a well-developed truck portfolio.

# POWERFUL TODAY. INDISPENSABLE TOMORROW.

Five core benefits of lithium-ion technology:

- Outstanding performance at all times thanks to high voltage stability
- Rapid charging and booster charging for maximum truck availability
- Maximum efficiency: consume up to 20 % less energy and last up to three times longer than lead-acid batteries
- ➤ Ease of use: virtually maintenance-free, no battery exchanges and no need to stock spare batteries
- Absolute reliability thanks to the latest cell chemistry with lithium iron phosphate. No gassing. No leaking.





# Jungheinrich POWERLiNE.

# The new standard.

POWERLINE represents the highest level of evolution in the lithium-ion family: trucks with integrated lithium-ion battery, setting new industry standards and logically thought through in every way. They are compact, manoeuvrable and agile like no other truck before them, while offering lots of space and high levels of safety for operators and representing an ambitious sustainability concept that is truly trailblazing.

# **WANT TO SET NEW STANDARDS YOURSELF?**

Welcome to POWERLINE.

# The new standard in performance.

POWERLINE trucks are real powerhouses. With dimensions cut by as much as 30 % they offer improved manoeuvrability and acceleration plus a higher lift speed, making them more productive as a result. So your warehouse will receive a boost in productivity, even where space is in short supply.

# The new standard in safety.

With high, steel outer walls and a whole host of safety features, POWERLINE trucks provide optimum operator protection. The compact dimensions and high manoeuvrability allow trucks to get round obstacles with ease, avoiding accidents and collisions.

# The new standard in sustainability.

Aiming to be climate neutral? Your POWERLINE truck can help. And not just while you're using it; it starts way before that. Jungheinrich employs energy-optimised processes and invests in climate-protection projects, meaning that your truck is delivered to you with an exemplary life cycle assessment! The extremely low energy consumption of these trucks also helps the climate: using up to 20 % less than lead-acid batteries.

# The new standard in comfort.

We put absolutely everything into designing a truck with optimum ergonomics. Because every increase in comfort makes operators more productive and also significantly reduces illness-related absences. Our POWERLiNE trucks offer operators an ergonomically designed workplace with maximum freedom of movement and optimum ease of use.



EJE 1i: maximum performance at an overall weight of just 280 kg including the battery.



EJE 114i: built-in charger for rapid charging at any 230 V socket. 50% charge in just a 30-minute break. Only 60 minutes for a full charge.



The manoeuvrability of the truck enables HGVs to be loaded and unloaded safely and effortlessly. EJE 114i: extremely agile and compact thanks to low front end length.

# Increasing efficiency is child's play.

Toy giant Simba relies on POWERLINE.

# **CHALLENGES**

The Simba Dickie Group is one of the biggest names in the toy industry. Goods are dispatched all over the world from the logistics centre in Sonneberg (Germany) at a current rate of 370,000 packages a year, with significant peaks in the lead-up to Christmas. Simba has relied on Jungheinrich for many years for internal transport and for warehouse equipment. The fleet has been gradually upgraded to lithium-ion technology in order to boost process efficiency and reduce maintenance expenses. Sustainability concerns are also important to this family company.

# **SOLUTION**

The company aims to upgrade gradually to lithium-ion trucks in all areas of the warehouse to be ready for future growth and potentially for multi-shift operation. In pursuit of this goal, Simba opted for many POWERLINE models equipped with top technology from the outset. The agile ETV 216i reach truck made its debut in the warehouse way back in 2019. Now there are five EJE-1i models in the low-lift area, used for internal goods transport and for loading and unloading HGVs. The result: huge reductions in energy consumption and CO<sub>2</sub> emissions. The team values the fact that the trucks are both comfortable and require no maintenance. A quick booster charge at the Jungheinrich chargers is enough to be ready for work again. So even the pre-Christmas rush can be processed at full power.

# **SUCCESS IN FIGURES**

20%

less energy consumption.

 $3 \times$ 

longer service life.

# **PROJECT IN FIGURES**

155,000 m<sup>2</sup>

Size of central warehouse in Sonneberg.

# 16 halls

with Jungheinrich trucks and warehouse equipment.

370,000 packages

across the world every year – and counting.





# A leader in intralogistics. There for you across the globe.



Our own service and direct sales companies in 42 countries.

Partner companies in more than 80 other countries.

More than 20,000 employees.

More than 6,100 service engineers worldwide.

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, integrated 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 service combines a high level of technical ability 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 6,000 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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