

	Series	Truck model	Capacity (kg)
EME	Series 1	EME 114	1,400
EJE  L L L L L L L L L L L L L L L L L L	Series 1	EJE 116	1,600
		EJE 118	1,800
		EJE 120	2,000
	Series 2	EJE 220	2,000
		EJE 225	2,500
		EJE 230	3,000
		EJE 235	3,500
	Series C	EJE C20	2,000
ERE	Series 1	ERE 120	2,000
	Series 2	ERE 225	2,500
ESE	Series 1	ESE 120	2,000
	Series 2/3	ESE 220/320	2,000
	Series 4/5	ESE 420	2,000
		ESE 430	3,000
		ESE 533	3,300



# Are you looking for the right solution for your application? You can count on our demand-oriented series truck concept.

The series concept for our electric pedestrian pallet trucks offers you all the options, enabling you to select the truck best suited for your specific applications. For example: Our EJE. For more than 50 years, it has been one of the world's most popular pedestrian pallet trucks. The EJE is available in three series:

**Series 1** with capacities of 1,600, 1,800 and 2,000 kg for light to medium-weight applications.

**Series 2** with capacities of 2,000, 2,500, 3,000 and 3,500 kg for heavy to extremely heavy applications.

**Series C** with an additional picking lift which ensures that the pallet can always be brought up to a comfortable height.

Choose from a wide number of equipment options and performance features. From a built-in charger to Silent-Drive (optional) and a crawl speed button. From a ramp lift to a fixed stand-on platform. From PIN activation to traction aid.

# Do you need greater capacity or special load lifting?

We will be happy to provide you with these on request. Our Special Build department manufactures tailor-made solutions for your unusual applications.



# Every operator drives, stacks and steers differently.

# That's why we've included a number of great ideas.

# More power for lower operating costs thanks to 3-phase AC technology

Three-phase alternating current is a type of alternating current from the regular power supply. Three-phase AC motors feature a smaller number of components and wear parts and operate more reliably and cost-effectively while providing significantly greater output. With no travel direction contactors or carbon brushes, and featuring enhanced performance data and improved handling, these motors are ideally suited for a wide range of applications while operating costs are simultaneously reduced.

# Advantages of 3-phase AC technology:

- More cost-effective than DC technology.
- Practically maintenance free with no carbon brushes or travel direction contactors.
- Change in direction of travel through frequency control without the 'time lag' otherwise required.
- Motor resistant to dust and moisture.



# **Precise monitoring** with CanDis control display

CanDis (optional) provides the operator with information about the battery charge, number of operating hours and error codes.

# Keyless access and adjustable travel characteristics with CanCode (optional)

- Activation with a four to six-digit PIN instead of an ignition key. This ensures that only authorised personnel have access to the truck.
- A choice of three travel programs. The drive parameters can also be individually adjusted.
- Switches off automatically by time control to prevent unauthorised use.



5





# Safe cornering with Jungheinrich Curve Control

When cornering, the travel speed is automatically reduced depending on the steering angle. Braking engages in the selected travel program and keeps the centrifugal forces acting on the operator, load and truck to a consistently low level. The benefits for you: The risk of the pallet truck rocking or even tipping over is drastically reduced.

# More stability thanks to ProTracLink traction aid

ProTracLink connects the support wheels with a torsion bar. The advantages are particularly noticeable on poor, bumpy surfaces and on ramps:

- No rocking. Any driving errors are compensated for.
- Supporting force is distributed as the driving situation requires: Evenly for forward travel, concentrated on the outer support wheel when cornering.
- When approaching a ramp at an angle, the support wheel that would otherwise hang free does not strike against the ramp, thus receiving additional protection.

# Safe speed regulation with SpeedControl

SpeedControl ensures maximum safety and effortless speed control in all situations.

- Roll-back protection on gradients with automatically engaging brake.
- Constant travel speed on gradients/descents.
- Energy recovery with regenerative braking.
- Particularly smooth stepless travel characteristics.
- Various drive parameters can be adjusted such as acceleration and braking patterns.

## Wear reduction of forks (optional)

A problem frequently encountered during empty runs with intensive use of ramps is driving with lowered forks. If thresholds or breaks on ramps are crossed, fork skids often wear very quickly. A new control mode (optional) prevents this. When the forks are lowered, the controller automatically switches to slow travel. This encourages the operator to raise the forks to prevent wear.



# Long safety tiller ensures large safety distance

The long, low-mounted safety tiller on all our pedestrian trucks ensures the necessary distance from the truck. Other advantages: Lower steering forces and optimum operation of the tiller arm.

# Crawl speed button permits travel with tiller in upright position

The crawl speed button allows for safe and effortless shunting of our pedestrian trucks even in very narrow spaces and when the tiller is vertical. The travel speed is automatically reduced to a slow speed.

# Ergonomic tiller arm

- Easy control with grip contours specially adapted to the hand position for pedestrian or ride-on operation.
- Faster turnaround through direct control of all travel and lift functions without having to reach forward.
- Enclosed perimeter on all sides provides optimum protection for the operator's hands.
- Clear colour coding and buttons with wear-resistant icons ensure intuitive operation.

# Built-in charger provides independence

The installation of an optional charger is possible for lighter applications (standard on the EME 114). This will enable you to recharge your pedestrian pallet truck at any standard mains socket.

# Significant noise reduction thanks to SILENT DRIVE

SILENT DRIVE provides a number of different technical modifications for reducing typical travel and lifting noise:

- Reduced resonance noise thanks to cushioned covers.
- Lower impact loads due to softer drive, load and support wheels (Shore hardness 75).
- Impact cushioning through use of tandem rollers
   (also optionally available as a triple load roller specially designed for tiled floors or surfaces with numerous gaps).
- Exceptionally quiet pump detached from the frame.
- Lift limit cutout: When lifting to maximum lift height, the pump is automatically switched off to prevent the noises that usually occur here.

### EU and operator protection

To protect your operators, the European Union has issued the '2002/44/EC Vibrations' employer directive. With this, the EU governs the overall volume of 'human vibrations' to which an employee may be subjected per day at the workplace. The employer is solely responsible for compliance with this directive. However, we can also be a strong partner here. In two stages:

- 1. By providing vibration-optimised pedestrian pallet trucks (e.g. with ShockProtect), which offer greater productivity through longer travel times without exceeding limits.
- 2. On request, our After Sales Service can carry out a qualified vibration assessment at your site. This involves measurements being taken during operation and if the vibration burden is excessive the recommendation of measures which you can take to further reduce the vibration burden for your operators.



# Minimum steering effort and stable forward travel with SmartPilot

'Inside and outside', the SmartPilot controller ensures efficient, safe work throughout the entire shift. Inside, the non-contact sensor technology guarantees safety. On the outside, the tiller is characterised by its compact form (without tiller arm) and ergonomic rocker switch as well as clear colour coding. This makes intuitive control even easier. The electric steering guarantees significantly lower steering forces and greater stability in forward travel due to its 'underlying' steering characteristics.





# Reduced impact for operator and truck with ShockProtect

Our patented ShockProtect cushioning system significantly reduces impacts, thereby protecting the operator, truck and load at the same time. The stand-on platform is completely cushioned against impacts – such as those caused by uneven surfaces. Benefits for the operator: Reduced strain on the spine and comfortable standing on the vibration-proof stand-on platform. Benefits for the truck: Reduced strain on the undercarriage and frame as a whole.

# More comfortable with a sprung platform (optional)

An additional sprung stand-on platform is available as an option. This will provide your operator with greater protection against the effects of uneven surfaces.



ShockProtect with cushioned stand-on platform



# **EME 114:**

# Simple, short and good.









# Short front-end length

This means a low service weight and effortless handling even in confined operating conditions.

### Ergonomic tiller arm

Everything is easy to reach and intuitive to operate.

## Battery discharge indicator and hourmeter

Ensuring that you and your operator are always in control.

# **Gel battery**

Combines the advantages of no maintenance, robustness and environmental compatibility.

### Built-in battery charger

This means that the EME 114 can be easily and quickly recharged at any standard mains socket.

### Practical storage compartment

There is space for everything, whether it is work documents or elevenses.



# **EJE 116-120:**

# Very short and very strong.

# Powerful in every situation

The 3-phase AC drive system guarantees the full top speed of 6 km/h both with and without a load.

## Short front-end length

Add approximately 70 mm to the width of this double side and this will give you almost exactly the front-end width ( $I_2$  dimension\*) of the EJE Series 1: 494 mm. And this series has a lot to offer! Although it is extremely short, the Series 1 is full of technical innovations. Consequently, daily operations are faster, simpler and more cost-effective – even when used on HGVs.

### Easy battery charging

The built-in charger (optional) allows for straightforward charging and intermediate charging of the battery during its useful life. Battery capacities of up to 250 Ah are available for particularly long operating periods.

# Really tough

The truck frame, which is sloped from below, and the sturdy steel battery lid offer a high degree of stability for heavy-duty applications, e.g. on the ramp.

# Cool in the cold store

The cold store package (optional) expands the area of use to include an important sector. Mechanical tiller springs, special hydraulic and transmission oils as well as stainless steel load sections guarantee safe, corrosion-free operation, even in temperatures well below freezing.

# Options package EJE 116-120

- Three-phase AC technology
- Crawl speed button
- Ergonomic tiller arm
- · Long tiller
- CanDis (optional)
- CanCode (optional)
- SpeedControl
- ProTracLink
- Wear reduction of the forks (optional)
- SILENT DRIVE (optional)



1,600/1,800/2,000 kg capacity (EJE 116/118/120)

 $<sup>^{\</sup>star}$  The  $l_2$  dimension of the standard version (S) is 494 mm and 565 mm for the long version (M).



# **EJE C20:**

# Accommodating up to 756 mm.

# Mast lift for picking with reduced back stress

Our EJE C20 is a fully-fledged pedestrian pallet truck based on the EJE design. What makes it special: It can effortlessly raise any picking load to a comfortable reach height of up to 756 mm. The capacity of the mast lift for this is 700 kg – a practical capacity for partially unloaded load aids. Light stacking operations, such as moving a half-empty pallet, can be undertaken easily and cost-effectively thanks to the separate operation of the support arm and mast lift (optional).

### Short front-end length enables easy manoeuvring

The EJE C20 has been specially designed to handle confined spaces. With its mast integrated in the battery compartment, the EJE C20 has a front-end length scarcely any longer than that of a conventional pedestrian pallet truck. In conjunction with the crawl speed button, this makes the EJE C20 ideal for shunting even in the most confined spaces.

### **Automatically improved ergonomics**

The automatic rack height positioning (optional) allows for more comfortable order picking.

### Skids for closed pallets

Skids on both fork tips make it easier to pick up closed pallets.

# Options package EJE C20

- Three-phase AC technology
- Crawl speed button
- Ergonomic tiller arm
- · Long tiller
- CanDis (optional)
- CanCode (optional)
- SpeedControl
- ProTracLink
- SILENT DRIVE (optional)
- Automatic lift-height positioning (optional)





# **EJE 220-235:**

# Always something more.

# Fit for heavy loads

The EJE series 2 has been specially designed for working with heavy loads in the most difficult conditions, e.g. loading and unloading HGVs or when transporting loads. For multi-shift operations a frame is available with lateral battery exchange.

### Powerful drive motor

The powerful drive motor of the EJE Series 2 shows no difference in the travel speed with or without a load. Even when carrying their maximum load, the trucks can reach their maximum permitted speed of 6 km/h.

### Sturdy frame design

The 8-mm thick frame offers the best prerequisites for outstanding performance over a long period. In the warehouse and production, in tough continuous operations on the ramp, in two or three-shift operation or when loading and unloading HGVs. Other strengths: The torsion-resistant forks and fork skids for wear protection.

# Load section with additional steel reinforcement (optional)

To protect the battery reliably from impacts during intense operations, the load section is available with an additional steel-reinforced pallet stop.

# Options package

### EJE 220-235

- 3-phase AC technology
- Crawl speed button
- Long tiller
- Ergonomic tiller arm
- CanDis (optional)
- CanCode (optional)
- SpeedControl
- ProTracLink
- Wear reduction of the forks (optional)



2,000/2,500/3,000/3,500 kg capacity (EJE 220/225/230/235)



# **EJE models:**

# When you have special applications.



# Level adjustment with ramp lift

Sloping loading docks when loading and unloading the first row of pallets on HGVs or rail wagons are no hurdle to the EJE 220r/222r. In addition to the normal lift, both truck models are have a patented ramp lift. This allows for level adjustment on ramps and inclines with gradients of up to  $15\,\%$ .







Specially designed for the most stringent hygiene requirements in the food and pharmaceutical industries: EJE i20/i25 with stainless steel frame and lift mechanism.



- Bevelled surfaces and generous openings guarantee the unhindered run-off of detergent when cleaning and disinfecting the truck.
- Sealed and protected components also enable the truck to be used in damp environments.
- The EJE i25 is also available with two drive motors for particularly difficult ground conditions.
- High-grade stainless steel also provides a corrosion-resistant surface in harsh environments.



# **ERE 120:**

# Comfortable, flexible, cost-effective.

### Climb aboard

Its very compact dimensions make the ERE 120 ideally suited for flexible and easy use as a ride-on truck – both on the ramp and for the transport of loads of up to 2,000 kg over medium distances. And in very confined spaces, the platform and operator restraint system can be folded into the contours of the truck, making the ERE 120 even shorter so that it can effortlessly negotiate the narrowest of aisles. The maximum speed is restricted to 6 km/h when the operator restraint system is folded up.

### Your bonus for productivity

When transporting goods over longer distances, the stand-on platform and operator restraint system can be folded out very quickly. The maximum travel speed is 8.5 km/h. This results in a significantly greater throughput than for comparable pedestrian trucks. Lateral battery exchange is available for multi-shift use.

# High-frequency built-in charger provides independence (optional)

The optional high-frequency built-in charger enables the ERE 120 to operate independently of charging stations. All it needs to recharge is a standard mains socket.

# Options package ERE 120

- 3-phase AC technology
- Ergonomic tiller arm
- CanDis (optional)
- CanCode (optional)
- SpeedControl
- ProTracLink
- ShockProtect
- Wear reduction of the forks (optional)
- High-frequency built-in charger (optional)





# **ERE 225:**

# Relaxed movement of large loads.

# Symmetrical configuration of operator compartment for more comfort and safety

The spacious operator compartment and the steering which can be operated from both sides enable the operator to stand comfortably and safely at the side or front. When travelling in both a forward and backward direction.

Your operator can choose the position most comfortable for them. On the left or right, at the front – the ERE 225 offers more 'positioning options' than any other. One hand is always on the tiller, the other on the platform handle. For full control! And more comfort and more performance.

### Greater speed, increased throughput and more safety

The ERE 225 achieves a maximum speed of 12.5 km/h without a load. It also demonstrates high acceleration characteristics: After just 10 m, the ERE 225 is able to reach 95% of its top speed. Advantage: The rate of throughput increases by more than 25% compared with pedestrian trucks.

The fixed stand-on platform with closed operator restraint system provides maximum safety – particularly on narrow ramps or with frequent journeys in reverse.

## Safe cornering with Jungheinrich Curve Control

Jungheinrich Curve Control automatically reduces travel speed when cornering depending on the steer angle. This significantly reduces the risk of tipping over and skidding.

# For flexible use as a pedestrian truck in confined spaces, the ERE 225 is also available with a folding stand-on platform (optional).

## More comfortable with a sprung platform (optional)

An additional sprung stand-on platform is available as an option. This will provide your operator with greater protection against the effects of uneven surfaces.

# Options package ERE 225

- 3-phase AC technology
- Ergonomic tiller arm
- CanDis (optional)
- CanCode (optional)
- SpeedControl
- ProTracLink
- ShockProtect
- SmartPilot
- Jungheinrich Curve Control
- Wear reduction of the forks (optional)
- Sprung platform (optional)





# **ESE 120:**

# Comfortable, manoeuvrable and compact.

# Power for high performance

The ESE 120 facilitates the cost-effective loading and unloading of HGVs with a particularly high throughput. The rapid drive (optional) with 2.5 kW output delivers even greater speed and more powerful acceleration. With its truck width of only 760 mm, the ESE 120 can also quickly and easily pick up pallets positioned along the sides of the HGV.

### Clear field of vision with sideways standing position

The operator stands sideways to the direction of travel, making it easy to keep the forks or the load and the work environment in view. Irrespective of whether travelling in the fork or drive direction – time-consuming turning manoeuvres are avoided.

# Options package ESE 120

(Technical details pages 4-11)

SpeedControl





# **Ergonomic workstation**

- Foldable, height-adjustable standing position
- Padded knee area
- Sprung floor plate
- Roomy leg compartment

# Easy to use

The fully electric steering guarantees easy and shock-free steering with only five turns of the steering wheel producing a 180° steering angle. The steering software and the fully electric control unit ensure quiet, directionally stable forward travel as well as precise, quick manoeuvring. The LISA LC information and service display (optional) informs your operator about the position of the steered wheel at any time.





# ESE 220-533:

# Full speed ahead over long distances.

### 24-V and 48-V versions

With their four different models, our ESE series 2 to 5 offer the best prerequisites for maximum throughput over long distances. Advantages:

- Powerful start-up behaviour, high speed.
- Comfortable operator position with comfort seat and roomy leg compartment with no annoying steering column.
- Multifunction control unit provides effortless control.

### ESE 220 (24 volts)

Extremely slim for shunting in narrow warehouse areas or when handling goods on the ramp. Only 820 mm wide, the ESE 220 saves valuable space.

### ESE 320 (24 volts)

Especially comfortable with a 930 mm truck width.

### ESE 420/430 (48 volts)

High performance for long-distance transport. With higher speeds and very robust load section for the simultaneous transport of up to three pallets. This is made possible by the 6.9-kW 3-phase AC motor.

# ESE 533 (48 volts)

2-motor power pack with 3-phase AC technology. The two 6.9 kW drive motors guarantee maximum travel speeds (20 km/h without load). Different fork lengths allow up to three pallets to be carried simultaneously. The vehicle is also optionally available with a 3,600 kg capacity at reduced travel speed.

# Optimum control from the operator display (optional)

The optional operator display unites a number of functions in one control panel. Function keys with one clear function, indicator lights and an LCD display provide your operator with access to all the performance parameters, enabling them to remain in control of any situation.

# Options package ESE 220/320/420/430/533

- 3-phase AC technology (ESE 220/320/420/430/533)
- SpeedControl



# Yes or no?

# Investment decisions are simple, but not straightforward. We produce facts that make it easier for you:

### **BestInvest**

Our pedestrian pallet trucks will reduce your long-term operating costs by up to 20%. With a wide range of technological and ergonomic advantages that reduce all of the expenses making up the Total Cost of Operations (TCO) to minimum levels, from purchase to disposal. We call this promise BestInvest. It helps you transform your costs into profitable investments. So that you can make the best total investment decision.

# The right racking for the right truck

We can provide you with the complete solution for this: Integrated warehouse planning, where the racking and the trucks work 'hand in hand' as parts of a single system. From project planning through CAD drafting to handover. From modular racking systems through system platforms to high-bay racking. From consultancy through installation to service. A one-stop shop. Everything from Jungheinrich, your 'designer' for a complete intralogistics system.

# In-house financial services

We offer you a wide range of tailored solutions to suit your commercial, financial and balance sheet requirements – even if these should change over time. This will allow you to keep on the move and respond flexibly. Your area sales manager will be happy to work out which solution is best suited to your needs.

# A dedicated service network

Service engineers are available for you countrywide in various locations. Each one a Jungheinrich professional: A mechanical engineer, electrician, electronic and hydraulic specialist all rolled into one. And they'll generally be with you within four hours.

# Double digit decrease in CO<sub>2</sub> emissions over 10 years

We have drastically reduced the  $CO_2$  emissions for our entire truck range over the last ten years. And by more than 25% for electric and diesel/LPG fork lift trucks. And by more than 35% for vertical order pickers and narrow aisle/reach trucks. We have done this with a series of technological innovations which are currently setting standards for  $CO_2$  emissions.

# Significantly reduced CO<sub>2</sub> emissions also mean significantly reduced energy costs.

Our entire product cycle now features technical innovations for reducing  $CO_2$  emissions, from manufacturing through usage to reconditioning. And our high-tech solutions are really setting standards in the usage phase, which is where 80-90% of all emissions occur. You can easily use this advantage to your benefit, immediately reducing your energy costs considerably while simultaneously achieving maximum throughput rates. www.jungheinrich.com/oekobilanz

### TÜV-certified product life-cycle assessment

TÜV-Nord has systematically analysed the lifecycle assessment and certified it in accordance with DIN EN ISO 14040, giving us the environmental rating 'Geprüfte Produkt-Ökobilanz' [Certified Product Lifecycle Assessment].





ISO 9001 The German production facilities in Norderstedt and Moosburg are certified.



Jungheinrich trucks conform to the European Safety Requirements.

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