The electric forklift truck for maximum performance.

Powerful. Efficient. Versatile.

Our EFG series 4 and 5 trucks are extremely powerful with load capacities up to 5,000 kg that can be adapted to your individual needs.

DUNGHEINRICH



Universal use.

Full steam ahead.

Maximum power with optimum energy efficiency – that's what our EFG series 4 and 5 electric four-wheel forklift trucks offer – thanks to the innovative PureEnergy concept. Ergonomically sophisticated, intuitively experienced and with the best view in the market, we offer your operators a top class workspace. Various options ensure individual adjustment to any task, whether indoors or outdoors. And for extremely tough applications there is the S range.







Drive more efficiently.

With PureEnergy.

Price over performance is a thing of the past. Today, energy consumption and overall results are the key factors. And we have noticeably improved this with PureEnergy.

We adapt to you

Our PureEnergy technology concept is a package for optimising energy efficiency and achieving maximum throughput efficiency with minimum consumption. Whether you always drive and lift flat out or you operate economically. And all of that automatically, even without pressing any buttons.

This energy concept comprises:

- Advanced 3-phase alternating current technology with optimum interaction of motors and controls.
- Compact controls and very short electric cables due to consumer-oriented configuration.
- Compact hydraulics: Reduced length of hoses line due to direct connection to the hydraulic system.

Two performance packages are available to customise the truck to best suit your requirements:

Efficiency options package

The Efficiency package is perfect for applications where the emphasis is on quick lifting and moving and not on maximum achievable throughput. Choosing the Efficiency configuration is the most cost-conscious option.

drive&liftPLUS options package

The drive&liftPLUS package utilises all the technical capabilities of the truck to their full extent, for example, in conjunction with a longer frame which offers more space for higher capacity batteries. drive&liftPLUS gets outstanding performance out of your EFG so that you can get everything in or out of your warehouse as quickly as possible.

Maximum energy efficiency to save you money



Energy consumption

EFG series 4: 8.0 kWh/h

Competition: Ø 9.1 kWh/h

Throughput

EFG series 4: 74 pallets/h

Competition: Ø 67 pallets/h

Consumption and transported pallets per hour according to VDI, compared to competition (average value). EFG series 4 with drive&liftPLUS options package.



Two shifts on one battery charge

Thanks to their optimised energy concept, our electric forklift trucks manage to complete two shifts on just

one battery charge. This applies to Jungheinrich standard batteries, regardless of the conditions they are used in and your required throughput, thus guaranteeing to save you time while also reducing costs.



Lithium-ion batteries for enhanced flexibility

technology Using li-ion batteries enables you to benefit from fast charging times, zero maintenance and a long battery service life. Using the opportunity for boost and interim charging at any time, you can avoid tedious battery changes, while simultaneously benefitting from a significantly higher energy efficiency and availability of your forklift trucks.



In a class of its own.

Our S range.

With our EFG S30, S40 and S50 electric forklift trucks, we have achieved performance results previously only ever seen by IC-powered trucks.

Optimum load centre for maximum capacity

Our S range raises the bar even higher: With a 600 mm load centre at capacities ranging up to 5,000 kg, it provides you with the high performance levels you need for toughest indoor and outdoor applications or for fitting heavy attachments. Thanks to its greater ground

clearance, our S forklift trucks can even travel over uneven ground without difficulty. In addition, the steering axle's centre of rotation has been noticeably shifted upwards. This means less wear and, above all, maximum driving safety, standing and lateral stability.







A workplace that fits everyone.

Every operator is different. Starting from body size and reach to their individual preference for sitting, steering and operating. That is why we have created a workplace that can adapt to its operator for maximum well-being. This ensures that every operator can extensively exploit the full potential of "their" fork lift.

Individually adjustable operating versions:

- Double pedal or car-type pedals
- Three control lever variants
- Adjustable lever/axis assignment
- Five different operating/travel programmes
- Individually assignable function key

Everything in sight, everything in reach: Full-colour display and driver dialogue system

The high-resolution, four-inch display provides information about all of the forklift's readings. From the control panel on the driver dialogue system, the operator can intuitively adjust all of the forklift parameters. There are also buttons that can be assigned individual functions.

Space-saving steering column

The narrow steering column guarantees lots of legroom with effortless entrance and exit. It can be intuitively adjusted to any setting to ensure comfort for any operator – large or small.

USB port in the storage tray

The USB port integrated into the storage tray allows mobile devices to be charged simply and securely (optional).







For impressive performance.

A series of technical and ergonomic innovations reduces the strain on the operator while supporting performance.

Safety with Jungheinrich curveCONTROL

Jungheinrich curveCONTROL automatically reduces the truck's travel speed when cornering, depending on the degree of the steering angle. Electric braking engages and keeps centrifugal forces at a constantly low level. The advantage: The risk of rocking or even tipping over is effectively reduced.

Maximum driving safety thanks to low centre of gravity and high-mounted fully floating axle

The forklift trucks have excellent stability and driving safety values. And this is achieved without a complex or maintenance-intensive system.

Safety on inclines with automatic parking brake (optional)

If – on a ramp – the operator takes the foot off the accelerator, the forklift automatically stops. As soon as the forklift starts up again, the brake is automatically released and the truck moves off carefully without rolling backwards. When your operator leaves the truck, the physical parking brake engages after a short time.

Individually selectable operating/travel programmes for efficient operation

Five different operating/travel programmes give your operator the ideal versatility to handle any task. This ensures that the forklift truck uses as little energy as possible and only as much as is actually necessary.



Integrated converter makes it easy to retrofit additional functions

Plug and play. Peripheral functions can be activated quickly and easily with the series 4 and 5 EFG. A wide range of electrical options can be installed in no time at all.

Two wear-free braking systems for any situation

If your operator wants to stop normally, he can simply take his foot off the accelerator shortly before reaching his destination. Electric braking brings the forklift truck to a halt. If the operator has to brake suddenly, he presses the brake pedal, thus activating the hydraulic multi-disc brake, which also works entirely without wear.

Individually tailored attachments

We offer attachments for your industry-specific applications. All attachments are mounted and intensively tested for safety in our factory.

Optimum tyres and high ground clearance

Our EFG offer impressively high ground clearance and optimum traction on any ground. Choose between twin, pneumatic and super elastic tyres depending on the condition of the ground.

Double pedal or car-type pedals

The double pedal allows the operator to change direction by foot. However, if you prefer switching PILOT control by hand, choose the automotive-style arrangement.



Fast. Simple. Safe.

Our solutions for changing batteries.

SnapFit for battery exchange without a crane

SnapFit is the most reliable and user-friendly battery replacement system on the market. SnapFit locks the battery and battery tray to the pedestrian pallet truck and safely guides both during insertion/removal. SnapFit is easy to use on any of our pedestrian pallet trucks. The universal adapter for 48 and 80 Volt batteries is simple to attach and remove – without using tools!





Battery exchange with crane and automatic battery ejection (optional)

At the touch of a button, the undercarriage moves into position and the battery is completely ejected – ready to be lifted by crane. The operator stands safely behind the battery door. The two-stage mechanism not only protects the ground, but can also deal with almost any surface – from industrial floors to cobblestones. Additional exchange equipment is not required.

More energy through synergy

In keeping with this motto, we provide you with forklift trucks, batteries and chargers from a single source. A system adapted 100 per cent to your operating conditions. Your advantage: Maximum truck availability and economical energy supply adapted to your specific needs. Your batteries, your budget and the environment will thank you.

We give you all the options.

Series trucks can still be tailor-made solutions: Our wide range of options makes almost anything possible. This ensures that our electric forklift trucks are fully suited to your application and safety requirements.

Three adjustable control lever variants

With the ability to choose between soloPILOT, duoPILOT and multiPILOT, your operator benefits from the most efficient and comfortable operating system. In addition,

functions for lever and axle handling can be individually assigned. Parallel operation of hydraulic functions and half-axle assignment are also possible.



soloPILOT

With soloPILOT, the travel/lift functions are controlled solely by the fingertips. No hand movements are required. The levers have the same functions as conventional single levers.



duoPILOT

duoPILOT offers precise and sensitive control of all truck functions with two control levers. The separate travel direction switch features an ergonomic gripping design for effortless activation.



multiPILOT

multiPILOT is based on the principle of a joystick. The functions are directly controlled by the movement of the multiPILOT or via pushbuttons.



More room for performance through parameter steering

Our unique parameter steering makes the steering support dependent on the travel programme and speed. At low speeds, support from the electrical steering is high – the operator needs to make fewer movements of the steering wheel, while at higher speeds, the steering support diminishes.

Your benefits:

- Minimises unwanted steering movements
- Narrower steering column creates more legroom
- Improved energy efficiency



Everything at a glance: Full-colour display

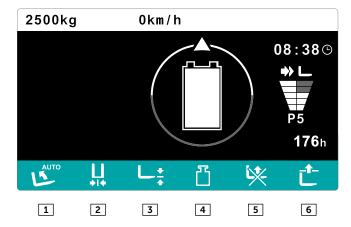
The high-contrast, four-inch display provides information about all of the forklift readings such as direction of travel, travel programme, crawl speed, battery charge and warnings.

Everything under control: Driver dialogue system

From the control panel on the driver dialogue system, the operator can set all of the parameters via a simple menu. It also offers individually assignable function keys for controlling other modules and applications.







Easier operations at the touch of a button

To move to the second display level, press the FN key. The system displays two icons representing all available special functions:

 tiltCONTROL / 2. Central Sideshift / 3. Mast Vertical Positioning / 4. Load Weighing / 5. Shutdown Mast Hydraulics / 6. Lift Cut-Out Override

EasyAccess for easy access control

Jungheinrich EasyAccess protects the forklift truck against unauthorised use. Authorisation is assigned directly via the truck display. You can choose between the Softkey, PinCode and Transponder options.

Softkey

- Activation by entering a 4-digit PIN.
- Up to 10 PINs can be set up.

PinCode

- Activation by entering a 10-digit PinCode.
- Up to 100 codes can be set up.

Transponder

- Activation using a transponder card.
- Up to 100 transponder IDs can be assigned.



Cabin variants for any application

With a wide range of configuration options (with heater or air conditioning system etc.) our cabins offer a comfortable solution for every season. All variants offer the same excellent visibility, which is the best on the market. The cabin height is also variable. We offer a container overhead guard, which thanks to its reduced dimensions, allows entry into the shipping container. Conversely, we offer a raised operator seat, if bulky loads impair visibility to the front.

Clean solution: Roof screen wiper

Clear view upwards at all times thanks to an electric roof screen wiper, which is activated via a separate switch.



Container overhead guard



Cabin with increased seat height

Seat options for any operator

If you're seated comfortably, you'll achieve more. The choice is yours:

MSG 65 Ergo

Seat with cloth cover and integrated duo-sensitive seatbelt. Ergonomic backrest extension for larger operators and lumbar support. Spring deflection: +/- 30 mm.

MSG 65 LUX

Like MSG 65 Ergo with additional integrated seat heating. Also available in easy-clean leatherette.

MSG 75 Air

Like MSG 65 Lux with fabric cover, but in air-cushioned design.

No unauthorised driving thanks to accessCONTROL

accessCONTROL only releases the truck for operation when a valid activation sequence is recognised and the 'seat occupied' and belt lock detection systems have been activated in turn.





Speed limit through driveCONTROL

driveCONTROL automatically limits acceleration and maximum travel speed when a pre-defined lift height is reached. This increases safety when travelling with a raised pallet, while still ensuring even more sensitive manoeuvring during the work cycle.

Safe and reliable load handling with liftCONTROL

Based on driveCONTROL, liftCONTROL reduces the mast tilt speed from an individually specified lift height. This facilitates load handling at an increased lift height. The operator is able to track this movement via the tilt angle display.

Central sideshift at the push of a button

After activating this function, the operator can move the lever for the sideshift. The corresponding icon in the display is green when the centre position is reached. There is no time-consuming "feeling your way" to the required position. We also offer automatic versions without a display.

Mast vertical positioning at the touch of a button

If this function is selected and the lever for the mast tilt is activated, an icon on the display shows the angle of the mast in five positions. It is green when the mast is vertical. We also offer automatic versions without a display.

Load cushioning with hydraulic accumulator

When dealing with the throughput of sensitive goods, it is possible to install a nitrogen shock absorber in the hydraulic system. This cushions the load on the mast components and the fork.

Radio data terminal with barcode scanner

The data radio connection allows for wireless data transfer. Radio data terminals with intuitive operation for work in real time allow paperless operations. The barcode scanner ensures fast and reliable identification of goods. This prevents errors in the work process.





High-frequency charging ensures maximum performance

Our high-frequency chargers save up to 30 per cent on energy and significantly reduce charging times. Preconfigured charging programmes, simple commissioning and the low space requirement make charging quick, straightforward and cost-effective.

Save time and space with comfort charging

This makes charging the battery even easier and quicker: Open the flap, insert the charger, and you're done. By integrating the plug into the rear, no additional space is required. Connections for Aquamatik and electrolyte recirculation are also included.



Floor Spot: Safety at blind spots

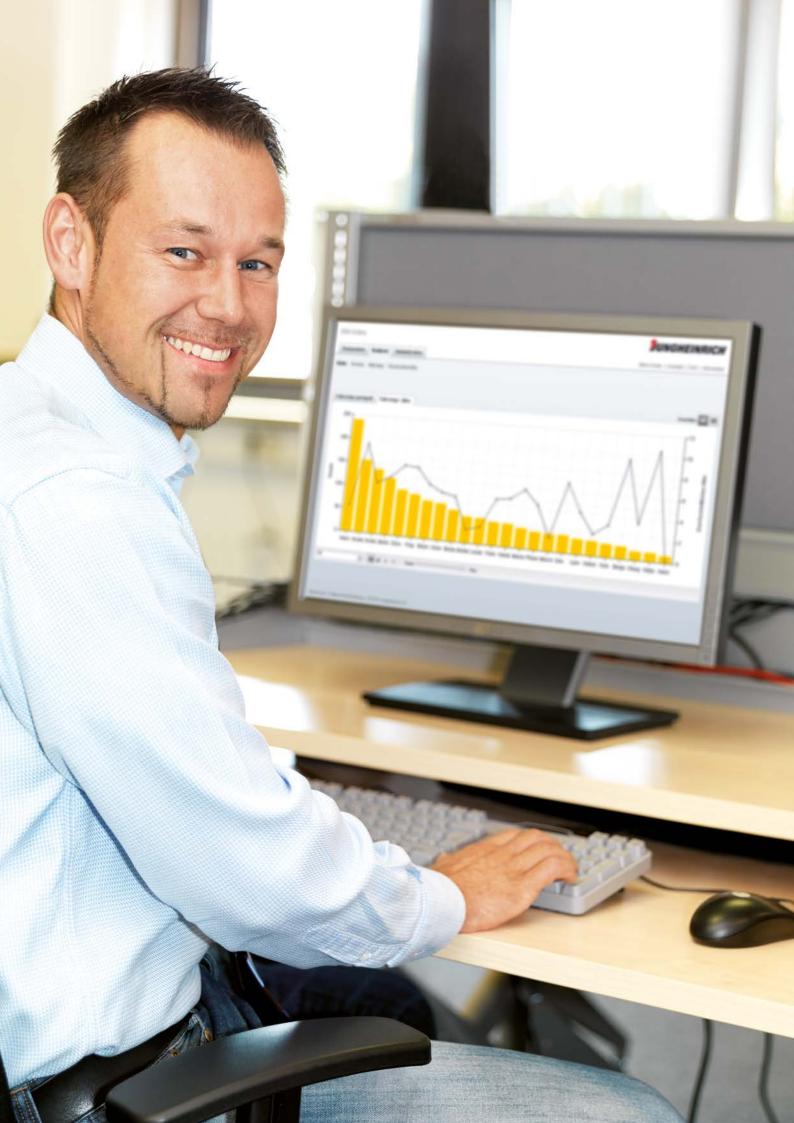
Our Floor Spot is an optical warning device that projects a red dot onto the floor approximately five metres in front of the forklift truck. This acts as a warning light to employees in front of and behind the truck that can be easily detected even in poor visibility conditions.

More in, more out, more performance.

The most important options at a glance.

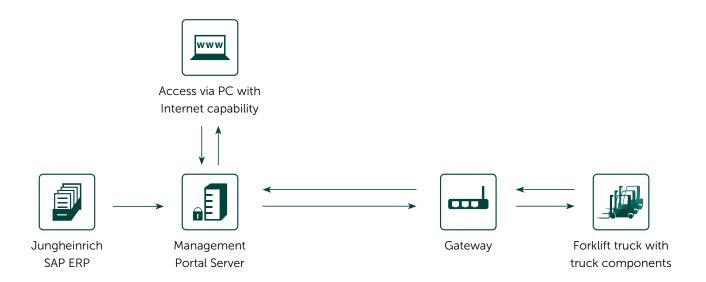


Parameter steering liftCONTROL Full-colour display and driver dialogue system **EasyAccess** Hydraulic accumulator load cushioning driveCONTROL 000



Always up to date.

Minimise your fleet's operating costs with ISM Online.



ISM Online for efficient fleet management

ISM Online is a web-based information system for the analytical collection, monitoring and evaluation of data for a wide range of truck types. It can be used at multiple and international locations and is manufacturer-independent. For maximum data transparency and the cost-optimised structuring of industrial truck fleets. Seven different modules can be individually combined to lower operating costs and increase security in the warehouse:

Basic module

The Basic module helps you get an overview of your fleet including all the equipment at all your locations.

Operating Costs module

You need a detailed account of costs and an overview of billing documents, service reports and operating hours? Then this is just the right module for you.

Safety module

This module will help you to increase safety in your warehouse while simultaneously reducing costs for impact damage due to access control, operator management and shock recording. Truck configuration is performed online via a PC.

Productivity module

Would you like to make your fleet even more productive and find out how your industrial trucks are being used?

This module provides you with reports that will do just that. You can evaluate truck usage and optimise the current use of the fleet.

Maintenance Control module

Get a quick overview of pending, completed or overdue maintenance and safety checks – irrespective of your contract partner for servicing tasks. Thanks to its fourweek reminder function, you are always well informed of all inspection dates. Subsequently, you can schedule maintenance measures during operation in good time.

Battery Management module

Using our Battery Management module, you can easily monitor your electric trucks battery performance, identify possible operator errors and implement targeted measures. The increased transparency help you prolong your batteries' service life and avoid unnecessary maintenance and replacement costs.

Access Control module

Would you like to effectively protect your forklift trucks from unauthorised use? The Access Control module enables you to simply manage access to your trucks online and individually assign employees, areas/departments and trucks. Additionally, you can determine that your trucks automatically switch off during non-operation. This helps you to save operating costs, while increasing your warehouse safety.



The best investment.

For any budget and the environment.

BestInvest

Our electric four wheel counterbalanced forklift trucks will reduce your operating costs by up to 20 per cent in the long term. 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 Bestlnvest. It helps you transform your costs into profitable capital expenditures. So that you can make the best total investment decision.

Explosion protection for hazardous areas

Many industrial sectors are subject to a high level of explosive hazards due to flammable gases, fumes, powder or dust. To meet these special requirements and to ensure safe operation in potentially hazardous surroundings, we can supply explosion-proof electric forklift trucks in accordance with Directive 94/9/EC (also referred to as ATEX 95).

The right racking for the right forklift truck

We can provide you with the complete solution for this: integrated warehouse planning, with the rack and the forklift trucks working "hand in hand" as part 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.

Service with the expertise of the manufacturer

Benefit from our service. Benefit from our expertise as the manufacturer. Whether our full service offer or individual maintenance intervals – our service flexibly adapts to your specific application, providing you with long-term investment and planning security. Our comprehensive direct sales network and superbly trained engineers ensure rapid response times, minimum downtimes and low operating costs.

Flexible and risk-free use

Tap into the full economic potential of our electric four-wheel forklift trucks and take advantage of our rental and financing solutions. This helps to maintain your credit line without the risk of tied up capital. In addition, we take care of managing your entire truck fleet, thus ensuring smooth operations at any time. And when all is done, you can simply return the forklift or exchange it for a different model.

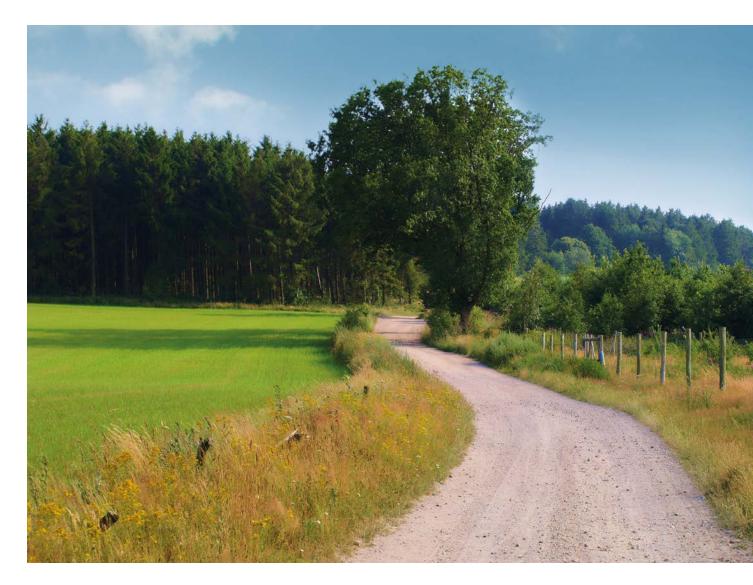
First TÜV-certified product life-cycle assessment

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



Lower CO₂ emissions – lower energy costs

Over the past ten years, our trucks have become more efficient by up to 30 per cent. Also, with a series of technological innovations, we have drastically reduced the $\rm CO_2$ emissions for our entire truck range since 2000. This applies to the entire Jungheinrich product cycle, from manufacturing to usage and refurbishing. And our high-tech solutions are really setting standards in the usage phase, which is where 80 to 90 per cent 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.







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



Jungheinrich trucks conform to the European Safety Requirements.

Jungheinrich Aktiengesellschaft

Friedrich-Ebert-Damm 129 22047 Hamburg Germany Telephone +49 40 6948-0 Telefax +49 40 6948-1777

info@jungheinrich.com www.jungheinrich.com

