

# The electric forklift truck for maximum performance.

## Powerful. Efficient. Versatile.

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

**JUNGHEINRICH**  
Machines. Ideas. Solutions.



# 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 Pure Energy concept. Ergonomically developed, 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 internal or external. And for extremely tough applications there is the S range.











JUNGHEINRICH

AGV/AMV

# Drive more efficiently. With Pure Energy.

Price over performance is a thing of the past. Nowadays, the ratio between energy consumption and results is important. And we have noticeably improved this with Pure Energy.

## We adapt to you

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

The elements of this energy concept are:

- Advanced 3-phase alternating current technology: With optimum coordination between motors and controls.
- Compact controls and very short electric cables due to consumer-oriented configuration.
- Compact hydraulics: Reduction in 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, but just not at the maximum achievable throughput. Choosing the Efficiency configuration is the most cost-conscious option there is.

## 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: 71 pallets/hour

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.





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EFG 540S

# 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 engine trucks.

### **New focus on load centre**

Our S range raises the bar even higher: With a 600 mm load centre at capacities ranging up to 5,000 kg, it offers you the range of features you need for the toughest indoor and outdoor applications or fitting of costly attachments. Thanks to its greater ground clearance, our S forklift

trucks can even travel over uneven ground without difficulty. In addition, the pendulum point of the steering axle has been clearly shifted upwards. This means less wear and, above all, maximum driving safety, stability and lateral stability.





**Adjustable control lever**

**Full colour display**

**Adjustable,  
space-saving  
steering column**

**Wide footwell**

**Convenient footstep**







## Driver dialogue system

### Many storage options

### Adjustable armrest with large storage tray

### Low-vibration seat

# 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 the 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 programs
- Individually assignable function keys

#### 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).

# View it from the eyes of your operator.

## Clear view of the load

Our compact mast significantly extends the operator's field of vision, offering the best visibility available in the market. Important features contributing to the enhanced visibility include compact profile nesting and an optimised chain and hose guide as well as two viewing windows in the cross member.

## Automatic mast inclination with tiltCONTROL

tiltCONTROL is a switchable retrieving aid. If the load's weight reaches around one third of the forklift's rated capacity, the mast tilt backwards slightly when lifting. This compensates for the mast bending and wheel deflection – the load can no longer slip from the fork. tiltCONTROL comes as standard on all vehicles with a four inch display and automatic parking brake.











# For impressive performance.

A series of technical and ergonomic innovations relieve the burden on the operator while supporting performance.

## **Safety with Jungheinrich curveCONTROL**

Jungheinrich curveCONTROL automatically reduces the travel speed when cornering, depending on the degree of the steer angle. Electric braking engages and keeps centrifugal forces at a constant 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.

## **Automatic wheel stop for safety on inclines (optional)**

If the operator takes their foot off the accelerator on a ramp, the fork lift truck stops automatically. When the forklift truck starts up, the brake is automatically released and the forklift truck moves off carefully without rolling backwards. If your operator leaves the fork lift truck, the physical parking brake is applied after a certain time.

## **Individually selectable operating/travel programs for efficient operation**

Five different operating/travel programs give your operator the ideal versatility to cope with any application. This enables the forklift truck to use 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 every situation**

If your operator wants to stop "normally", he can simply remove his foot "from the accelerator" shortly before reaching his destination. The electric braking brings the forklift truck to a halt.

If the operator has to brake suddenly, he presses the brake pedal and activates the hydraulic multi-disc brake. This also works entirely without wear.

#### **Individually tailored attachments**

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

#### **Optimum tyres and high ground clearance**

Our EFGs 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 car-type arrangement.



# Fast. Simple. Safe.

## Our solutions for your battery exchange.

### 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 trolley to the pedestrian pallet truck and guides both safely 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 with automatic battery ejection (optional)**

A touch of the button is sufficient: 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 can offer you forklift trucks, batteries and chargers from a single source. A system adapted 100% to your operating conditions. The advantage: Maximum truck availability and an economical energy supply designed for specific needs. Your batteries, your budget and the environment will thank you.

# We give you all the options.

Series vehicles, but tailor-made solutions: Our wide range of options makes almost anything possible. This ensures that our electric forklift trucks fully satisfy your application and safety requirements.

## Three adjustable control lever variants

With the ability to choose between soloPILOT, duoPILOT and multiPILOT, you can offer your operator the most efficient and pleasant operating system for him. In addition, your operator can individually define the function assignment for the lever and axles. 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. At higher speeds, the steering support diminishes.

#### **Advantages:**

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



**Everything at a glance: Full colour display**

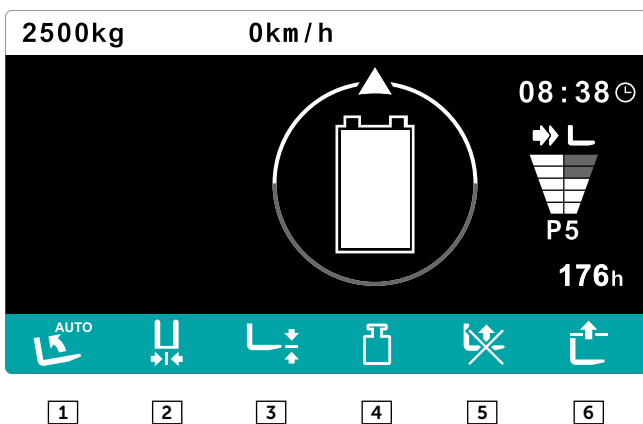
The high-contrast, four inch display provides information about all of the forklift readings such as direction of travel, travel programme, crawl speed, battery charge and warnings.

**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 work 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:

**1.** 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 at the truck display. You can choose between the softkey, PIN code and transponder options.

#### Softkey

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

#### PinCode

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

#### Transponder

- Activation is triggered by a transponder card.
- Up to 100 transponder IDs can be assigned.





### Cabin versions for every 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 versions offer the same exceptional view, 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 seat-belt. Ergonomic backrest extension for larger operators and lumbar vertebra (lumbar) supports. Spring deflection: +/- 30 mm.

#### MSG 65 LUX

As MSG 65 Ergo. Additional integrated seat heating. Also available in easy-clean leatherette.

#### MSG 75 Air

As 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.



MSG 75 Air



### **Speed limit by driveCONTROL**

driveCONTROL automatically limits acceleration and maximum travel speed when a lift height that you can define 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 calling the function, the operator actuates the lever for the sideshift. The corresponding icon in the display shows 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 shows 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**

Data radio connection allows for wireless data transfer. Radio data terminal with intuitive operation for work in real time without paperwork. The barcode scanner ensures fast and reliable identification of goods. This prevents errors in the work process.





**Floor Spot: Safety at blind spots**

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

**High-frequency charging ensures maximum performance**

Our high-frequency chargers save up to 30% on energy and reduce the charging times significantly. Pre-configured charging programmes, simple commissioning and, not least, the low space requirement make charging quick, straightforward and cost-effective.



**Save time and space by 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.



**Two-shifts on one battery charge**

The optimised energy concept of our EFGs mean that it is now possible to complete two shifts with a single battery charge. All by using a Jungheinrich standard battery, irrespective of your conditions of use and the necessary throughout performance. That saves you guaranteed time and costs.

# More in, more out, more performance.

## The most important options at a glance.

Cabin versions

Seat versions

accessCONTROL

Automatic battery  
extension

Automatic wheel stop





**Parameter steering**



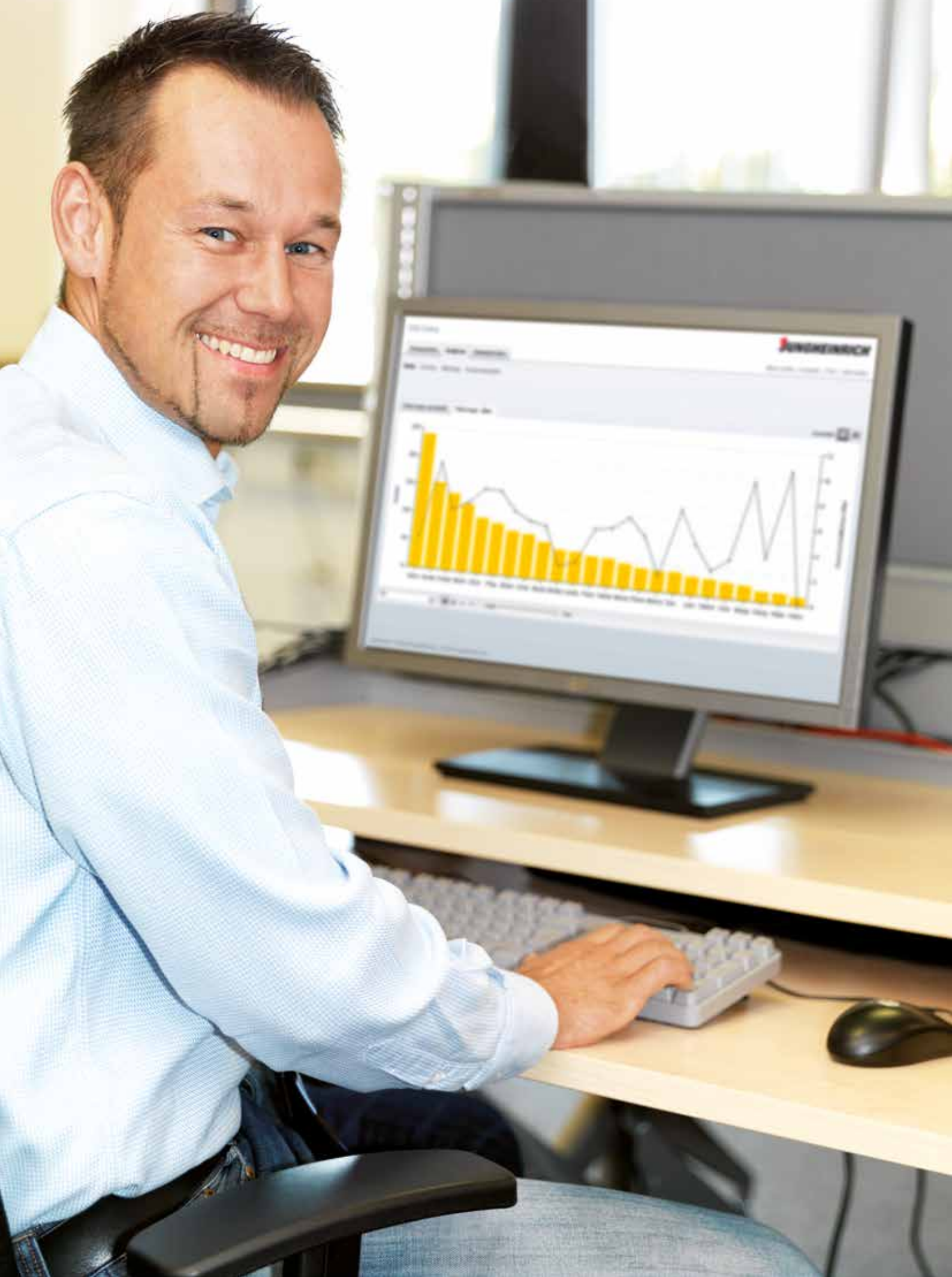
**liftCONTROL**

**Full colour display and  
driver dialogue system**

**easyACCESS**

**Hydraulic accumulator load  
cushioning**

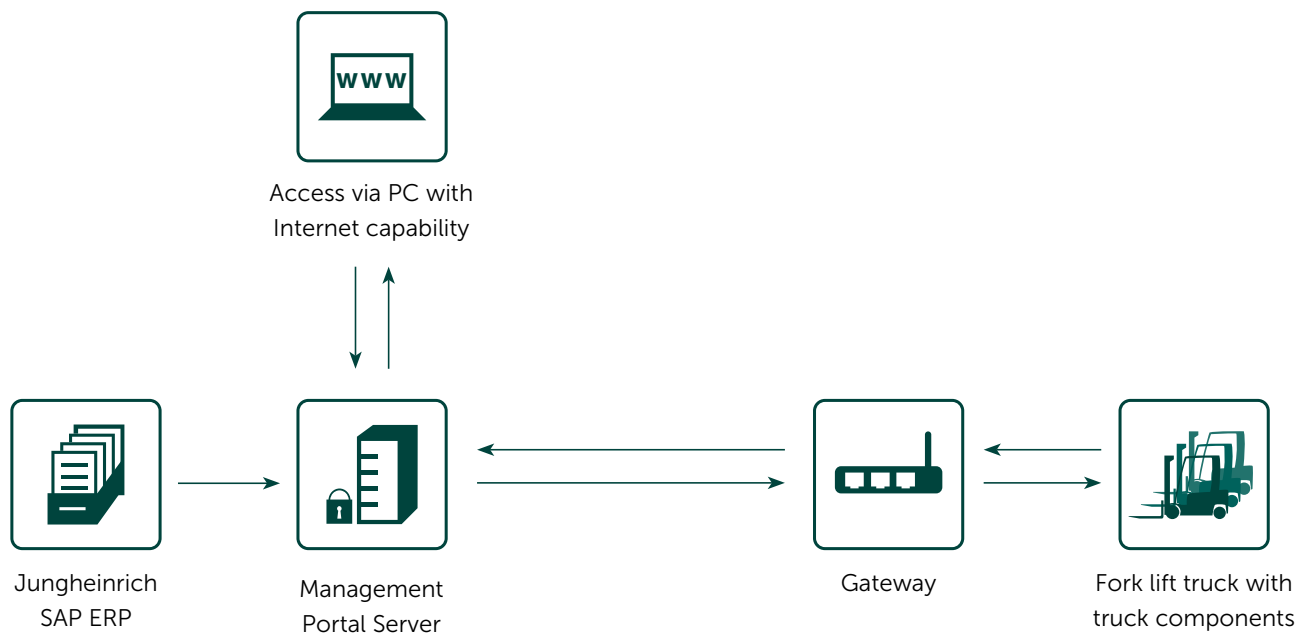
**driveCONTROL**





# Always up to date.

## Check your fleet with ISM Online.



### ISM Online for efficient fleet management

ISM Online is a Web-based information system for analytical collecting, monitoring and evaluation of data for a wide range of truck types. It can be used at multiple locations, internationally and is manufacturer independent. For maximum data transparency and the cost-optimised structuring of industrial truck fleets. Five 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 all the equipment in your fleet at all locations. It provides reports on the number of trucks per site, on their ages and on total costs as of the reporting day.

#### Service module

Would you like a quick overview of pending, completed or overdue maintenance and safety checks? This module provides you with all the dates in good time via the management portal, enabling them to be scheduled accordingly.

#### Operating Costs module

Would you like to see 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.

# Yes or no?

## Opt for the best solution.

### **BestInvest**

Our electric four wheel counterbalanced fork lift trucks will reduce your operating costs by up to 20% 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 BestInvest. 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 hazard due to flammable gases, fumes, powder or dust. To meet these special requirements and to guarantee safe operation, we can supply explosion-proof electric fork lift trucks in accordance with Directive 94/9/EC (also referred to as ATEX 95).

### **The right rack 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 manufacturer's expertise**

Benefit from our service. Benefit from the manufacturer's expertise. With our full service offer, our individual maintenance intervals, or, ... You will be convinced by the diversity of our service, which is flexibly adapted to your specific application. In this way our service provides 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.

#### **Advantages:**

- Competent and comprehensive consultancy
- Short communication channels and rapid response times
- Short downtimes to save you money
- First-class training of the service engineers
- Efficient spare part logistics with 98.5% spare parts availability
- Preserve the value of your forklift trucks with original spare parts
- Increased operational safety and reliability

### **The whole is greater than the sum of its parts**

Our service department has exclusive access worldwide to original spare parts. Using only original spare parts is the only way to maintain optimum interaction between all components, ensuring maximum reliability and preserving value. Only our original spare parts meet the high performance requirements of the fork lift truck and material and secure your complete warranty claim.





Kunden (200 Stück)  
100 Stück

Funktions

Produktion  
Lager  
Vertrieb  
Einkauf  
Forschung & Entwicklung





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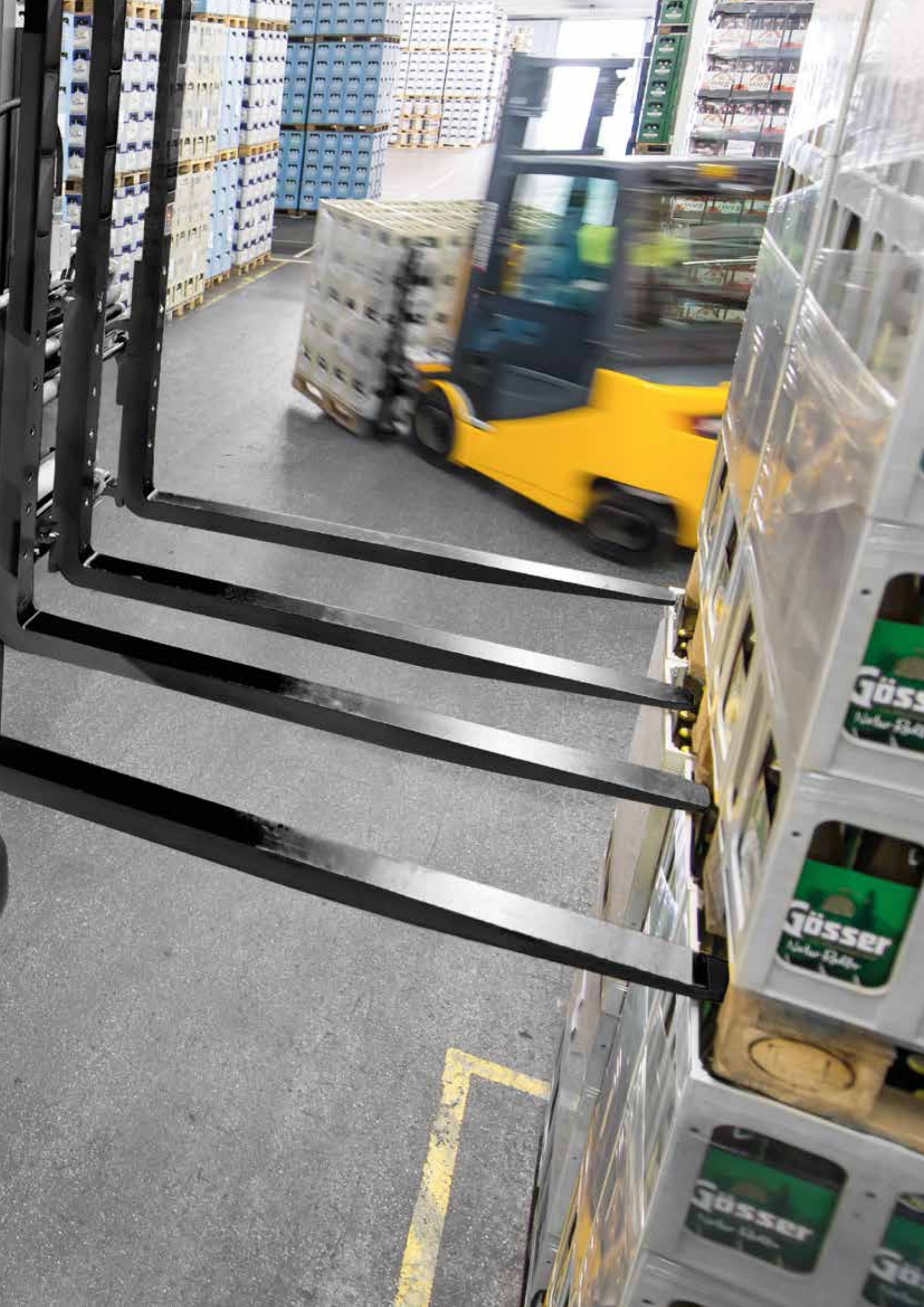
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**ISO 9001** The German production facilities  
**ISO 14001** in Norderstedt, Moosburg  
and Landsberg are certified.

 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

  
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