

Electric forklift trucks.

The perfect combination
of performance and efficiency.



JUNGHEINRICH

INTRO

HIGHLIGHTS

Equipped with superior lithium-ion technology or lead-acid batteries, the EFG trucks from Jungheinrich impress with a wealth of tangible benefits. 03

THE EFG SEGMENT

SERIES 1**112**

Sophisticated ergonomics, intuitive operation and optimum all-round visibility. 04–05

SERIES 2**213 | 215 | 216 | 216k | 218 | 218k | 220**

Agility in the tightest spaces with market-leading visibility levels. 04–05

SERIES 3**316 | 316k | 318 | 318k | 320**

A perfect blend of agility and stability, even on very uneven surfaces. 06–07

SERIES 4**425 | 425k | 430 | 430k | S30 | 435**

Maximum endurance for flexible use in indoor and outdoor areas. 08–09

SERIES 5**535 | 535k | 540 | 540k | 545 | 545k | 550 | S40 | S50**

The high-performance truck for the heaviest loads and attachments. 10–11

BA SERIES**BA 113 | 115**

Perfect for lightweight applications and tight spaces. 12–13

BB & BC SERIES**BB 216k | BC 316 | BC 320**

The economical alternative for less intensive use. 14–15

OPTIONS AND ADDITIONAL INFORMATION

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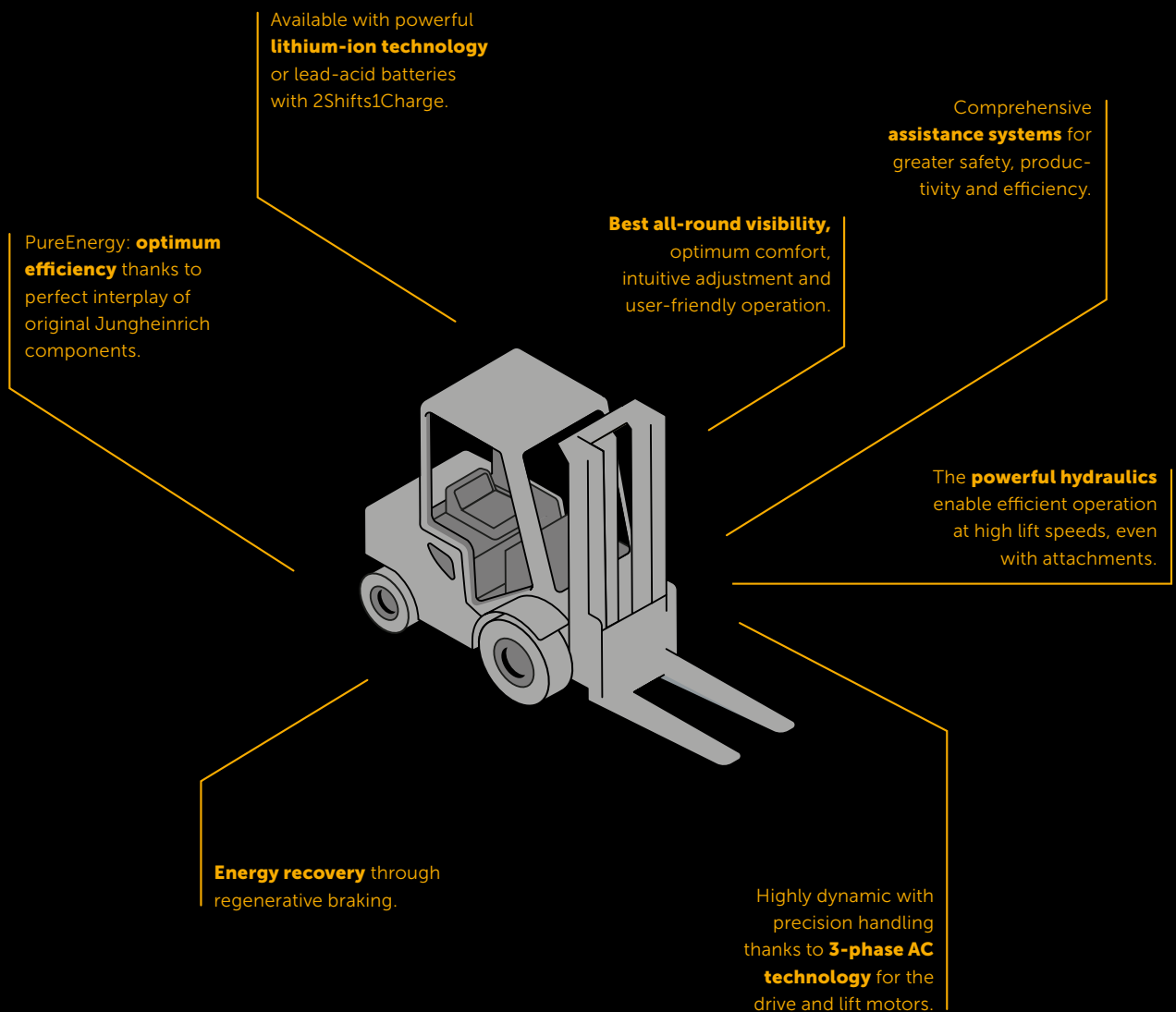
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The Jungheinrich EFG electric forklift trucks.

The main benefits at a glance.



Our agile and versatile electric forklift trucks are designed to offer maximum performance combined with minimal energy consumption. By opting for an EFG equipped with superior lithium-ion technology, you will leave the competition behind.



The **EFG 216k** – compact mast for the best visibility.



Energy recovery with regenerative braking on the **EFG 112**.



The powerful hydraulics enable the **EFG 216k** to achieve high lift speeds.

| SERIES | EFG 1 ¹ | EFG 2 ¹ |
|---------------------|--------------------|---|
| Model name | 112 | 213 215 216 216k 218 218k 220 |
| Type | 3-wheel | 3-wheel |
| Lift height (mm) | 2,900–7,000 | 2,020–7,000 |
| Capacity (kg) | 1,200 | 1,300–2,000 |
| Travel speed (km/h) | 12 | 16 |
| Overall length (mm) | 2,929 | 2,929–3,145 |

¹ Some models are available with a shorter wheelbase and turning radius (k).

Compact and manoeuvrable three-wheel counterbalance forklift trucks.

The EFG series 1 & 2.

Simple and accurate manoeuvring, even in confined spaces, containers and on HGVs.

SERIES 1

112

Series 1 is the perfect aid in operations with low tonnage in confined spaces. Highly manoeuvrable and at the same time extremely powerful with a capacity of 1,200 kg and a lift height of up to 7 metres, the EFG 112 can also be enhanced with a wide selection of options. Thanks to sophisticated ergonomics, intuitive operation and the compact mast enabling the best all-round visibility, you can fully utilise the performance of the EFG series 1 in any application.

- ▶ Highly manoeuvrable three-wheel counterbalance forklift truck.
- ▶ 180° turns possible on the spot.

SERIES 2

213 | 215 | 216 | 216k | 218 | 218k | 220

Where there is little space and the ground is level, the EFG series 2 offers maximum manoeuvrability. The powerful hydraulic system enables high lift speeds, even when used with attachments. A compact mast ensures that the view remains unobstructed, giving the operator the best field of vision on the market.

- ▶ The highly versatile all-rounder.
- ▶ Optimum energy and cost efficiency with maximum performance thanks to PureEnergy concept.
- ▶ Numerous assistance systems and safety options protect people, goods and truck.



The **ergonomic workplace** supports efficient working and protects the operator.



Extremely manoeuvrable, even in the tightest of spaces, thanks to 180° rotations on the spot.

Reliable all-rounders for any warehouse environment. The EFG series 3.

A perfect blend of agility and stability,
even on very uneven ground.

SERIES 3

316 | 316k | 318 | 318k | 320

Our series 3 electric forklift trucks offer the perfect balance of stability and manoeuvrability on very uneven ground. The powerful hydraulic lift enables high lift speeds even when attachments are used. Thanks to the PureEnergy technology concept, the forklift trucks in this series combine reduced energy consumption with increased throughput. The lithium-ion battery technology enables rapid intermediate charging so that the devices are ready for the next job with no delay. The compact mast gives the operator an unobstructed view of the load, increasing safety and control during the operation.

- ▶ Maximum operational stability and travel safety due to optimum weight distribution across all four wheels.
- ▶ Fatigue-free working thanks to the ergonomic workplace.
- ▶ Versatility and flexibility, both indoors and outdoors.



The **electric parameter steering** ensures utmost precision and minimises unwanted steering movements.



The **ergonomic workplace** offers plenty of freedom of movement and a range of adjustment options for highly efficient working.



The **EFG 320** offers maximum ease of use with its ergonomic workplace.

Optimum stability on any surface with the **EFG 320**.



Maximum efficiency thanks to PureEnergy technology concept with the **EFG 320**.



SERIES

| SERIES | EFG 3 ¹ |
|---------------------|-------------------------------|
| Model name | 316 316k 318 318k 320 |
| Type | 4-wheel |
| Lift height (mm) | 2,020–7,000 |
| Capacity (kg) | 1,600–2,000 |
| Travel speed (km/h) | 17 |
| Overall length (mm) | 3,140–3,248 |

¹ Some models are available with a shorter wheelbase and turning radius (k).



EFG 435 for industry-specific applications.



The **EFG 430** is the ideal choice for HGV loading.



The combination of slimline B-pillar design and panoramic roof guarantees optimum visibility.

SERIES

| SERIES | EFG 4 ^{1,2} |
|---------------------|-------------------------------------|
| Model name | 425 425k 430 430k S30 435 |
| Type | 4-wheel |
| Lift height (mm) | 2,900–7,500 |
| Capacity (kg) | 2,500–3,500 |
| Travel speed (km/h) | 16–20 |
| Overall length (mm) | 3,484–3,637 |

¹ Some models are available with a shorter wheelbase and turning radius (k).

² Some models are available with higher capacity and wider tread (S).

Performance for the highest demands. The EFG series 4.

Maximum endurance for flexible use in indoor and outdoor areas.

SERIES 4

425 | 425k | 430 | 430k | S30 | 435

Be it the beverages industry, the building materials trade or the automotive sector, our versatile and efficient series 4 electric four-wheel counterbalance forklift trucks are the perfect choice for transporting goods internally when heavy loads need to be handled quickly. Capacities of up to 3,500 kg make them particularly ideal for applications using attachments. With high ground clearance, these trucks are also ideal for use outdoors. Thanks to the PureEnergy technology concept, the forklift trucks in this series combine reduced energy consumption with increased throughput.

- ▶ Compact mast profiles deliver the best all-round visibility on the market.
- ▶ Customisable workplace with sophisticated ergonomics.



Adjustable lever and axis assignment of the controls.



Low, highlighted entry step with **level footwell**.

For challenging applications in all industries. The EFG series 5.

Ideal for the heaviest loads and use of complex attachments.

SERIES 5

535k | 540 | 540k | 545 | 545k | 550 | S40 | S50

Our series 5 ergonomically perfected electric four-wheel counterbalance forklift trucks are ideal for the toughest applications, both indoors and outdoors. Thanks to clever attachment options, an individual attachment can be implemented for almost every item to be transported. Even the heaviest loads are transported safely. The PureEnergy technology concept ensures excellent cost and energy efficiency. The compact mast with extended field of visibility and intelligent controls that adapt to the application and driver profile enable optimum performance at all times.

- ▶ S range for heavy loads with attachments.
- ▶ Safety even in extreme conditions thanks to numerous assistance systems and equipment options.



Market-leading visibility thanks to compact mast with extended field of view.



Tailored to a wide range of sectors with individual **attachments**.

The **EFG S50** with diverse attachment options for virtually any type of cargo.



The **EFG S50** with dynamic handling based on the selected travel program.



The **EFG S40** is a veritable powerhouse for the most demanding applications.



SERIES

| | |
|---------------------|--|
| Model name | 535k 540 540k 545 545k 550 S40 S50 |
| Type | 4-wheel |
| Lift height (mm) | 2,480 – 7,500 |
| Capacity (kg) | 3,500 – 5,000 |
| Travel speed (km/h) | 17 |
| Overall length (mm) | 3,805 – 4,102 |

EFG 5^{1, 2}

¹ Some models are available with a shorter wheelbase and turning radius (k).

² Some models are available with higher capacity and wider tread (S).



Optimal visibility of the fork and load with the **EFG BA 115**.



Impressive productivity with a capacity of up to 1.5 tonnes.



Available as standard, **curveCONTROL** automatically reduces cornering speed.

SERIES

| SERIES | EFG BA |
|---------------------|-------------|
| Model name | 113 115 |
| Type | 3-wheel |
| Lift height (mm) | 3,000–6,500 |
| Capacity (kg) | 1,300–1,500 |
| Travel speed (km/h) | 12.5 |
| Overall length (mm) | 2,732–2,830 |

The compact entry model. The EFG BA series.

Perfect for lightweight applications and tight spaces.

BA SERIES

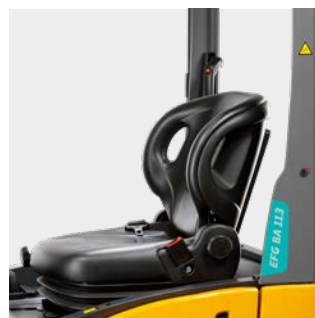
113 | 115

The electric three-wheel counterbalance forklift truck in the BA series is ideal for the internal transport of goods including handling, transporting and stacking. Irrespective of the application, its 48-V batteries enable rapid charging and offer a great deal of flexibility for single- or two-shift operation. The dual-motor front-wheel drive also ensures reliable traction on a variety of surfaces. Despite their compact dimensions, the EFG trucks in the BA series with their robust mast quality and counterweight deliver a high residual capacity.

- ▶ Small turning circle makes them ideally suited to narrow aisles and tight spaces.
- ▶ Efficient energy recovery of up to 30% with every braking operation.



High level of occupational safety through individually configurable equipment options such as strobe and warning zone lights.



Compact exterior, comfortable interior. **Ergonomic and clearly arranged operator workplace.**

Simple and reliable trucks. The EFG BB & BC series.

An attractive alternative for less intensive use.

BB SERIES

BB 216k

Where there is little space to manoeuvre in the warehouse, the compact electric three-wheel counterbalance forklift truck from the BB series comes into its own. It can turn on the spot, reaches lift heights of up to 6.5 m and boasts impressive technology and ease of use. Not only does it operate quickly, it is also energy efficient and requires little maintenance – a highly economic all-in-one solution.

- ▶ Minimised turning radius thanks to dual-motor front-wheel drive.
- ▶ High residual capacity thanks to the low truck centre of gravity.

BC SERIES

BC 316 | BC 320

This four-wheel electric forklift truck is a high-performance all-rounder that moves safely even on uneven ground. With a load capacity of up to 2 t and a high residual capacity of up to 6.5 m, it offers the perfect combination of stability and manoeuvrability. The robust, wear-resistant components guarantee a long service life.

- ▶ Intelligent Jungheinrich controller for maximum goods throughput.
- ▶ Can also be used outside the warehouse thanks to IPX5 protection rating.



curveCONTROL assistance system for added safety when cornering.



Arched overhead guard for optimal visibility typical of the BB and BC series.



EFG BC 320: Intelligent Jungheinrich controller for maximum goods throughput.



EFG BC 320: Robust mast quality and high residual capacity of up to 5 m lift height.



EFG BB 216k: Compact design for maximum flexibility in tight spaces.

SERIES

Model name

Type

Lift height (mm)

Capacity (kg)

Travel speed (km/h)

Overall length (mm)

EFG BB

BB 216k

3-wheel

3,000–6,500

1,600

15

2,899

EFG BC

BC 316 | BC 320

4-wheel

3,000–6,500

1,600–2,000

15

3,096



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

0,0

Zero maintenance.



Up to 8 years on the warranty.



Significantly higher endurance in multi-shift operation.



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

No compromises. With lithium-ion technology from Jungheinrich.

ADVANTAGE: LITHIUM-ION TECHNOLOGY

With Jungheinrich lithium-ion batteries, you can enjoy the benefits of what is by far the longest-lasting energy source. Jungheinrich develops and produces the batteries, chargers and all important truck components in-house. This ensures perfect interplay between all parts of the system, thus ensuring optimum performance at all times. Ultra-fast charging times and zero maintenance requirements enable virtually uninterrupted deployment of lithium-ion trucks. Power is always available, with no signs of fatigue. With the Jungheinrich Li-ion Guarantee Plus, we promise a lasting performance of up to 8 years. Because we know that a long service life and maximum battery performance are crucial to the success of your business.

ADVANTAGE: PUREENERGY

Thanks to our PureEnergy technology concept, the EFG electric forklift trucks combine maximum performance with minimal energy consumption. PureEnergy reduces consumption while simultaneously boosting throughput performance by a significant margin. This is enabled by sophisticated 3-phase AC technology in conjunction with the compact controller and compact hydraulic unit.



LI-ION
technology



Perfection in every detail. Our assistance systems and performance packages.

Sophisticated solutions to enhance
your safety, efficiency and productivity.

ASSISTANCE SYSTEMS

addedVIEW 360° camera system

Four digital cameras provide the operator with perfect all-round visibility. As well as benefiting from a front and a rear view camera, the operator can also call upon an external, bird's eye view of the truck. All camera feeds can be viewed directly on the cockpit display – either individually or using a split-screen function.

curveCONTROL

When cornering, the truck speed is actively reduced based on the current load and steering angle. This ensures maximum travel stability and safety for the transported load – while also boosting throughput performance.

driveCONTROL

The truck speed is adjusted automatically based on the current lift height. This ensures that the raised load is always transported safely.

liftCONTROL

Based on the current load, the tilt speed of the mast is controlled automatically as of a lift height of approx. 1500 mm. This ensures that the transported goods are raised safely and drastically reduces the risk of accidents.

tiltCONTROL

When approximately one third of the rated capacity is reached, the mast angle is adjusted automatically. This actively prevents the truck from tipping, allowing the operator to focus on the task at hand.

zoneCONTROL

This electronic system monitors and controls the motion sequences in predefined warehouse zones. It can perform automatic actions, such as opening a gate or activating a warning light. Where necessary, it can also intervene in the truck functions, e.g. in the case of lift height restrictions, when unloading is prohibited or by actively braking in danger zones.

PERFORMANCE PACKAGES

EFFICIENCY

The Efficiency package ensures highly energy-efficient lifting and travel, thus enabling a massive reduction in consumption. It is ideal for applications where the emphasis is on quick and efficient lifting and travel, rather than on the maximum achievable throughput speed.

drive&liftPLUS

By offering greater travel/lift speeds, the drive&liftPLUS package exploits the full technical capability of the forklift truck. This ensures maximum performance and highest throughput speeds.



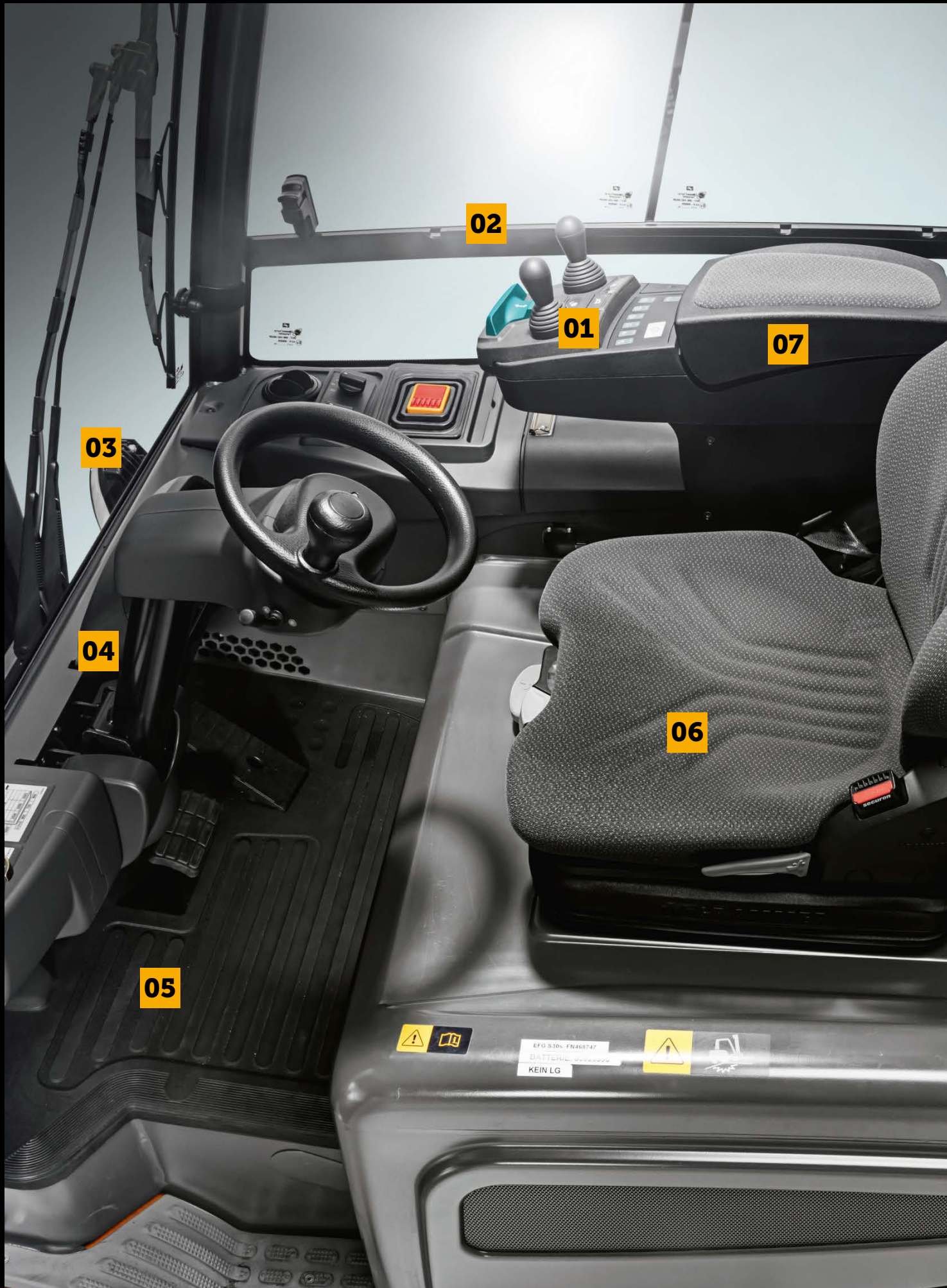
liftCONTROL controls the lift speed to ensure that loads are lifted safely.

driveCONTROL enables even more precise manoeuvring during the work cycle.



With **tiltCONTROL**, the tilt angle of the mast is automatically adjusted to the load.





02

01

07

03

04

06

05



EFG S 100- F1660747
BATTERIE
KEIN LG



Customised equipment options.

Every warehouse environment, every cargo and every driver is different. We tailor your truck accordingly.

01

Driver dialogue system – ergonomically integrated in the armrest. This allows operators to perform quickly during work processes.

02

Adaptable control lever – soloPILOT (standard), multiPILOT or duoPILOT (as shown).

03

Full-colour TFT display – high-resolution and high-contrast, with intuitive user guidance – for relaxed, productive working.

04

Space-saving steering column – infinitely adjustable in two directions. Ergonomic adaptation to suit any operator.

05

Generous footwell with single- or double-pedal operation.

06

Low-vibration seat for maximum driver comfort and relaxed, fatigue-free working.

07

Adjustable armrest with large storage compartment – perfect ergonomics for operators of all sizes.



soloPILOT: All hydraulic functions, travel direction selection and horn in a single lever. Control of all functions with millimetre precision.

multiPILOT: Smooth input of all control commands without moving your hand – with ergonomically optimised grip.

duoPILOT: Precision control of the truck via two independent levers. Individually configurable on request.

Simply a great performance

Pure Ingredients expands its fleet with electric forklift trucks.

Burgers, nuggets, Turkish pizzas... Pure Ingredients is not only known for its delicious convenience food; the company is also the market leader in frozen Halal products. An increasing number of orders led the food manufacturer to revise its fleet, with the selection including compact EFG entry models from Jungheinrich. These trucks not only offer an impressive price-performance ratio, but also a proven high level of quality.

THE POWER OF SIMPLICITY.

The company's decision to choose the Jungheinrich EFG BB 216k trucks proved to be the correct one: when it comes to efficiency and reliability, no other electric forklift truck comes close to these EFG entry models. That's because these compact, fully equipped and robust trucks have been developed using the expertise of Jungheinrich engineers, offering customers the perfect middle ground between new and used truck – a price as attractive as a used model yet straight out of the factory.

EXPANSION OF INTERNAL LOGISTICS.

The Halal snacks sold under the Mekkafood name, together with the Lekker&Anders and Herrenhof brands, enjoy national and international acclaim. Wishing to continue

its professional management of own-brand production for major supermarket chains, supplying to the catering trade and overseeing ever-growing product sales, Pure Ingredients increased the number of industrial trucks at its Dutch location in Belfeld. To standardise the fleet, the company opted for a combination of Jungheinrich industrial trucks encompassing hand pallet trucks, pedestrian stackers, electric pallet trucks and an EFG 216 lithium-ion forklift truck. EFG BB 216k three-wheel counterbalance forklift trucks were also added to the mix: the perfect add-on for light to medium applications of short duration. The customer was so impressed with the performance of these electric forklift trucks that they were quickly introduced to the German location in Nettetal-Kaldenkirchen as well.

ANYTHING BUT STANDARD.

The equipment included on the solid 1.6-tonne electric forklift trucks includes a lighting set, flashing light and Floor-Spot, a handle with horn, plus a distinctive orange lap belt with detector. Fleet Manager Peter Bastiaens has been delighted with the flawless operation of the EFG trucks since day one, praising their user friendliness and the proven great level of service provided by Jungheinrich.

CUSTOMER PROFILE

1993

Year of formation

3

Locations

Approx. 200

Employees

Food

Industry



The proven Jungheinrich AC technology delivers high performance with low energy consumption.



A robust chassis design ensures optimum truck stability with the best-possible all-round visibility.



The manoeuvrable three-wheel counterbalance forklift truck boasts a compact design and is particularly impressive at delivering flexible transport within confined warehouse environments.



Short downtimes and fast charging thanks to Li-ion technology.



The Jungheinrich FMS controls utilisation of the fleet.



The Floor-Spot projects a blue light onto the floor in front of the truck, which alerts employees to the approaching industrial truck.

Safety first.

Powerful lithium-ion leasing fleet for Duyvis.

Dutch food producer Duyvis is known for its high-quality nut snacks and was acquired by PepsiCo in 2006. When its old leasing contract expired, the time had come to introduce a new, state-of-the-art fleet. Lithium-ion expert Jungheinrich was able to see off its rivals and win the contract. In addition to 17 trucks, the performance package also includes the Jungheinrich Fleet Management System.

PROTECTING PEOPLE AND GOODS

Duyvis has leased the new fleet for a total of 60 months. It consists of eight electric forklift trucks with lithium-ion batteries (EFGs) and nine pallet trucks (EJEs, EJCes and EJJGs) and includes a full service maintenance contract. When selecting a leasing partner, the focus was on safety, environmental friendliness, optimum ergonomics and, of course, a commercially viable concept.

HIGH AVAILABILITY GUARANTEED

All trucks are equipped with maintenance-free, powerful lithium-ion batteries. This allows fast booster charging without exchanging the battery, and saves Duyvis 20 to 30 minutes per charging cycle. Since

the batteries can leak neither gas nor acid, the operator and the food are optimally protected. The new trucks also offer a more pleasant working environment: the seat is comfortable and spacious, the hydraulic mast control is particularly sensitive and the visibility is excellent, making the operator's job much easier. The Floor-Spot, a visual signal on the floor, informs other trucks and pedestrians in good time about the approaching truck. When it comes to food safety, nothing has been left to chance: In the unlikely event that the driver's cab window breaks, a shatter-proof film prevents glass particles from contaminating the products. All trucks are also equipped with food-safe hydraulic oil.

OPTIMUM UTILISATION OF THE FLEET

Duyvis opted for the Jungheinrich FMS to enable better monitoring and control of fleet usage. Only authorised operators have access to the trucks. The Fleet Management System ensures that utilisation is equally spread across all trucks: any bottlenecks that may arise are identified and prevented at an early stage. This virtually eliminates the stress of dealing with unexpected performance peaks.

CUSTOMER PROFILE

1806

Year of formation

1

Location

> 150

Employees

21,000 m²

Area

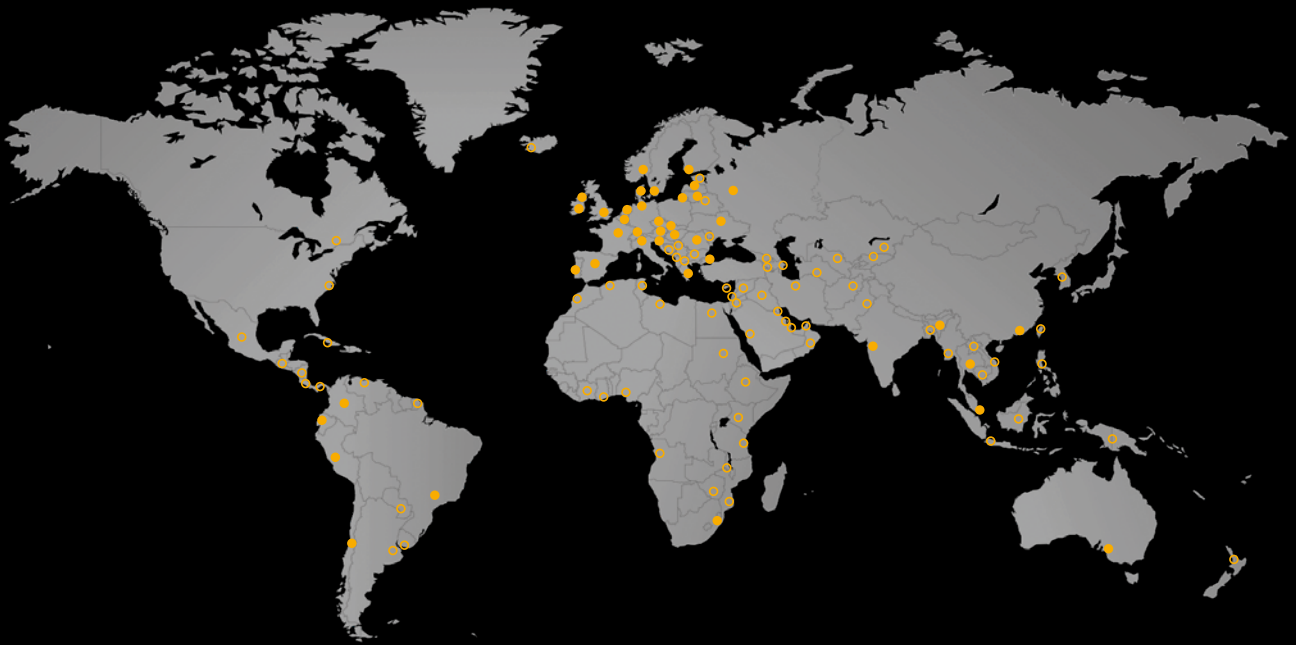
17

Trucks

Food

Industry

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 6,100 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
ISO 14001 in Norderstedt, Moosburg
and Landsberg are certified.

 Jungheinrich trucks
conform to the European
Safety Requirements.

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