

# Electric forklift trucks.

The perfect combination  
of performance and efficiency.



## 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**

Series 1 offers 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**

Power and stamina 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

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

The economical alternative for less intensive use. 12–13

## OPTIONS AND ADDITIONAL INFORMATION

**LITHIUM-ION TECHNOLOGY**

The longest-lasting energy carrier by far thanks to ultra-quick charging times and zero maintenance requirements. 14–15

**ASSISTANCE SYSTEMS AND PERFORMANCE PACKAGES**

Sophisticated solutions to enhance your safety, efficiency and productivity. 16–17

**EQUIPMENT OPTIONS**

Every warehouse environment, every load and every operator are different. We can tailor your truck to suit all needs. 18–19

**SAFETY FIRST**

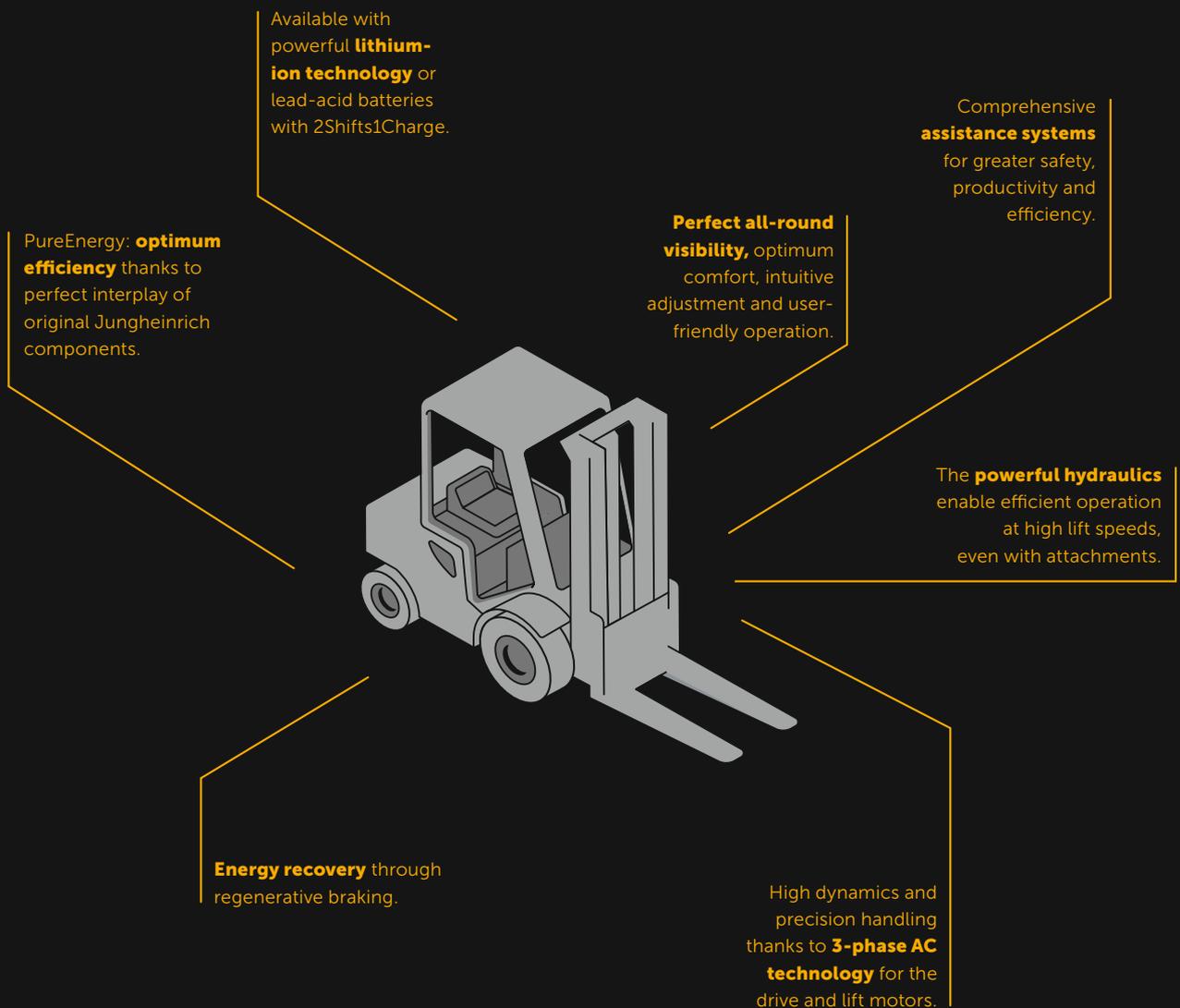
Powerful lithium-ion leasing fleet for Duyvis. 20–21

**JUNGHEINRICH FACTS**

Interesting facts about the leading provider of intralogistics solutions along with information regarding our products, systems and services. 22–23

# 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 perfect visibility.



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



The powerful hydraulic system enables the **EFG 216k** to achieve very high lift speeds.

SERIES	EFG 1 <sup>1</sup>	EFG 2 <sup>1</sup>
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

<sup>1</sup> 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 HGV.

### SERIES 1

112

Series 1 is perfectly suited to operations with low tonnage in very 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 optimum all-round visibility, you can fully utilise the performance of your EFG series 1 at any time.

- ▶ 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 market-leading visibility.

- ▶ The highly versatile all-rounder.
- ▶ Optimum energy and cost efficiency with maximum performance thanks to PureEnergy concept.
- ▶ Protection of people, goods and vehicles with numerous assistance systems and safety options.



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



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



The **ergonomic cockpit** 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 cockpit.

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



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



#### SERIES

Model name

Type

Lift height (mm)

Capacity (kg)

Travel speed (km/h)

Overall length (mm)

#### EFG 3<sup>1</sup>

316 | 316k | 318 | 318k | 320

4-wheel

2,020–7,000

1,600–2,000

17

3,140–3,248

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



**EFG 430** for industry-specific applications.



**EFG 425k** with a special rotating device.



Precise handling of special loads with the **EFG 425k**.



**EFG 425** with minimal vibrations thanks to decoupling of cab and chassis.

**SERIES**

Model name	<b>EFG 4<sup>1,2</sup></b> 425   425k   430   430k   S30
Type	4-wheel
Lift height (mm)	2,900 – 7,500
Capacity (kg)	2,500 – 3,000
Travel speed (km/h)	20
Overall length (mm)	3,446 – 3,612

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

<sup>2</sup> Some models are available with higher capacity and wider tread (S).

# Versatile forklift trucks for demanding applications. The EFG series 4.

Power and stamina for flexible use in indoor and outdoor areas.

## SERIES 4

425 | 425k | 430 | 430k | S30

Our series 4 robust electric four-wheel counterbalance forklift trucks are suitable for a wide range of indoor and outdoor applications. They can be adapted to industry-specific requirements using individual attachments and can also move heavy loads quickly and efficiently. With high ground clearance, these devices are ideal for use outdoors. Thanks to the PureEnergy technology concept, the forklift trucks in this series combine reduced energy consumption with increased throughput. The ergonomic equipment and technical innovations support fatigue-free work in high-performance environments.

- ▶ Market-leading visibility enabled by a wider field of view.
- ▶ Range S well suited to particularly tough and demanding applications.



Ideal for specific industry requirements and the use of **special attachments**.



**Optimum ground clearance and tyres** to suit virtually all ground conditions.

# For challenging applications in all sectors. 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 control elements that adapt to the application and driver profile enable optimum performance at all times.

- ▶ Range S for heavy loads with attachments.
- ▶ Safety guaranteed 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 all loads.



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

SERIES	EFG 5 <sup>1, 2</sup>
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

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

<sup>2</sup> Some models are available with higher capacity and wider tread (S).



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



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



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

SERIES	EFG BB	EFG BC
Model name	BB 216k	BC 316   BC 320
Type	3-wheel	4-wheel
Lift height (mm)	3,000–6,500	3,000–6,500
Capacity (kg)	1,600	1,600–2,000
Travel speed (km/h)	15	15
Overall length (mm)	2,899	3,096

# Simple and reliable trucks.

## The EFG BB & BC series.

An attractive alternative for less intensive use.

### SERIES BB

#### 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 is impressive in terms of 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 twin-engine front-wheel drive.
- ▶ High residual capacity thanks to the truck's low centre of gravity.

### SERIES BC

#### BC 316 | BC 320

This four-wheel electric forklift truck is a high-performance all-rounder that drives 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.



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

0,0  
Zero maintenance.



Up to 8 years warranty.



Significantly higher endurance in multi-shift operation.



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

# No Compromises. 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 guaranteeing 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 front and reversing cameras, 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 from a lift height of approx. 1,500 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 the 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



EFU S306-FR680747  
BATTERIE  
KEIN LG



# Customised equipment options.

Every warehouse environment, every load and every operator are different. We can tailor your truck to suit all needs.

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 adjustment to suit all drivers.

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.

# 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. The 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 fleet management system Jungheinrich FMS.

### 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 (EFG) and nine pallet trucks (EJE, EJC and EJJ) 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 replacing 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, acts as a visual signal on the floor in front of the truck, informing other trucks and pedestrians in good time about the approaching vehicle. When it comes to food safety, nothing has been left to chance: In the unlikely event that the driver's cab window breaks, a shatterproof 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 all trucks are assigned an equal workload. Potential bottlenecks 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 m<sup>2</sup>**

Area

**17**

Vehicles

**Food**

Industry



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, alerting employees to the approaching vehicle.

# A leader in intralogistics.

## There for you across the globe.



● Our own direct sales companies in 40 countries.

○ Partner companies in more than 70 other countries.

Over 18,000 employees.

More than 5,500 service engineers across the globe.

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.



### **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 – whether electric, engine-powered, or operated 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, holistic 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 maximum 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 combines a high level of technical know-how 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 5,500 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.

### **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

 **JUNGHEINRICH**