



# Safe handling of long loads. Our reach truck ETV Q.

The reach truck series with  
multi-directional capability,  
load capacities of up to 2,500 kg  
and 10,700 mm lift height.

**JUNGHEINRICH**

A large industrial warehouse with high ceilings and blue metal shelving units. The shelves are filled with various materials, including long metal rods, green plastic pipes, and stacks of white bags labeled 'Salztabletten'. The floor is a smooth, light-colored concrete. The lighting is bright, highlighting the organized storage system.

# **The agile space saver.** **For flexible and safe operations.**

Reach trucks score with their minimal space requirements. Our ETV Q takes it one step further. Thanks to all-wheel steering and five steering modes, it can be moved in every conceivable direction and also turn on the spot. The ETV Q can be used in very narrow aisles and is specifically designed for handling long loads at high lift heights. With various assistance systems to choose from and electric brakes on all three wheels, working with our ETV Q is as easy as it is safe.





# Pointing the way. In every direction.

## Our ETV Q with all-wheel steering.

### The reach truck redefined

The impressive manoeuvrability of the ETV Q is pre-programmed. Simply press one of the five large buttons on the control panel to switch the truck to the required travel mode. It is also possible to switch modes at any time during travel. In addition to the familiar multi-directional programmes "normal travel" and "transverse travel", you can also select "parallel travel", "circular travel" and "modified normal travel". These modes of travel are only available from Jungheinrich. If you do not require these features, your ETV Q will come with the standard programmes "normal travel" and "transverse travel".

### The benefits of our ETV Q at a glance:

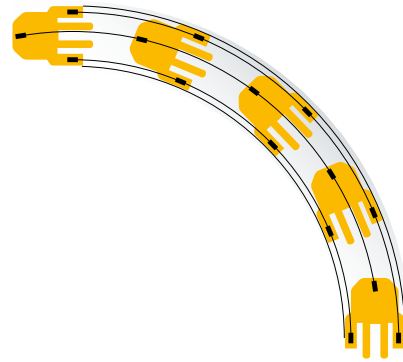
- Five steering modes for optimum space utilisation at the touch of a button
- "Parallel travel", "circular travel" and "modified normal travel" exclusively from Jungheinrich
- Maximum directional stability thanks to independent steering of all three wheels
- Electric brakes on all three wheels for maximum safety
- Safe braking during transverse travel
- Optional reversing camera for perfect rear view during transverse travel

### Five steering modes at the touch of a button

Even when wearing gloves, all it takes is one touch to make the ETV Q move with one of the five different steering modes ("normal travel", "modified normal travel", "transverse travel", "circular travel" and "parallel travel"). The clearly arranged control unit makes operation easier than ever before. Like all other electronic components of our ETV Q, it is protected against dust and water. The operator can also change the steering mode during operation.



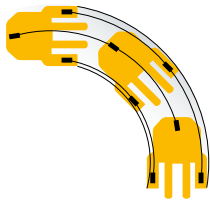
**Steering mode 1:**  
Normal travel



In "normal travel" mode, only the drive wheel is steered. This travel behaviour equates to that of a conventional reach truck.



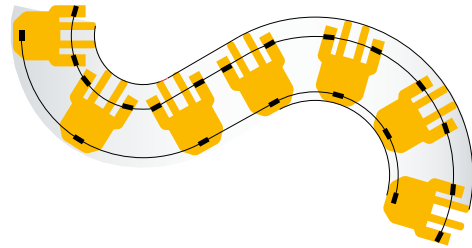
**Steering mode 2:**  
Modified normal travel



In "modified normal travel" mode, all wheels are being steered. This reduces the turning radius by up to 34%.



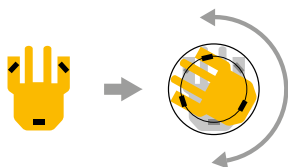
**Steering mode 3:**  
Transverse travel



In "transverse travel" mode, the drive and load wheels are positioned perpendicularly to the truck's longitudinal axis. Steering is performed via the load wheels.



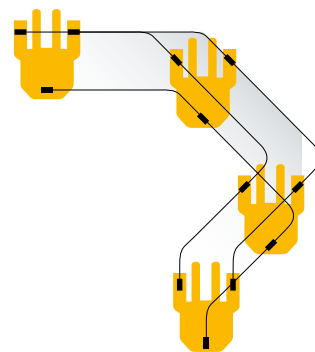
**Steering mode 4:**  
Circular travel



In "circular travel" mode, the steering wheel has no function.



**Steering mode 5:**  
Parallel travel



In "parallel travel" mode, all wheels are positioned at the same angle. This makes it possible to switch from normal to transverse travel (and vice versa) during travel.



# Enhanced efficiency thanks to reach mast technology.

## Over 60 years of experience

Our reach trucks have been reliably and efficiently stacking and transporting goods in the warehouses of the world for more than six decades. Today, every third reach truck on the market carries the Jungheinrich logo. We're also the top provider in terms of number of variants – no one offers more selection.

## Principle of reach mast technology

After handling the load with extended mast, the mast is pulled back with the load between the support arms inside the contours of the truck. This shortens the truck and enables the load to be transported securely. A further advantage of this principle: The reach truck requires narrower aisles between the racking. And the narrower the aisles, the more racks can be installed in the same space.

### Maximum energy efficiency saves you money

#### Energy consumption

ETV series Q: 15.9 kWh/100 pallets

Competition: Ø 24.3 kWh/100 pallets

#### Throughput

ETV series Q: 77 pallets/h

Competition: Ø 60 pallets/h

Consumption and pallets transported per hour according to VDI 2198, compared to the competition (average value).

## Maximum efficiency at all levels

Our ETV Q sets new standards: With higher acceleration as well as faster lift and reach speeds for greater throughput. This rings also true with regard to energy consumption thanks to the truck's first-rate overall performance. This allows you to save valuable time. The secret behind these peak values: in-house manufacture. We develop and produce our own software, motors and controllers. Everything is perfectly coordinated, thus guaranteeing maximum power with minimum energy consumption.

## LITHIUM-ION technology

### Lithium-ion batteries for more flexibility

Complicated and tedious battery changing is now a thing of the past. Today and tomorrow, our lithium-ion batteries always give you the opportunity for fast interim charging and boost charging. The significantly greater efficiency also allows for a long service life.



### Two shifts on one battery charge

Thanks to the optimised energy concept of our reach trucks, it is now possible to complete two shifts with a single battery charge. And this can be achieved with a standard Jungheinrich battery, irrespective of your conditions of usage and the necessary throughput performance, saving you time and costs. Guaranteed.



# A universal workplace.

Every operator is different. That is why we have created a workplace that adapts to the operator for maximum comfort. The operator can thus fully exploit the potential of "his" forklift truck.

## **Productivity-enhancing ergonomics**

The low entry height ensures easy access. The generous footwell provides ample legroom. The seat has three adjustable positions with high absorption of vibrations to offer optimum positioning for every operator. The adjustable steering wheel and storage compartments make for an entirely ergonomic experience.

## **Low-vibration operator seat**

The low-vibration design of seat/seat cover/seat support guarantees increased productivity due to longer operating times – without exceeding legislation requirements for maximum exposure to vibrations.

## **Simple handling**

Our reach trucks offer easy handling of both truck and load: with intuitive control of the hydraulic lever and travel direction switch, automotive-style pedal arrangement and a short wheelbase. All of this helps make your operator's working day noticeably easier.

## **Comfortable steering wheel position when travelling in a straight line**

When travelling straight ahead, the steering wheel spinner knob is always positioned at the ergonomically ideal 9 o'clock position. Irrespective of whether the steering wheel was turned with the truck switched off or in 180° steering mode.



### Safe cornering with 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: maximum safety with optimum utilisation of truck performance.

### Automatic crawl speed with driveCONTROL

driveCONTROL limits acceleration and maximum travel speed (adjustable between 1.4 and 10 km/h), as soon as the forks are raised above the free lift. This increases safety when manoeuvring with a raised pallet in front of the storage rack, while still ensuring more sensitive manoeuvring during the work cycle.

### The optimum basis for fast and reliable stacking

- Extremely stable mast with maximum residual capacities (1,250 kg up to a lift height of 10.7 m for the ETV Q25).
- Maximum lift speeds, even with rated load.
- Mast reach cushioning system (optional) to avoid time-consuming mast sway when stacking and retrieving.
- Market-leading closed height/lift height ratio for applications with low overhead clearance heights.

### Residual time display to protect the battery

The battery residual time display indicates exactly when the battery will need recharging. When the last bar disappears, the lift function is automatically deactivated and the truck reduces its travel speed – while the functions required for changing the battery will remain available. The risk of the battery's deep discharge is significantly reduced.

### Excellent perspectives for quality work

- Narrow roof supports for excellent all-round visibility.
- 100 % clear view with panoramic roof (optional).
- Wide visual range at the mast for best view of the forks and load.
- Spotlight on the fork carriage (optional) for optimum visibility even in dark conditions.
- Reversing camera (optional) for perfect rear view during transverse travel.
- Video camera (optional) with additional colour display.

### soloPILOT control lever

Integrated in the armrest, the soloPILOT control lever ensures precise control of the travel/lifting functions by using fingertips alone. The switches and levers are allocated in a conventional manner to provide a single control function.

### multiPILOT control lever (optional)

The multiPILOT is designed like a joystick. All functions are comfortably situated for the operator's hands. multiPILOT is the ideal control option for maximum stacking and retrieval performance.



multiPILOT



soloPILOT

**Three adjustable travel programmes for every application. The programmes can be changed at any time by the operator.**

**Profile 1:** For transporting especially sensitive goods or driving in sensitive environmental conditions.

**Profile 2:** For average speeds and maximum uptime.

**Profile 3:** For maximum acceleration, travel/lift speed and throughput.



**Full control with the operator display**

The high-contrast, 4-inch colour display unites a number of functions in one control panel. It shows direction of travel, travel programme, crawl speed, battery charge status, warnings and more. The function keys provide a very easy way to adjust performance parameters and auxiliary functions, such as lighting.

Handle for safe entry and exit

Adjustable steering wheel

Storage tray for refreshments or personal effects

Generous footwell

Low entry and exit height



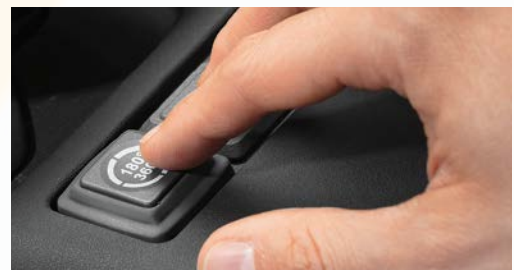
Wide armrest

Direct access to storage trays

Shoulder protection

Low-vibration seat with more free space to the left and right

**JUNGHEINRICH**



**180° or 360°-steering at the touch of a button**

Advantage of 180°-steering: no unintentional changes in travel direction and smaller turning radii.

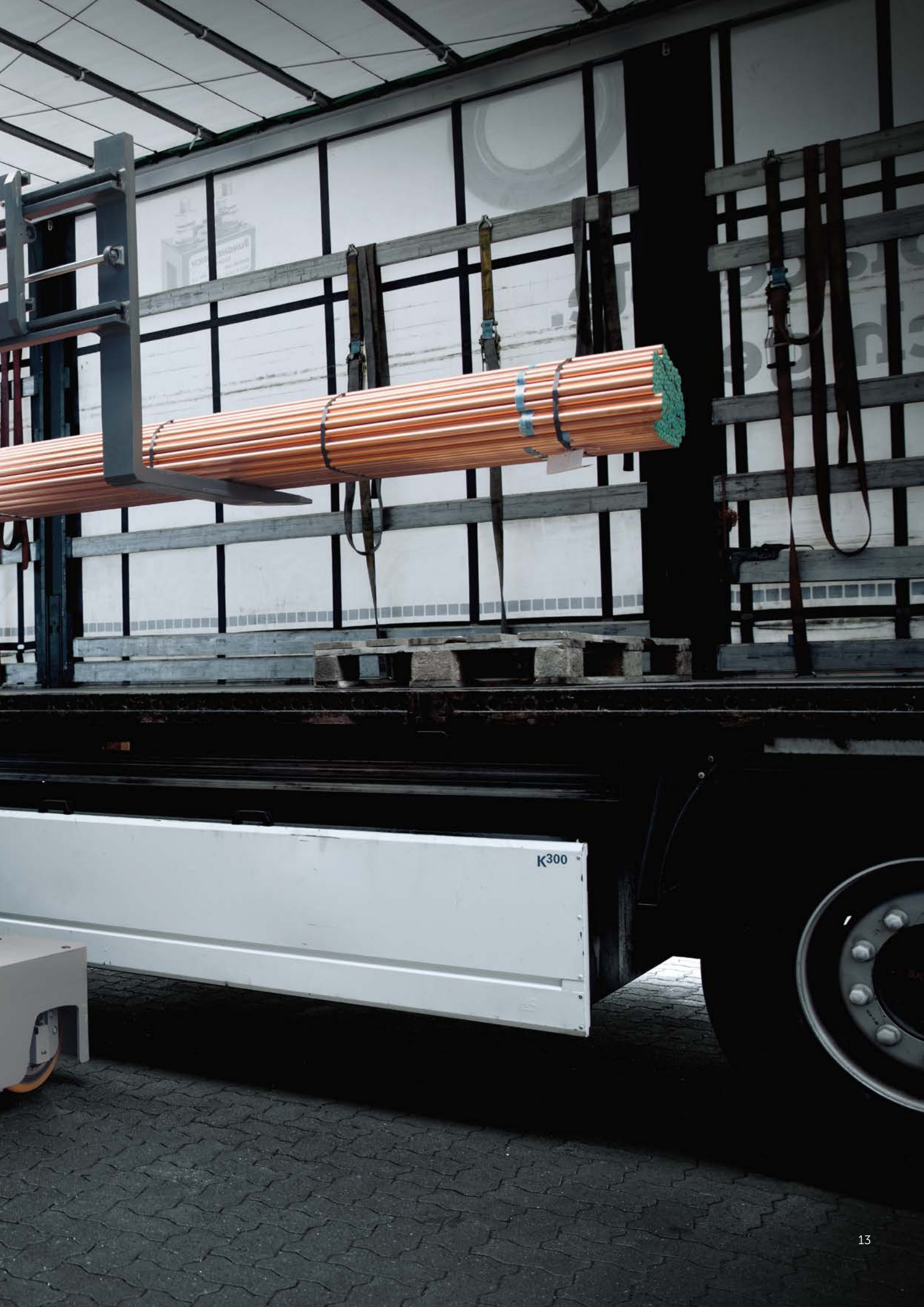
Advantage of 360°-steering: rapid changes in travel direction without delays due to stopping and switching.



ETV Q25

JUNGHEINRICH

JUNGHEINRICH



K300



Fast, easy and reliable stacking and retrieval operations with positionCONTROL

# We give you all the options.

The trucks of our ETV Q series are serial trucks – but they can still be tailored to your needs: Our wide range of options makes almost anything possible. This ensures that our multi-directional reach trucks fully satisfy your application and safety requirements.

## **1** Fast, easy and reliable stacking and retrieval operations with positionCONTROL

Just press the SNAP button: The lift speed is briefly reduced, allowing the next racking beam to be approached automatically with the load stopping precisely at the required lift height. The correct height is detected either with or without load.

### **Advantages:**

- Avoiding collisions with the next highest rack beam.
- Greater throughput due to faster stacking and retrieval.
- Ergonomic working by positioning the operating terminal within easy reach.
- Less damage to goods and racks.



**2 Rack height select with liftNAVIGATION**  
 liftNAVIGATION is an extension to positionCONTROL and is used to connect the truck to your warehouse management system. The WMS automatically transfers the target height to the truck's control system. All the operator has to do is activate the lift function. The truck automatically performs fine positioning of the lift height.

**Advantages:**

- Stacking in the wrong location due to approaching the wrong rack height is practically impossible.
- No costs incurred due to incorrectly directed shipments.
- Cost and time-intensive searches for incorrectly stored pallets are eliminated.
- Work is significantly faster and easier.



**3 Continuous monitoring of capacity limit with operationCONTROL**  
 operationCONTROL ensures that the maximum permissible load weight is never exceeded. The lift height and load weight are continuously monitored and displayed. When the limit capacity is reached, a warning tone sounds and a warning symbol lights up.

**Advantages:**

- Increased safety for all colleagues.
- Fewer accidents due to operating errors.
- Helpful support for new operators.



**Wireless data processing and barcode scanner for up-to-date stock details**

Data radio connections allow for wireless data transfer with a radio data terminal for intuitive operations in real time without paperwork. The barcode scanner ensures fast and reliable identification of goods. This prevents errors in the work process.



Reversing camera

**4 Reversing camera for a better view**  
Thanks to the side-facing seat, the operator of a reach truck has a clear view of the forks and in travel direction. However, our ETV Q can also move in a backward direction during transverse travel. In this case, our reversing camera ensures a clear rearward view.

**5 Stacking and retrieval with video monitoring**  
Our video camera gives you precise, rapid access to extremely high locations. The position of the camera on the forks enables your operators to efficiently and reliably control stacking/retrieval operations from their convenient seating position/viewpoint. They do not have to look up, which noticeably reduces the strain on their shoulders and neck. Even information on pallets at great heights can easily be read.



Weight check

**Weight check at the touch of a button**  
The weighing function ensures that the residual capacity has not been exceeded. The weight can be displayed on the monitor at the touch of a button (50 kg tolerance).

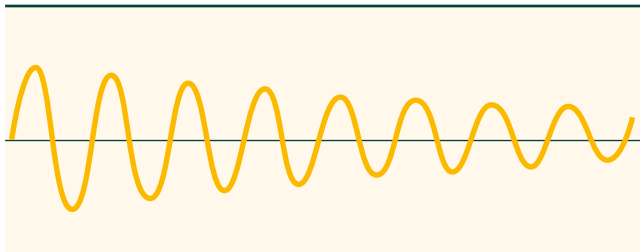
**6 Rapid mast reach with liftCONTROL**  
Sensor rollers in the mast and pressure sensors in the hydraulic circuit provide data for calculating the maximum reach speed of the mast. The speed for the mast reach is then maximised depending on the lift height and load weight. This optimised reach speed further boosts throughput by up to 13 %.



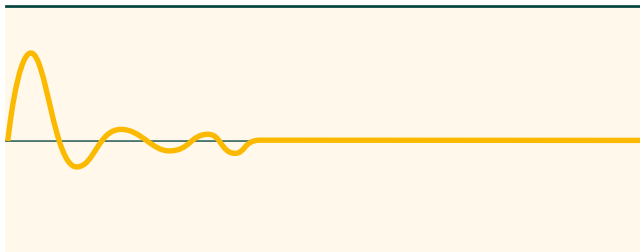
**7 Mast reach cushioning system**

Heavy load weights cause vibrations during mast reach at great heights, which noticeably slow the positioning of the pallet. Our mast reach cushioning system minimises these fluctuations, thereby greatly enhancing efficiency.

Duration of vibrations without mast reach cushioning



80 % time saving due to mast reach cushioning



**8 Central sideshift at the push of a button**

Simple, reliable and fast: The centralising of the sideshift is automatic. There is no time-consuming “feeling your way” to the required position.

**9 Horizontal fork alignment at the touch of a button**

Particularly at high lift heights, the tilt position of the forks is often very hard to detect. The automatic horizontal positioning greatly simplifies and accelerates pallet entry.





LED spotlights on fork carriages and positioning laser

### Perfect visibility thanks to spotlights on the fork carriage

In dark environments, our LED spotlights on the fork carriage provide perfect visibility, even at high lift heights. The latest lighting technology with maximum luminosity and energy efficiency ensures optimum lighting of the rack row and compartment. The headlights are positioned on the side so they are effective even when the load is raised. They are switched on and off automatically at a specific lift height to ensure that no one is dazzled.

### Easier stacking and retrieval thanks to positioning laser

Our positioning lasers greatly simplify the stacking and retrieval process and ensure greater safety for the load and rack. The laser is integrated in the fork tips and projects a red line onto the surrounding area. This allows your operator to adjust the fork more precisely and thus enter the pallet smoothly. The powerful laser light ensures good visibility, even at lift heights above 10 m.

### 10 100 % clear view through panoramic roof panel

Maximum visibility: The panoramic roof panel without the interference of cross beams provides maximum clear visibility of load and forks.



Panoramic roof panel



**11** Maximum safety at blind spots with Floor-Spot

Floor-Spot projects a red dot onto the floor about 5 m in front of the truck. Particularly at blind intersections or at the end of rack aisles, this provides an effective alert for approaching trucks and gives them plenty of time to respond.



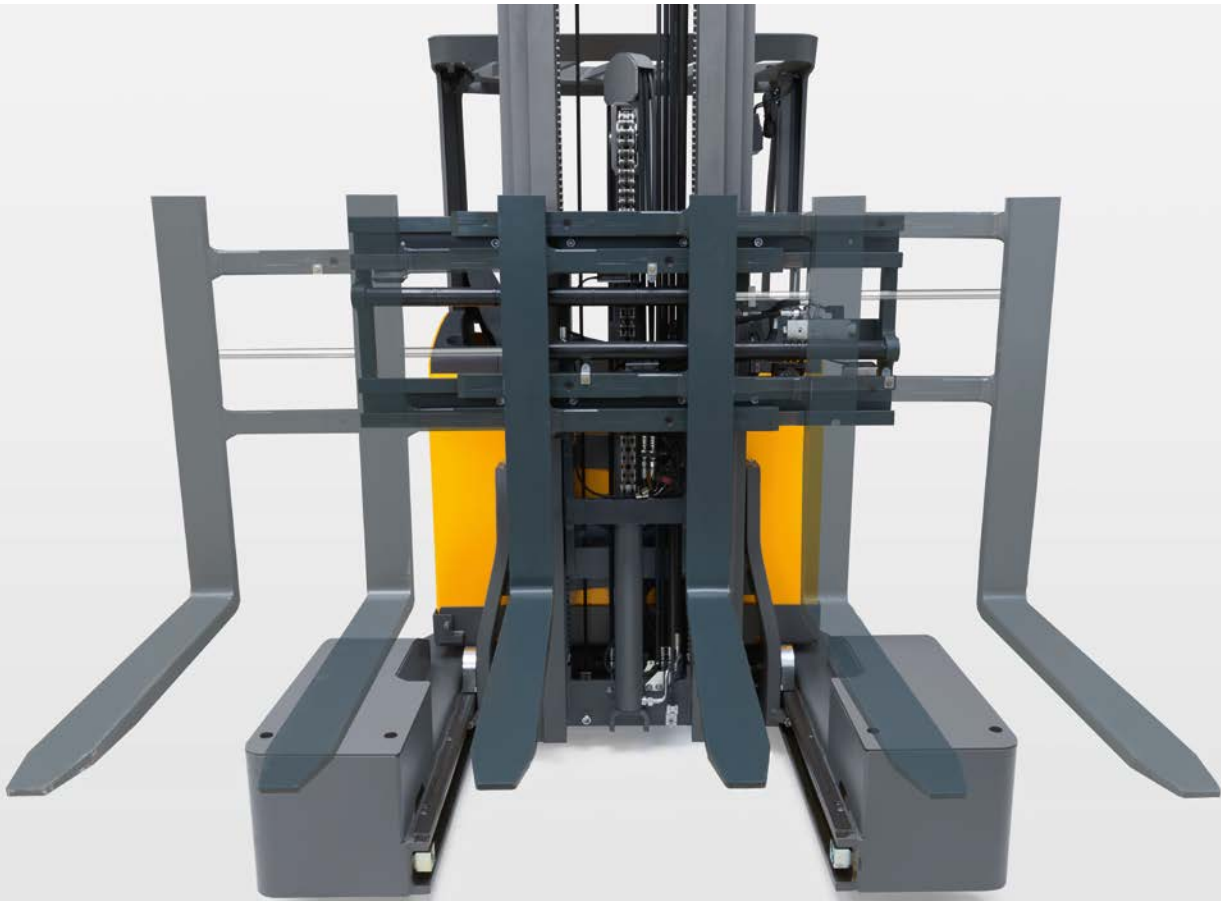
Floor-Spot

**12** For an even better view: 6-inch full-colour display

A little more of everything – with a screen diagonal of 142 mm, displays and icons appear larger and operation is even easier. Like our standard 4-inch full-colour display, the 6-inch high-contrast full-colour display also offers a wide range of functions. It shows direction of travel, travel programme, crawl speed, battery charge status, warnings and more. The function keys provide a very easy way to adjust performance parameters and auxiliary functions such as lighting.



6-inch full-colour display



Fork positioner

### **13** Reliable load handling with attachments

To expand the application range of your truck, we offer tailor-made attachments. They are mounted and thoroughly tested in our production facility to ensure maximum safety and reliability.

#### **Telescopic fork**

Our telescopic forks enable the fork lengths to be adapted quickly, e.g. for carrying frequently changing load lengths, one-sided lorry loading or for double-deep pallet storage in the rack.

#### **Two fork positioner options**

Our fork positioner is used to adjust the distance between the forks. This is done at the touch of a button from the comfort of the operator's seat. Your advantage: Even very long loads can be picked and transported with utmost safety. Two different versions of the fork positioner are available for the ETV Q: one can be attached when required while the other is factory-fitted.

#### **Limit switch system**

An optional limit switch system ensures safety during operation. It prevents damage to the load as well as support arms or forks. When the forks are being lowered, retracted or extended, they are automatically stopped in an end position, preventing a collision with the support arms.

#### **Acknowledgement button for clamping attachments**

If clamping attachments are used, an acknowledgement button can optionally be integrated into the controller. The clamps can only be opened or closed if the button is operated in addition. That makes handling sensitive loads even more reliable.

## 14 Seat options for every need

A good sitting position makes working easier and increases output. Choose from four models:

### Fabric comfort seat (standard)

With a fabric cover, excellent cushioning and adjustable backrest. Spring deflection: 80 mm, adjustable weight range: 45–170 kg.

### Comfort seat with heater

Like the fabric comfort seat but with adjustable lumbar support. Additional integrated seat heating. Activation via button directly on the seat.

### Comfort seat with air cushioning

With fabric cover and fully automatic air cushioning via a 48-V compressor. Offers automatic adjustment to the operator's weight in the range from 45–170 kg. This eliminates the need for manual readjustment, even when changing from one operator to another. Every one of your operators will automatically be optimally seated.

### Leather comfort seat

Ideal for cold and damp environments. With genuine leather and integrated seat and backrest heating. 3-level thermostat control and LED display, adjustable via buttons directly on the seat.



Comfort seat with air cushioning

## 15 EasyAccess for protected access

EasyAccess protects the forklift truck against unauthorised use. Authorisation can be managed directly on the truck display. You can choose between the softkey, PIN code and transponder options to match your requirements and the size of your company.

### Softkey

- Up to ten access authorisations can be assigned.

### PIN code

- Up to 100 different codes can be set for individual access authorisation.

### Transponder

- Up to 100 different transponder cards can be read for individual access authorisation.
- Existing transponders (ISO 14443) can be used.

## A cabin for any kind of weather

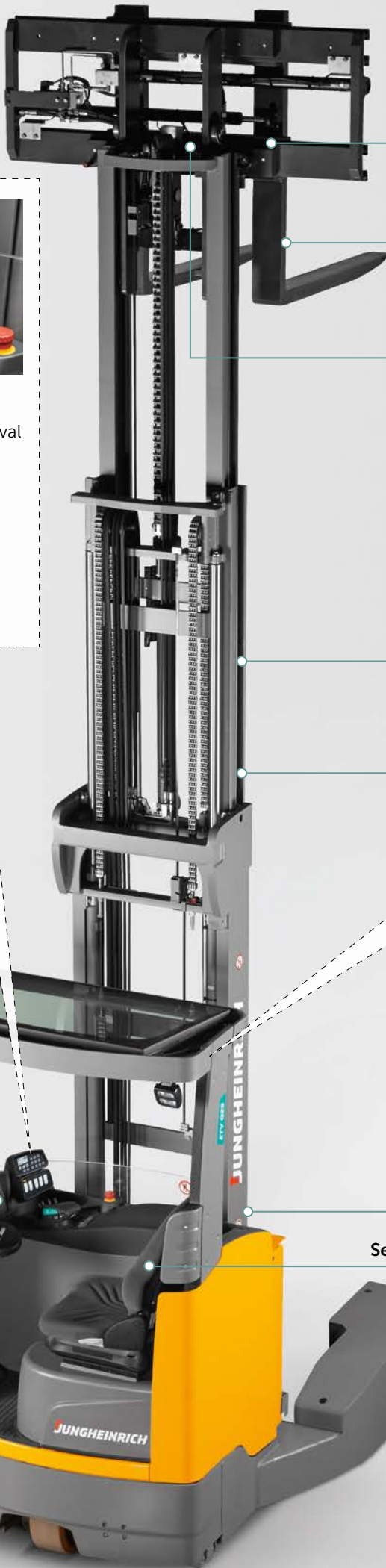
If your trucks are frequently used outside, our cabins offer your operators a comfortable working environment. Thanks to a wide range of equipment options (e.g. with heating or panoramic mirror), there is an optimal solution for every season. And the modular design allows individual adjustments to be made to suit your applications.

Choose from two designs:

- **Comfort I** for occasional use outdoors as well as fast entry and exit.
- **Comfort II** for frequent outdoor use with a completely enclosed cabin for optimum all-round protection.

### Advantages:

- Unobstructed upward view.
- Front and side windows are made of polycarbonate (Margard).
- The side windows are sliding windows and offer maximum ventilation even at high external temperatures.
- Easy entry with a wide angle to the door opening. A pneumatic spring makes it easier to open the door (lockable).



Integrated fork positioner for different load widths **13**

Horizontal fork alignment at the touch of a button **9**

Central sideshift at the push of a button **8**

Rapid mast reach with liftCONTROL **6**

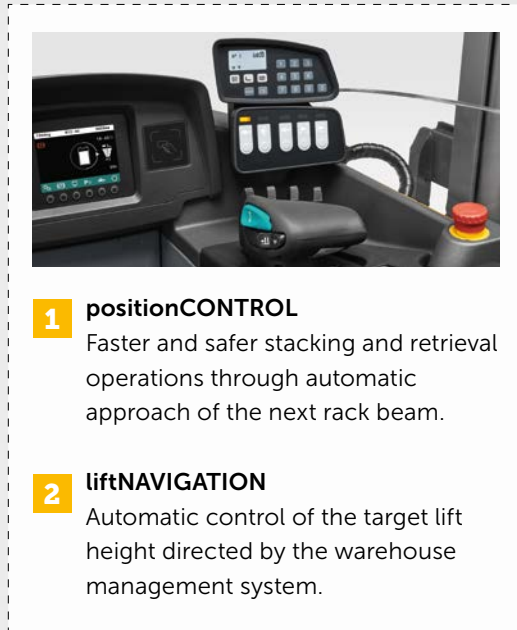
Continuous monitoring of capacity limit with operationCONTROL **3**



4 Reversing camera

Mast reach cushioning system **7**

Seat options for every need **14**



**1 positionCONTROL**  
Faster and safer stacking and retrieval operations through automatic approach of the next rack beam.

**2 liftNAVIGATION**  
Automatic control of the target lift height directed by the warehouse management system.

**10** 100 % clear view through panoramic roof panel

**11** Safety at all blind spots with Floor-Spot

**5** Stacking and retrieval aided by video monitoring

**12** For an even better view: 6-inch full-colour display

**15** EasyAccess for protected access

# Everything at a glance. Our most important options.

Assistance system/option		ETV Q20	ETV Q25
<b>1</b>	positionCONTROL	○	✓
<b>2</b>	liftNAVIGATION	○	✓
<b>3</b>	operationCONTROL	○	✓
	Wireless data transmission/barcode scanners	○	✓
<b>4</b>	Reversing camera (camera/monitor)	○	✓
<b>5</b>	Video monitoring (camera/monitor)	○	✓
	Weight control (at the touch of a button)	○	✓
<b>6</b>	liftCONTROL	○	✓
<b>7</b>	Mast reach cushioning system	○	✓
<b>8</b>	Central sideshift (at the push of a button)	○	✓
<b>9</b>	Horizontal fork alignment (at the touch of a button)	○	✓
	LED spotlights on the fork carriage	○	✓
	LED spotlights on the overhead guard	○	✓
	Positioning laser	○	✓
<b>10</b>	Panoramic roof panel	○	✓
<b>11</b>	Floor-Spot	○	✓
<b>12</b>	6-inch full-colour display	○	✓
	Steering wheel spinner knob in 9 o'clock position	●	✓
	Toggle switch 180°/360° steering	●	✓
	curveCONTROL	●	✓
	driveCONTROL (above free lift)	●	✓
	driveCONTROL (within free lift)	○	✓
<b>13</b>	Integrated fork positioner	○	✓
	Limit switch system for attachments	○	✓
	Acknowledgement button for clamped attachments	○	✓
<b>14</b>	Seats (with heating/air cushioning/leather)	○	✓
<b>15</b>	EasyAccess (softkey/PIN code/transponder)	○	✓
	Cabins	○	✓

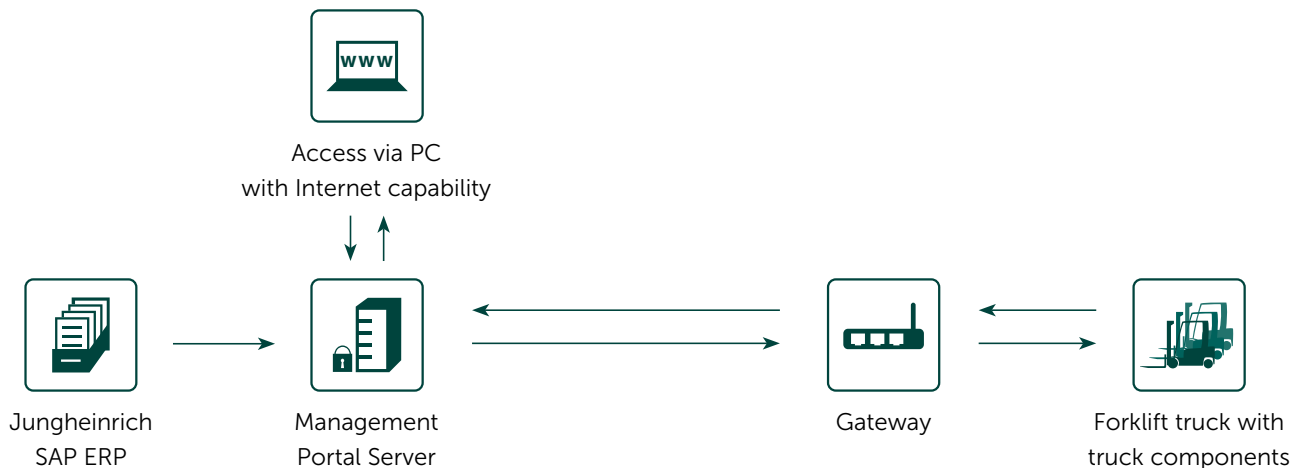
○ Option   ● Standard   ✓ Available





# Always up to date.

## Reduce the operating costs of 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. Seven different modules can be individually combined to lower operating costs and increase safety in the warehouse:

#### Basic module

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

#### 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.

#### Maintenance management module

The maintenance management module gives you a complete overview of all maintenance and safety inspections at any time and independently of your service contract partner. With the four-week advance reminder function, you always have all inspection schedules in view so you can plan preventive maintenance measures in your daily business.

#### Safety module

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

#### Battery management module

The battery management module allows you to monitor the battery of your electric forklift trucks, identify malfunctions quickly and introduce selective measures. The added transparency will help you increase battery life and prevent unnecessary maintenance and procurement costs.

#### Access control module

Would you like to protect your industrial trucks against unauthorised usage? With the access control module you can conveniently control access online and define them individually for employees, divisions/departments and trucks. Automatic shutdown when the truck is not being used will support you in increasing security in the warehouse while reducing operating costs.



# The best investment. For every budget and the environment.

## BestInvest

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

## The right rack for the right truck

We can provide you with the complete solution that is perfect for you: Integrated warehouse planning, where racking and trucks work "hand in hand" as parts of a single system. From project planning through CAD drafting to handover. From modular racking systems through system platforms to high-bay warehouse. From consultancy through installation to service. We offer a one-stop shop.

## Service with the manufacturer's expertise

Benefit from our service. Benefit from the manufacturer's expertise. Whatever your needs – full-service offers or individually coordinated maintenance intervals – our service can be flexibly adapted to your application and offers you long-term investment planning security. In addition, our comprehensive direct sales network and superbly trained engineers ensure rapid response times, minimum downtimes and lower costs.

## Flexible use without risk

Unleash the full financial potential of our reach trucks by combining them with our rental and financing solutions. This ensures that your credit line will be preserved and no capital will be tied up. We also provide complete support for your trucks and problem-free operation. And when the work is done, you can simply return the truck or trade it in.

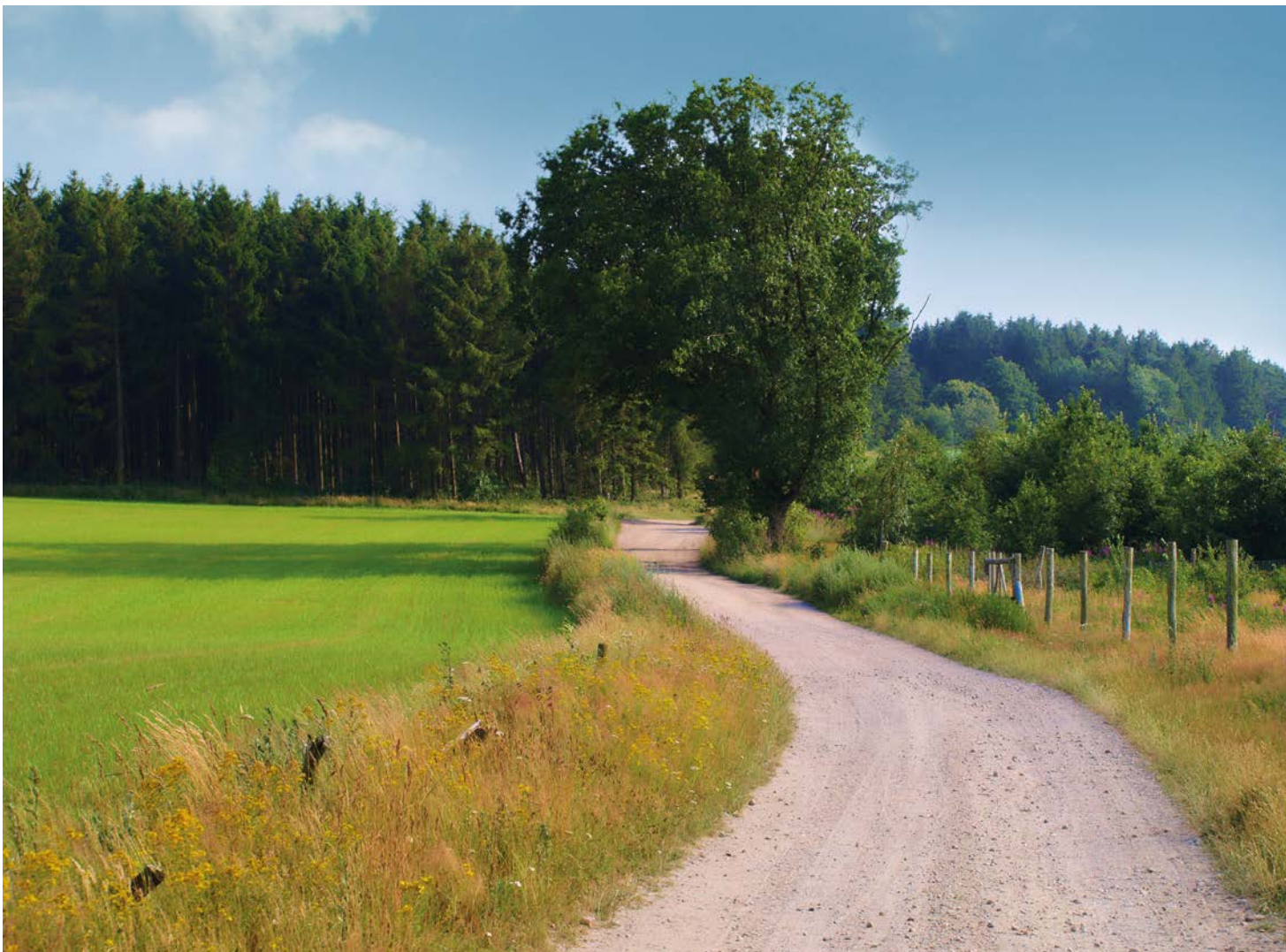
**The first TÜV-certified product life-cycle assessment in the industry**

TÜV-Nord has systematically analysed the life-cycle assessment of our manufacturing steps relevant to environmental protection and certified it in accordance with DIN EN ISO 14040. This means that Jungheinrich is the first forklift truck manufacturer to hold the environmental rating "Geprüfte Produkt-Ökobilanz" [Certified Product Life-cycle Assessment].



**Lower emissions – lower energy costs**

Our trucks have become up to 30 % more efficient in the last ten years. Technological innovations and advanced development have drastically reduced the CO<sub>2</sub> emissions of our entire truck portfolio since 2000. The entire Jungheinrich product cycle now features these innovations, from manufacturing through usage to refurbishing. And our high-tech solutions are really setting standards in the usage phase, which is where 80 to 90 % of all emissions occur. You can easily use this Jungheinrich advantage to your benefit, immediately reducing your energy costs considerably while simultaneously boosting your throughput rates noticeably.



**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**

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