



**ETV/ETM Series 2/3
options catalogue.**

**To ensure that your reach
truck meets 100 %
of your requirements.**

JUNGHEINRICH
Machines. Ideas. Solutions.

Selected options for efficient performance.

11 Central sideshift at the push of a button

7 Clear view panoramic roof panel

2 Stacking/retrieval with video monitoring

8 Comfortable steering wheel position during travel.

9 Optimum traction with drive slip control (ASC)

Spotlights on the fork carriage provide precise lighting. **6**

Horizontal fork alignment at the touch of a button **12**

Fast accurate mast reach with Lift Control **4**

Mast reach cushioning system **10**



1 **Position Control**
Faster reliable stacking and retrieval by approaching the selected rack beam automatically.

3 **Warehouse Control**
Automatic control of the target lift height directly from the warehouse management system.

5 **Operation Control**
Continuous monitoring of the lift height and load weight as well as warning in the event that a set limit is exceeded.

Do you already use all the options which are of benefit to you?

Selecting the best options to suit your operation can optimise the energy used and increase the throughputs of your operation. With our range of carefully selected options we guarantee to maximise your efficiency.

1 Fast, easy and reliable stacking and retrieval with Position Control

Position Control is a Rack Height Select function where the forks are automatically stopped at the desired lift height. In addition to the benefits of the manual Rack Height Select, Position Control offers additional functions: The SNAP function and the automatic load sensing with stacking assistance.

Advantages:

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



Simple, fast and reliable stacking and retrieval with Position Control.

SNAP function

The SNAP function does away with the manual selection of the racking level: When lifting or lowering, the next racking level is automatically identified as the target height.

2 Stacking/retrieval with video monitoring

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

3 Connection of the reach truck to the warehouse management system (WMS) via Warehouse Control

Warehouse Control is the next stage of expansion to Position Control and is used to connect the truck to the WMS. Consequently, the target height for stacking/retrieval is transferred directly from the WMS to the Position Control function. All the operator has to do is

activate the lift function. When lifting, the forks stop automatically at the right height.

Advantages:

- Storage errors are practically eliminated.
- No costs incurred due to incorrectly directed shipments.
- Cost and time-intensive searches for incorrectly stored pallets eliminated.
- Work is significantly faster and easier.

Weight control at the touch of a button

The weighing function provides reassurance that the residual capacity has not been exceeded. After the load is lifted, the weight can be displayed on the monitor at the touch of a button (50 kg tolerance).

4 Fastest possible mast reach with Lift Control

Sensor rollers in the mast and pressure sensors in the hydraulic circuit provide data for calculating the maximum reach speed for 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%.

5 Continuous monitoring of capacity limit with Operation Control

Operation Control ensures the maximum permitted admissible 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.



6 Spotlights on the fork carriage provide best lighting conditions

In dark applications, spotlights on the left and right sides of the fork carriage provide the best visibility, even at high lift heights. The lights are automatically switched on by activating a hydraulic function.



Stacking/retrieval with video monitoring



Weight control at the touch of a button



Spotlights on the fork carriage provide best lighting conditions



Clear view through panorama roof panel

Switching option from 180° to 360° steering ensures the best steering response for the application

With the option of selecting 180° or 360° steering, we can offer you the right solution for every application. Each type of steering has its own strengths. You can switch the steering mode at the touch of a button whenever required, even while driving. This allows you to adapt steering perfectly to match every application.

The advantages of 180° steering:

- The drive wheel can move a maximum of 90° to either side.
- Accidental changes in direction due to oversteering are prevented.
- Minimised turning radii.
- Minimum space required for turning in front of the pallet compartment.

The advantages of 360° steering:

- Endless steering: The drive wheel also follows the steering wheel beyond 90°.
- Rapid change of travel direction without having to stop and switch.

9 Optimum traction with drive slip control (ASC)

Optimum traction is ensured with braking of the drive wheel, which would spin on wet or dusty floors.

Advantages:

- Powerful acceleration and high speed despite smooth and slippery surfaces.
- Reliable steering response when braking during evasive manoeuvring.
- High level of stability.
- Less wear of the drive wheel tyre.

10 Mast reach cushioning system

Heavy load weights cause vibrations with mast reach at height which noticeably slow the positioning of the pallet. Our mast reach cushioning system minimises these fluctuations, thereby significantly contributing to the increased efficiency.

11 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 requires position.

12 Horizontal fork alignment at the touch of a button

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

Four options packages are available:

Efficiency:

Ideal for saving energy during both driving and lifting.

Drive Plus:

Ideal for powerful acceleration and highest travel speed.

Lift Plus:

Ideal for maximum lift speed.

Drive & Lift Plus:

Ideal for maximum throughput with optimum energy efficiency.

7 100% clear view panoramic roof panel

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

8 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. The steering control always returns the spinner knob back to the optimal position.

Curve Control for optimum safety while cornering

Curve Control 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. Advantage: The risk of hazardous rocking and even tipovers can be effectively reduced.

Automatic crawl speed with Drive Control

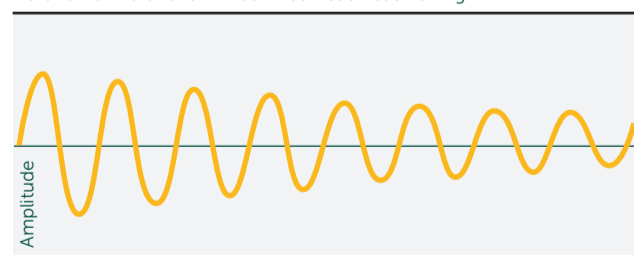
Drive Control limits the acceleration and maximum travel speed (adjustable between 1.4 and 7 km/h), as soon as the forks are raised above the free lift. This increases safety when manoeuvring with a raised pallet in front of the racking, and still guarantees the more sensitive manoeuvring during the work cycle.

Impact protection with limit switch system

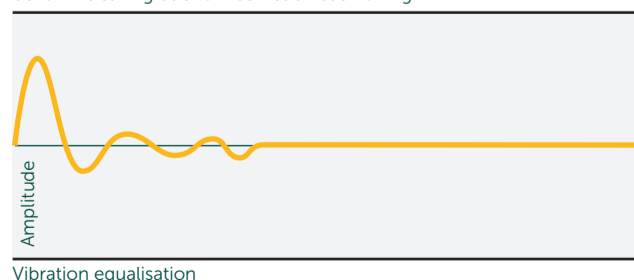
The limit switch system prevents damage to the truck and the load which otherwise may occur with the use of attachments. When being lowered, retracted or extended, the forks are automatically stopped before a collision occurs.

Mast reach cushioning system

Duration of vibrations without mast reach cushioning



80% time saving due to mast reach cushioning



12 V socket in dashboard

Power supply direct from the dashboard

The 12 V socket in the dashboard provides a power supply, e.g. for mobiles, smartphones or MP3 players.

Cold store equipment for maximum performance at the lowest temperatures

Only the goods should be frozen solid in a cold store. Even at -30°C, the flow of goods must remain flexible and on the move. The cold store versions of our reach trucks offer the best requirements for this. Special cold store versions provide reliable protection for both the operator and the truck technology. Both for intensive long-term use as well as for combined use in both the cold store and in normal temperatures.



Equipment for the cold store version comprises:

- Enclosed plug for reliable exchange of signals even with heavy condensation.
- Sealed controls for maximum functional safety down to -30°C.
- Heated leather seat for suitable working temperatures.

Combinations and advantages of assistance systems, options and equipment packages.

Assistance system	Efficiency	Drive Plus	Lift Plus	Drive & Lift Plus	Ergonomics	Economic efficiency	Safety	Life cycle costs
1 Position Control	○	○	○	○	✓	✓		
SNAP	○	○	○	○	✓	✓		
2 Video camera/monitor	○	○	○	○	✓	✓	✓	
3 Radio data/Warehouse Control	○	○	○	○	✓	✓		
Scales/weight control at the push of a button	○	○	○	○	✓		✓	
4 Lift Control	-	-	○	○		✓	✓	
5 Operation Control	○	○	○	○	✓		✓	
6 LED spotlights on the fork carriage	○	○	○	○	✓	✓	✓	
2 working lights on roof	○	○	○	○	✓		✓	
4 working lights on roof	○	○	○	○	✓		✓	
7 Panorama roof panel	○	○	○	○	✓		✓	
8 Steering wheel spinner knob in 9 o'clock position	●	●	●	●	✓	✓	✓	
Curve Control	●	●	●	●	✓	✓	✓	✓
180°/360° steering with toggle switch	-	●	-	●	✓	✓		
9 ASC	-	○	-	○		✓	✓	✓
12 V socket in dashboard	○	○	○	○	✓			
Cold store equipment	○	○	○	○	✓	✓		✓
Drive Control (from start of mast lift)	○	●	●	●			✓	✓
Drive Control (within free lift)	○	○	○	○			✓	✓
Limit switch system ESA 2 with button	○	○	○	○			✓	✓
10 Mast reach cushioning	-	-	○	○	✓	✓	✓	
11 Sideshift central	○	○	○	○	✓	✓	✓	
12 Fork horizontal (with fork tilt)	○	○	○	○	✓	✓	✓	✓

● Standard ○ Option - Not available ✓ Strong advantage



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Jungheinrich trucks
conform to the European
Safety Requirements.

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