



## **Electric front seat / tri-lateral stacker** **EFX 410 / 413**

Lift height: 3000-7000 mm / Load capacity: 1000-1250 kg

**LION**  
technology

**JUNGHEINRICH**

# The versatile man-down stacker with best all-round visibility.

For combined use in pre-storage, narrow and wide aisles.

The versatile and innovative EFX 410-413 tri-lateral stackers are our specialists for combined use in narrow aisles, wide aisles and the apron area. The modular vehicle concept with front seat arrangement and side-mounted mast provides optimum visibility of forks, load and travel route. Work is done according to man-down principle where the fork moves up and the driver's platform stays on the ground.

Standard and optional equipment options such as the integrated personnel protection system or RFID ground control ensure optimum speed profiles and high safety. Effective energy management with advanced 48- V AC technology delivers maximum throughput with low consumption.

WarehouseNAVIGATION makes work easier and enables precise approaching and gentle positioning. The driver benefits from the intuitive operating concept with large-format display, adjustable control panel, spacious shelves and ergonomic controls.



German quality  
made by Jungheinrich

## German Quality. Made by Jungheinrich

As one of the world's leading intralogistics companies, with more than 65 years of experience, Jungheinrich is always adhering to the concept of quality first. Choose Jungheinrich's products and services, enjoy the quality of Germany and the art of Jungheinrich right now!



Genuine parts  
with fast, reliable service

## Fast, reliable service with genuine parts

Jungheinrich services stand for partnership, trust and the highest quality. We guarantee you, our customers, to trust in our excellent service so that you can feel free to focus on your core business.



## No worries. No compromise

With the Jungheinrich Li-ion Guarantee Plus, we give you a long-term performance promise of up to 5 years on our high quality lithium-ion batteries, so you can completely concentrate on your tasks without worrying.

\* In accordance with our warranty terms - see website for details.

## All benefits at a glance

- Unique truck concept with front seat and side mast
- Unrestricted view of forks, load and travel route
- Modular service packages and assistance systems
- Energy recovery during lowering of loads and braking
- Optional personal protection system for maximum safety

# Your Jungheinrich high rack stacker for maximum customer benefits.



## Efficiency

Maximum performance with the most efficient trucks.

The EFX knows how it works: Thanks to its smart energy management with regenerative braking the truck works highly efficient.

### Efficient 3-phase AC technology

- High torque for maximum throughput and low energy consumption.
- Effective thermal economy.
- Reduced maintenance and wear.

### Cost-effective energy management

- Doubled energy recovery through regenerative braking and lowering.
- Longer operating times with one battery charge (up to 2 shifts).
- Active energy / battery management.
- Longer battery life.
- Shorter charging times.

### Commissioning and maintenance

- Quick and reliable commissioning through teach-in process.
- 1000 operating hours service interval.
- Electronics with wear-free sensor system.

### Available with lithium-ion technology

- High availability thanks to extremely short charging times.
- No battery exchange required.
- Saving costs due to longer service life and zero maintenance as compared to lead-acid batteries.
- No charging rooms and ventilation required as there is no build-up of gas.



## Safety

Best prerequisites for working safely.

The target position always in view and approaching at optimal speed thanks to RFID ground control - as easy as winking!

### RFID ground control (optional)

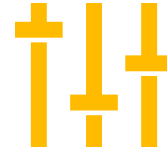
- Truck control with transponder technology.
- Permanent route measuring for precise identification of all warehouse areas.
- High degree of flexibility in terms of switching functions (end of aisle control, lift/travel cut-outs, travel speed reductions).
- Drive speeds optimised according to the floor topology.

### warehouseNAVIGATION (optional)

- Linking the EFX to a warehouse management system (WMS) using a radio data terminal or scanner.
- Direct acceptance of the destination in the narrow aisle by the truck computer.
- Automatic vertical and horizontal positioning.
- Effective twin cycles.
- RFID location detection prevents trucks travelling to incorrect destinations.
- High level of flexibility in the warehouse with adaptation to existing WMS.
- Throughput improved by up to 25%.

### Integrated personnel protection system (PPS)

- Factory default integration into the safety computer.
- Project planning, commissioning and maintenance by Jungheinrich.



## Individuality

A forklift truck as individual as your business.

An intuitive operating concept with adjustable control panel and large-format display make working life easy for your driver.

### Ergonomics and comfort

- Generously dimensioned entrance into the cab.
- Outstanding view of the load and travel route.
- Cushioned comfort seat absorbs vibrations.
- Operating console with adjustable height and distance from the operator.
- Soft keys with numeric keypad.
- Limit position / transition damping for all hydraulic functions.

### Control and CAN-Bus system

- 70% fewer cables and plugs due to CAN-Bus.
- All movements can be parameterised.

### Additional equipment

- Mechanical rail guidance.
- Wire guidance for precise control in the aisle with no mechanical stress on components.
- Radio with CD player and MP3 interface.
- Synchronised traverse.
- Modular system for lift and travel cut-outs as well as speed reduction.
- Radio data terminal with mechanical and electrical interfaces for material flow management systems.
- Jungheinrich ISM Online – Information System for Truck Management.

# Overview

The right solution for your applications:

Name	Load capacity/load	Lift height (max.)	Travel speed unladen	Lift speed unladen
EFX 410	1000 kg	7000 mm	9 km/h	0.41 m/s
EFX 413	1250 kg	7000 mm	9 km/h	0.41 m/s

The German production facilities in  
Norderstedt, Moosburg and Landsberg  
are certified.

ISO 9001  
ISO 14001

Jungheinrich fork lift trucks meet  
European safety requirements.



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