

# Mobile robots.

Indicators for use.



**JUNGHEINRICH**

# Mobile robots.

Fully automatic, precise and reliable.

Whether for efficient underload transport or robotics-to-goods applications for maximum dynamic in the warehouse – our mobile robots are your fast gateway to automation. Controlled by intelligent software and equipped with extensive safety sensors, they perform recurring tasks throughout the production and warehouse areas while relieving your employees.

## TOTE HANDLING

### SOTO

Intelligent transport robot for small load carriers up to 20 kg, for space-saving production supply with increased demand:

- ▶ Adjustable gripper with conveyor belt.
- ▶ Operating heights between 400 mm and 1,600 mm.
- ▶ Load capacity up to 24 containers.



## HIGH-STACK APPLICATIONS

### ERC 213a / 217a

Suitable for standardised load aids and accessible stations:

- ▶ Low space requirement.
- ▶ Lift height up to 4,400 mm.
- ▶ Load capacity up to 1,700 kg.



## UNDERLOAD TRANSPORT

### arculee M

Manoeuvrable, compact, autonomous mobile robot designed for horizontal transport in the field:

- ▶ Pallet transport using a backpack.
- ▶ Obstacle avoidance.
- ▶ Load capacity up to 1,300 kg.

## UNDERLOAD TRANSPORT

### arculee S

Small, agile autonomous mobile robot, designed for horizontal transport a defined area:

- ▶ Table transport.
- ▶ Obstacle avoidance.
- ▶ Load capacity up to 1,000 kg.



Precise positioning through laser navigation or wire guidance technology and transponders for automated high-rack stackers.



A high degree of efficiency in multi-shift operation thanks to intelligent energy management.

## Primary indicators for mobile robots:

- ▶ Multi-shift operation.
- ▶ Continuous transport.
- ▶ Frequent transport damage caused by manual transport.
- ▶ Standard loading devices (e.g. euro pallets, industrial pallets and containers, lattice boxes).
- ▶ Horizontal transport over large areas.
- ▶ Lifting heights up to 6 m / up to 13 m for automated high-bay stackers.

## Conditions of use for mobile robots:

- ▶ Enclosed, dry hall.
- ▶ Hall temperature: 5 to 35 °C.
- ▶ Lane width from 2 m (single lane) for automated trucks.
- ▶ Aisle width 1.8 m and transfer aisle 6 m for automatic high-rack stackers.
- ▶ Industrial floors / narrow aisle floor for automatic high-rack stackers.

### HIGH-STACK APPLICATIONS

#### EKS 215a

Highly manoeuvrable mobile robot suitable for closed loading devices and non-accessible stations:

- ▶ Adjustable forks.
- ▶ Lift height up to 6,000 mm.
- ▶ Load capacity up to 1,500 kg.

### LOW-LEVEL APPLICATIONS

#### ERE 225a

Powerful mobile robot, suitable for standardised load aids, multi-pallet and long-distance transport:

- ▶ Multi-pallet transport.
- ▶ Fork length up to 2,400 mm.
- ▶ Load capacity up to 2,500 kg.

### AUTOMATED VNA STORAGE

#### EKX 516ka / 516a

Powerful mobile robot with the option of step-by-step automation of very narrow aisle warehouses:

- ▶ "Man-up" high-rack stacker.
- ▶ Lift height up to 13,000 mm.
- ▶ Load capacity up to 1,600 kg.



Comprehensive safety sensors for use in mixed operation.



Everything from a single source: from planning and implementation to service and support.

**ISO 9001** The German production facilities  
**ISO 14001** in Norderstedt, Moosburg, Landsberg  
and Kaltenkirchen 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**