



Mobile Robot Tote handling **SOTO**

Lift height: 400–1,700 mm / Load capacity: 240 kg.

 **JUNGHEINRICH**

Your mobile robot **for autonomous tote transports.**

The smart link between warehouse and production.

Our flexible mobile robot SOTO is perfectly suited for automated tote transports between your warehouse and production line, for storage and retrieval directly into and out of flow racks and on conveyor belts. Thanks to real-time material tracking it impresses with maximum process reliability.

The SOTO easily accommodates up to 24 totes of different sizes on three sides and moves them safely to their destination. Its adjustable gripper reaches heights between 400 and 1,700 mm and allows the totes to be rotated by 90 degrees – for precise and stepless handling at different shelf heights.

Four laser scanners and two 3D cameras ensure maximum safety in the cooperation between people and trucks. The mobile robot is therefore 100 per cent collaborative and works confidently with humans in the same space.

Your benefits at a glance:

- Autonomous small parts transport between warehouse and production.
- High transport capacity up to 24 totes and flexible 180-degree tote rotation.
- Three-sided pick-up and delivery of different tote sizes.
- Stepless transfer heights from 0.4 m to 1.7 m.
- Reliable navigation thanks to 360-degree environment detection.

Autonomous mobile robot for maximum customer benefit.



Efficiency

Maximum performance with the most efficient mobile robots.

Whether automotive industry, production or warehouse logistics – noticeably increase the efficiency of your production supply processes with our autonomous helper SOTO, which transports up to 24 totes for you at the same time, using sustainable lithium-ion technology.

Increased transport efficiency:

- Precise storage and retrieval directly into and out of flow racks and on conveyor belts.
- Double-deep transport system with customisable compartments and capacity for 8–24 totes.
- Powerful gripper to support the load capacity of up to 20 kg per tote.

Real-time material tracking:

- Consistent transparency of your material transports.
- Increased delivery reliability and reduction of incorrect deliveries.
- Compatibility with third-party VDA 5050 control systems.

Efficient battery management:

- Up to 8 hours of continuous operation.
- Eight powerful lithium-ion batteries for extended operating time.
- Space-saving power supply thanks to the inductive charging system on the side.



Security

The best conditions for safe working.

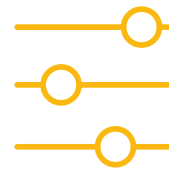
The SOTO has been equipped with a certified person recognition system to ensure safe working in a human-machine environment. On top of that we support our customers on site with the smooth integration of our mobile robot.

Autonomous Navigation:

- Laser-assisted navigation and 3D camera systems enable adaptive, collision-free movements and obstacle avoidance.
- Thanks to the use of artificial intelligence the mobile robot adapts to changes in the environment.
- The omnidirectional drive allows agile manoeuvring, even in confined warehouse and production environments.

Integrated safety technology:

- 360° safety sensor technology
- Light curtains protect the interior of the mobile robot from external intrusion.
- LED warning lights increase safety in the active operating environment.
- Safe cooperation with people and transported goods thanks to CE, ISO 3691-4, TÜV and ESD certifications.



Versatility

A mobile robot as versatile as your business.

Autonomous, scalable and transparent: In addition to simple operation, the SOTO impresses with intelligent functions such as dynamic route optimisation and 3D camera-based object gripping.

Intelligent fleet control:

- Magazino Fleet Manager for live tracking of material flows and mobile robots.
- Live monitoring of location and status of the mobile robots.
- Route optimisation based on real-time traffic data and AI.
- Coordination of multiple mobile robots to optimise the order flow.
- Compatibility with third-party VDA 5050 control systems.

Innovative gripping technology:

- Adaptive conveyor belt gripper for totes.
- Suitable for heights from 400 mm to 1,700 mm.
- Flexible rotation of the totes by 90 to 180 degrees for optimum storage.
- Compatible with tote sizes of 300 x 200, 400 x 300 and 600 x 400 mm.

User-oriented design:

- Intuitive user interface for setting up the working environment independently.
- User-friendly touch display for uncomplicated interaction.
- Graphic tutorials for solving errors directly on the display.
- Simple manual control with a controller if required.

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

ISO 9001
ISO 14001

Jungheinrich trucks
conform to the European
Safety Requirements.



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