

SYSTEM IN HIGH-BAY STORAGE:
TRAPO WAREHOUSE SHUTTLE (TWS)

TWS Series 
TRAPO Warehouse Shuttle

The TWS takes over products or complete load carriers such as pallets. The TRAPO Warehouse Lift (TWL) picks up the TWS to load and retrieve at different levels via a rail system in the warehouse lanes.

Our solutions - your advantage:

- TWL for storage and retrieval on the different shelf levels
- Modular structure shelf system, flexibly extendable

Services:

- Designed in standard for a payload of 35kg, other versions on request
- For load carriers such as pallets up to 1200kg, higher loads on request
- Energy storage is accomplished either by battery or capacitor
- Charging is preferably performed on the TWL or alternatively via a charging point in the gangway
- Increase in storage and retrieval capacities is achieved via additional TWS and TWL, so the warehouse can be extended in modules

	TTS 1200	TTS 2000	TWS 1200*
Key system Data			
Transport weight	1200kg	2000kg	1200kg
Conveyor belt dimensions	1200mm × 800mm	1600mm × 1200mm	1200mm × 800mm
Tare weight	400kg	800kg	800kg
Acceleration	0.5m/s ²	0.5m/s ²	1m/s ²
Driving speed	1m/s	1m/s	3m/s
Environment			
Ambient temperature range	5 - 35°C	5 - 35°C	5 - 35°C
Energy supply			
Lithium-ion battery	✓	✓	✓
Charge/drive time approx.	0.5/4h	0.5/3h	2h
Operating time	24/7	24/7	24/7
Energy transfer			
Inductive	✓	✓	-
Charging stations	✓	✓	-
Navigation			
Inductive	✓	✓	-
Autonomous	✓	✓	-
Variable structures			
Conveyor	✓	✓	-
Lift function	✓	✓	-
Robot	-	✓	-
Telescopic extension	-	-	✓
Customer-specific	✓	✓	✓

* Other sizes and designs on request



➤ Flexible storage and retrieval with TWS and TWL

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FLEXIBLE USE
TRAPO TRANSPORT AND
WAREHOUSE SHUTTLE

TRAPO | DRIVERLESS TRANSPORT SYSTEMS

MOBILE POWER:
TRAPO TRANSPORT SHUTTLE (TTS)



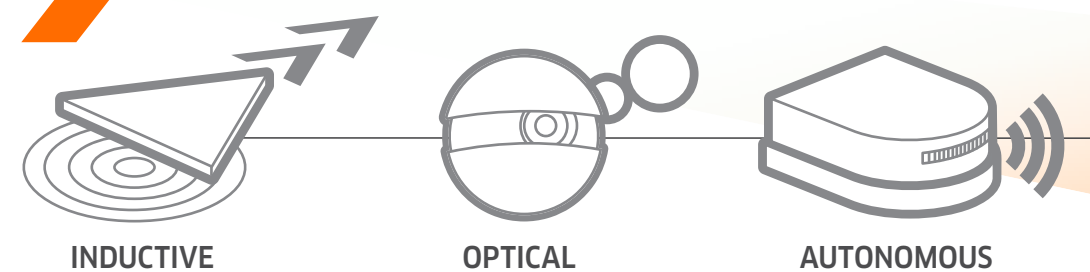
The variants of the TTS series are extremely flexible, approach conveyor lines and take over handling of individual loads or loads on load carriers such as pallets. The TTS approaches fixed conveyor technology and can navigate autonomously through the production floor. TTS can be flexibly adapted to production processes at any time.

The variants of the TTS series are geared to individual customer requirements. Moreover, superstructures are supplied according to customer-specific requirements.

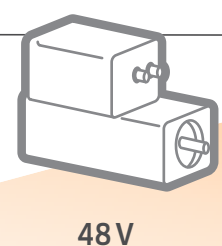
Our solutions - your advantage:

- > Standard up to 2000 kg, higher loads on request
- > All destinations are approached autonomously
- > Replaces and supplements fixed conveyor systems, offering more space and flexibility
- > Mecanum wheels which enable a surface-directional movement of the TTS
- > Many possibilities for energy transfer as well as navigation enable a wide range of applications
- > Customized structures such as lift function, conveyor systems or robots

NAVIGATION
+ CLASSIC OR AUTONOMOUS



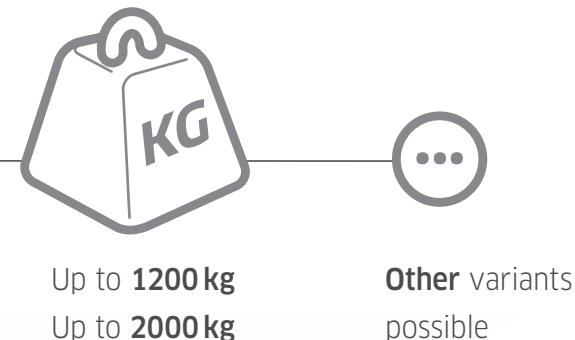
DRIVE
+ THE SUITABLE POWER



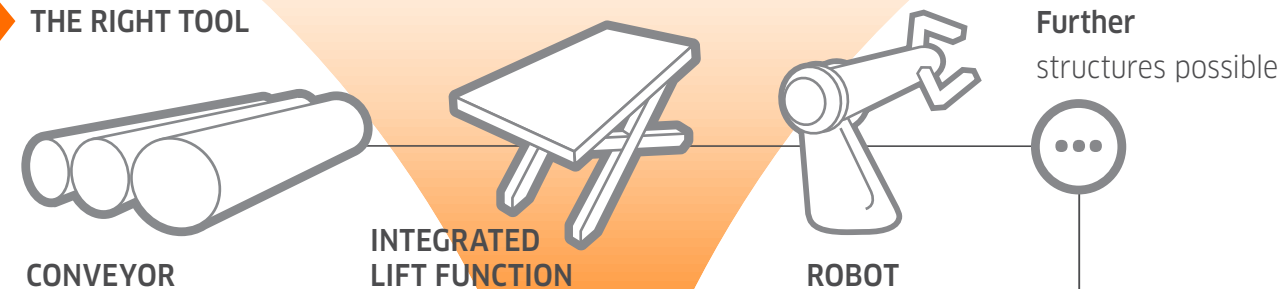
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YOU HAVE THE CHOICE:
YOUR INDIVIDUAL TTS

PAYLOAD
+ FROM STRONG TO STRONGER



STRUCTURE
+ THE RIGHT TOOL



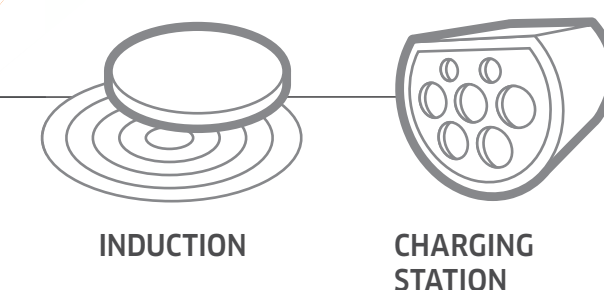
THE PERFECT TEAM:
TTS AND TWS IN COMBINATION

As a TRAPO Transport Shuttle (TTS) and TRAPO Warehouse Shuttle (TWS), the driverless transport systems work together and can be used in combination. As a flexible transfer unit, the TTS handles in-house goods transports - and transfers them to the TWS in the high-bay storage warehouse area. Whether in the individual application or as a fleet: With this portfolio, TRAPO fulfils all requirements with flexible, economical systems.

Our solutions - your advantage:

- > Different designs, payloads and speeds
- > Everything from a single source: no interfaces, mechanically one structure, control technologically one system
- > Modular construction

ENERGY TRANSFER
FOR SMOOTH OPERATION



ENERGY STORAGE
FOR SECURE OPERATION



LITHIUM-ION BATTERY