



Automated Pallet Truck

T-MATIC core

Capacity 1.5 t | Series 1153

ION

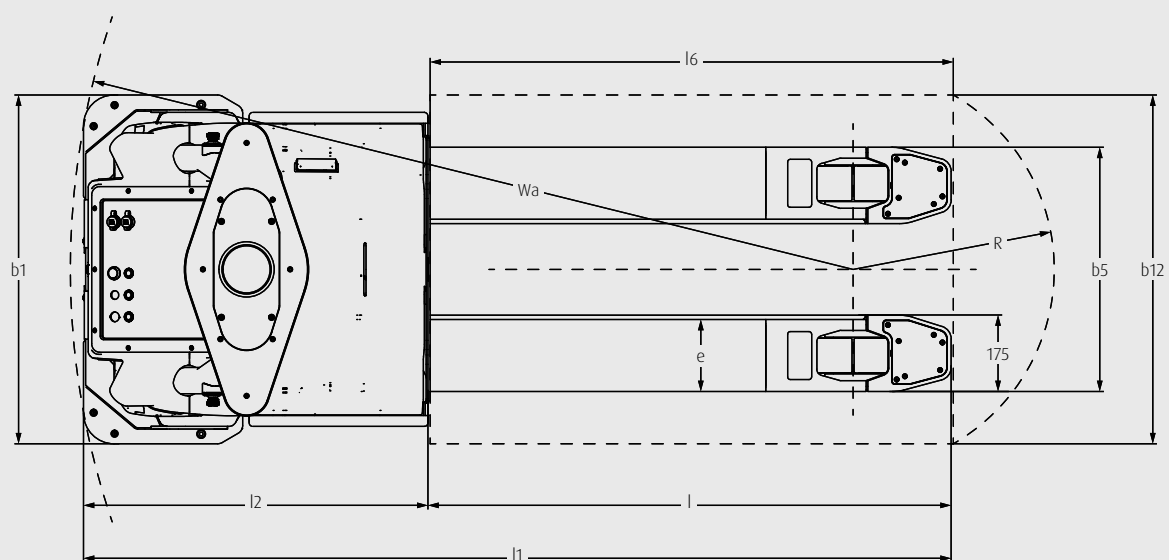
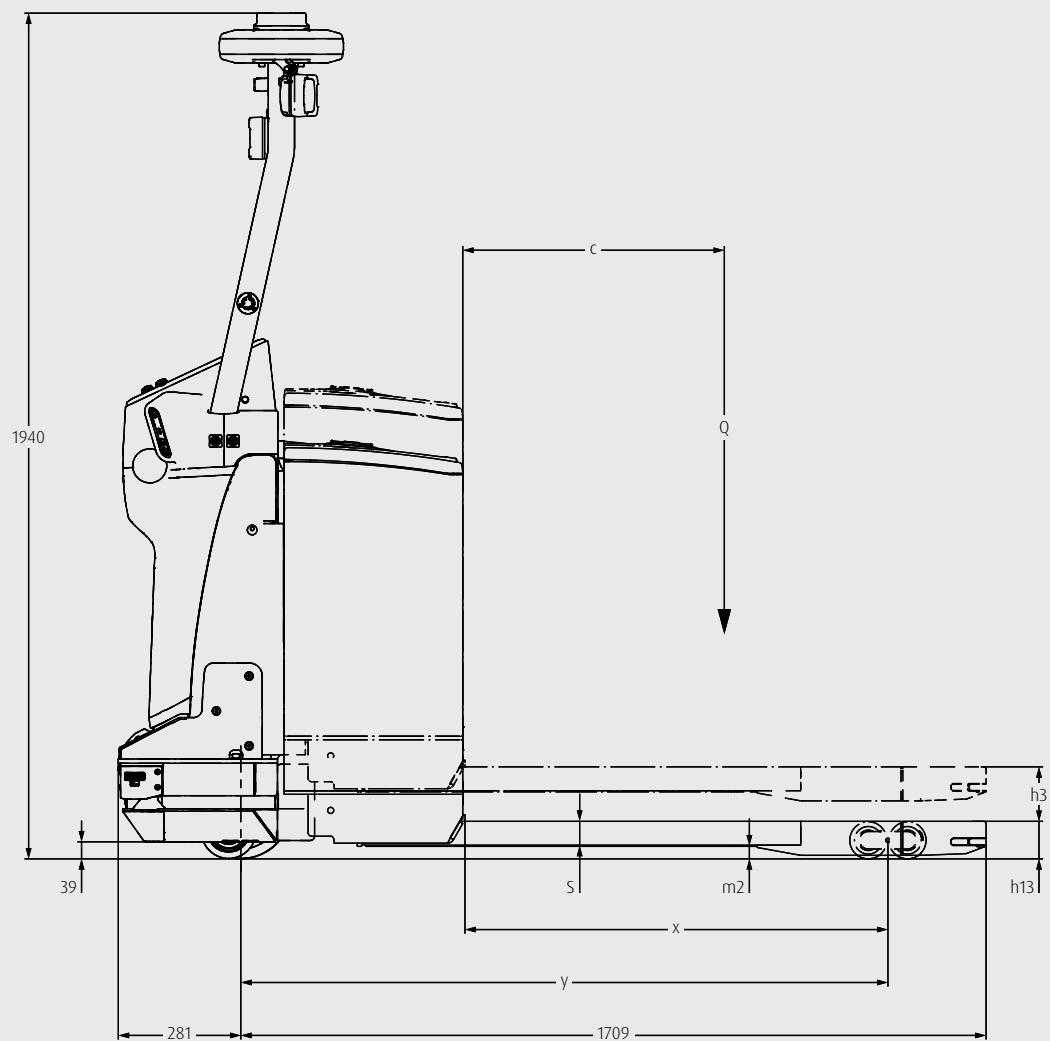
Autonomous ramp expert

- Automated low-lift pallet truck for trailer loading via the dock ramp
- Load capacity of 1500 kilograms
- Designed for high-pallet volumes in multi-shift operations
- Precise pallet handling for consistently high-load quality
- Fast deployment without the need for additional infrastructure
- Dock and ramp remain fully available for manual operations
- Two vehicles handle up to 30 Euro pallets in around 35 minutes

TECHNICAL DATA (according to VDI 2198)

Characteristics	1.1	Manufacturer (abbreviation)		Linde MH
	1.2	Manufacturer's type designation		T-MATIC core
	1.2a	Series		1153
	1.3	Drive		Battery
	1.4	Operation		automated
	1.5	Rated capacity/rated load	Q (t)	1.5
	1.6	Load centre distance	c (mm)	600
	1.8	Load distance, centre of drive axle to fork	x (mm)	895 ¹⁾
Weight	1.9	Wheelbase	y (mm)	1408 ¹⁾
	2.1	Service weight	kg	865
Tyres/chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Polyurethane
	3.2	Tyre size, front		Ø 230 × 90
	3.3	Tyre size, rear		Ø 85 × 85
	3.5	Wheels, number front/rear (x = driven wheels)		1x + 1/4
	3.6	Tread, front	b10 (mm)	502 ¹⁾
	3.7	Tread, rear	b11 (mm)	380 ¹⁾
Dimensions	4.4	Lift	h3 (mm)	120 ¹⁾
	4.15	Height, lowered	h13 (mm)	86
	4.19	Overall length	l1 (mm)	1990 ¹⁾
	4.20	Length to fork face	l2 (mm)	790 ¹⁾
	4.21	Overall width	b1/b2 (mm)	800 ¹⁾
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	57/165/1200
	4.25	Fork spread	b5 (mm)	560 ¹⁾
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	210 ¹⁾
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	28.5
	4.35	Turning radius	Wa (mm)	1795
Performance data	5.1	Travel speed, laden/unladen	km/h	7.2
	5.2	Lifting speed, laden/unladen	m/s	0.05/0.06
	5.3	Lowering speed, laden/unladen	m/s	0.1/0.08
	5.10	Service brake		Electromagnetic
Electric-engine	6.1	Drive motor rating S2 60 min	kW	3
	6.2	Lift motor rating at S3 15%	kW	2.2
	6.3	Battery according to DIN 43531/35/36 A, B, C, no		Li-ION: KBS H12
	6.4	Battery voltage/nominal capacity K5	(V)/(Ah) o. kWh	24/225
	6.5	Battery weight (±5%)	kg	175
Drive	8.1	Type of drive unit		AC control
Additional data	10.7	Sound pressure level LpAZ (at the operator's seat)	dB(A)	62

1) (±5 mm)



STANDARD AND OPTIONAL EQUIPMENT

	Manufacturer's type designation/equipment	T-MATIC core
Off board software	Interfaces to existing Warehouse Management Systems, Enterprise Resource Planning Systems etc.	●
	Interfaces to Linde Warehouse Management Systems	●
	Interfaces to infrastructure, e.g. doors	●
	Browser-based user interface for system control	●
Safety	360° safety scanner	●
	Visual warning indicators – multicolour flashing lights indicating vehicle status (warnings and alarms)	●
	Acoustic warning signals	●
	Emergency-stop buttons (emergency-stop switches) easily accessible from all surrounding positions	●
	3D obstacle-detection cameras in the direction of travel for detecting obstacles above ground level	●
	Linde BlueSpot in forward and reverse direction – visual drive-path warning for pedestrians and co-workers	●
	Critical cliff detection in forward and reverse direction preventing vehicle falling of dock or trailer	●
Operation/load handling	Automated rear loading of a trailer	●
	Pallet-detection camera – flexible load pick up	●
	Safety fields for pallet transport (EPAL 1)	●
	Fork 1200/165/57 mm – overall width 560 mm	●
	Floor-to-floor transport	●
Digitalisation	Wi-Fi data transmission	●
Navigation	Visual SLAM navigation	●
	Navigation in trailer based on safety scanner	●
	Obstacle avoidance	●
Energy	Li-ION battery	●
	Charging contacts for automated intermediate charging	●
	Charging station for automated charging	○
	Li-ION chargers	○

● Standard equipment ○ Optional equipment

CHARACTERISTICS



Safety laser scanner and 3D camera for environmental monitoring

Safety

- 360° environmental monitoring for employee safety using four laser scanners
- Integrated cliff detection for safe operation on ramps and dock edges
- Autonomous obstacle detection with controlled response using 3D camera systems
- Clear visual and acoustic signalling with Linde BlueSpot, status LEDs and warning sounds for safe mixed traffic
- Two emergency-stop switches for immediate intervention at any time



Safe pallet handling

Handling

- 3D visual SLAM technology for fast deployment without structural modifications
- 3D pallet detection for precise and reliable pallet handling
- Browser-based interface for intuitive control across all devices
- Open interfaces for seamless integration with warehouse systems, gates and doors
- 12 kWh Li-ION battery for extended operating time with automated charging



Engineered for easy maintenance

Service

- Based on a proven series-production model for reliable and robust operation
- Easily accessible components simplify maintenance
- Remote diagnostics for rapid fault analysis
- Linde MH's worldwide service network with fast response times



Process oriented as standard

Sales and realisation

- Individual, automated solutions with dynamic simulation and the option to run a demo in a real process environment on site
- Analyse manual handling processes and adjust the level of automation to suit each customer's needs
- Software solutions enable rapid commissioning, flexible customisation, scalability, and optimal process control

Presented by:

Subject to modification in the interest of progress. Illustrations and technical specifications could include options and are not binding for actual constructions. All dimensions subject to usual tolerances.



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