Robotic pallet stacker
L-MATIC AC

Series 1170

Linde Material Handling

Safety

Thanks to its smart safety management, the L-MATIC AC anticipates and reacts autonomously to its direct environment. Advanced obstacles' detection provides real time speed adjustment to enhance the productivity while offering the utmost safety.

Performance

The unique infrastructure-free geoguidance system makes the solution flexible and scalable. Stand alone or within larger fleets of robotic trucks, the L-MATIC AC can easily inter-act with the customer's environment (doors, conveyors..) and even interface with WMS/ERP. The L-MATIC AC will always deliver the optimal drive speed to achieve the maxi-mum throughput.

Comfort

The L-MATIC AC is natively designed to work in a shared environment with people. The user-friendly interface provi des all needed controls & information at a glance. Moreover, the dual driving mode makes the L-MATIC AC intuitive to switch automatic/manual.

Reliability

Fully integrated in the warehouse product range, the L-MATIC AC benefits from all Linde quality standards, and the robust "DRIVEN BY BALYO" navigation technology. Always available, the L-MATIC AC will support your business 24/7 while offering significant costs-savings.

Service

Efficiency at work, efficiency in servicing.
With a computerized & remote diagnostic system, combined with predictive maintenance program, the L-MATIC AC remains available at any time.

Features

Driving system

- → Standard truck converted into a robotic truck
- → Dual driving mode - automatic/manual
- → Navigation laser, safety front & rear scanner, 3D camera, embedded computer, emergency stop buttons, light and sound warning indicators

Geoguidance navigation

- → Innovative infrastructure-free technology (no reflector)
  Relies on existing structural features (walls, columns, rack)
- → Real time mapping and localization
- → Seamless integration in existing layouts, gradual extension or global deployment

Smart safety

- → Real time speed-adaptive detection fields
- → Dynamic cornering detection fields
- → Autonomous decision-making capability with 3D camera
- → Natural cohabitation with operators and other trucks
- → Pallets or obstacles detection thanks to the rear laser scanner

User interface

- → 7'' LCD touch screen
- → Robotic truck, battery and system status
- → Real time task management and report
- → Intuitive path localization
- → Service mode with PIN access
- → Log extraction via USB

Operations management

- → closed pallets management
- → Stand alone or WMS/ERP directed
- → Supervisor software for task and smart traffic management
- → Various task triggers: call buttons, sensors, PLCs, Supervisor software

Linde Material Handling

Linde Material Handling | 5 Distillers Place | Huntingwood NSW 2148
Phone 1300 135 463 | www.lindemh.com.au

Technical Data according to VDI 2198

Characteristics	1.1	Manufacturer		LINDE/BALYO
	1.2	Model designation		**L-MATIC AC**
	1.2a	Series		1170
	1.3	Power unit		Battery
	1.4	Operation		Robotic/manual
	1.5	Load capacity/Load	Q (t)	1.2
	1.6	Load centre	c (mm)	500
	1.8	Axle centre to fork face	x (mm)	100 [1]
	1.9	Wheelbase	y (mm)	1270 [1]
Weights	2.1	Service weight	(kg)	1996 [2] [3]
	2.2	Axle load with load, front/rear	(kg)	619 / 2577 [2] [3]
	2.3	Axle load without load, front/rear	(kg)	1186 / 810
Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		Polyurethane wet grip
	3.2	Tyre size, front		Ø 254 x 102
	3.3	Tyre size, rear		4x Ø 85 x 105
	3.5	Wheels, number front/rear (x = driven)		1x / 4
	3.7	Track width, rear	b11 (mm)	483 [1]
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	a/b (°)	1.0 / 6.0
	4.2	Height of mast, lowered	h1 (mm)	1515
	4.3	Free lift	h2 (mm)	150
	4.4	Lift	h3 (mm)	1924
	4.5	Height of mast, extended	h4 (mm)	2485
	4.9	Height of tiller arm in operating position, min/max	h14 (mm)	1140 / 1350
	4.19	Overall length	l1 (mm)	2700 [1]
	4.20	Length to fork face	l2 (mm)	1700
	4.21	Overall width	b1/b2 (mm)	890 [1]
	4.22	Fork dimensions	s/e/l (mm)	40 x 80 x 1000
	4.23	Fork carriage to ISO 2328, class/type A, B		2B
	4.24	Width of fork carriage	b3 (mm)	800
	4.31	Ground clearance, below mast	m1 (mm)	40
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	40
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	3098 [4]
	4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	3205 [4]
	4.35	Turning radius	Wa (mm)	1645
	5.1	Travel speed, with/without load	(km/h)	6
	5.10	Service brake		Electro-magnetic
Drive	6.1	Drive motor, 60 minute rating	(kW)	3
	6.2	Lift motor, rating at S3 15%	(kW)	3
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		no
	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24 / 345/375
	6.5	Battery weight (± 5%)	(kg)	295
Others	8.1	Type of drive control		LAC
	8.4	Noise level at operator's ear	(dB(A))	< 70

1) (± 5 mm)
2) Figures with battery, see line 6.4/6.5.
3) (± 10%)
4) Including a 200 mm (min.) operating aisle clearance.

Standard Equipment/Optional Equipment

Standard Equipment

Navigation module on a robust frame with lighting signals, control panel, touch screen, communication module, navigation laser, front & rear safety scanner, traction/steering & lifting software management
Drive wheel and tandem load wheels polyurethane
Forks dimensions 1200x80x40 mm
Lateral change 3PzS
Standard mast 1924 mm
Forks carriage width 800 mm ISO2B
Pre-setting for wet battery
Key switch truck acess
Polycarbonate mast protection
Load detection sensor
3D camera for volume perception (technical conditions apply)

Optional Equipment

Load backrest h=1000 mm
Forklength 1100 or 1000 mm
Pre-setting for gel battery
Mesh protection
Fixed battery stand 2 batteries
Cable/connector Flex
Cable/connector Perfect
3 m cable extension
2D curtain laser
Rear safety for higher backwards speed (application lane)
Mobile load perception mounted on carriage (application shelves)
Blue spots single
Additional louder horn
Bar code reader, call button (COMBOX), various sensors...