

## 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 interact 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 maximum throughput.

## Comfort

The L-MATIC AC is natively designed to work in a shared environment with people. The user-friendly interface provides 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

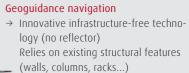
Efficiency at work, efficiency in servicing.

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



- → 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
- → 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 ...



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# Technical Data according to VDI 2198

	1.1	Manufacturer		LINDE/BALYO
	1.2	Model designation		L-MATIC AC
	1.2a	Series		1170
Characteristics	1.3	Power unit		Battery
כום	1.4	Operation		Robotic/manual
5	1.5	Load capacity/Load	Q (t)	1.2
0	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)
,	2.1	Service weight		1996 <sup>2) 3)</sup>
vvcigiits	2.2	Axle load with load, front/rear	(kg)	619 / 2577 2) 3)
	2.3	Axle load without load, front/rear		1186 / 810
	3.1	Tyres rubber, SE, pneumatic, polyurethane		Polyurethane wet grip
2	3.2	Tyre size, front		Ø 254 x 102
-	3.3	Tyre size, rear		4x Ø 85 x 105
viice15/ 1 yre3	3.5	Wheels, number front/rear (x = driven)		1x / 4
	3.7	Track width, rear	b11 (mm)	483 1)
	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		2700 ¹)
2	4.20	Length to fork face	I2 (mm)	1700
OIIIICI ISIOIIS	4.21	Overall width	b1/b2 (mm)	890 ¹)
5	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		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
	6.1	Drive motor, 60 minute rating	(kW)	3
Drive	6.2	Lift motor, rating at S3 15%	(kW)	3
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		NO NO
	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	24 / 345/375
	6.5	Battery weight (± 5%)	(kg)	295
onieis	8.1	Type of drive control		LAC
	8.4	Noise level at operator's ear	(dB(A))	< 70

# 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

Rear safety for higher back

Key switch truck acess

Mobile load perception mo

Polycarbonate mast protection

Load backrest h=1000 mm

Forklength 1100 or 1000 m

Pre-setting for gel battery

Mesh protection

Fixed battery stand 2 batter

Cable/connector Flex

Cable/connector Perfect

3 m cable extension

2D curtain laser

Rear safety for higher back

Mobile load perception mo

Polycarbonate mast protection

Load detection sensor

Blue spots single

3D camera for volume perception (technical conditions apply)

Additional louder horn

# **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...

