

PS16N LI

Industrial self-propelled electric stacker with a load capacity of 1600 kg



[Optional lithium battery](#)



INTRODUCTION

The new PS N LI range of short-tiller stackers is the result of several years' experience. During the design phase, a number of priorities and details were taken into account and verified, such as increased service life and performance, ease of maintenance and the interchangeability of components.

Experience shows that using components from the best-known brands on the market not only increases the reliability of the equipment but also raises the products to a higher standard.

This is why almost all the main components come from recognised brands with extensive experience in the material handling sector. The configuration of these stackers delivers greater power and productivity.



7. Industrial electric stackers



German AC traction motor

The AC traction motor, designed and manufactured by Schabmüller, is combined with a high-quality ZF gearbox and an Intorq electromagnetic brake. The drive unit enables a traction speed of up to 8 km/h. The use of high-quality drive wheels from German manufacturers Rader Vogel or Wicke ensures an extended service life for the wheels.



Power steering as standard on the PS16N LI

Electric power steering (EPS) enables precise and rapid control of the steering wheel position, as well as optimum reliability and safety.



Folding platform

The folding platform and side guards, together with the new internal structure, ensure the shortest possible overall length and provide an extremely tight turning circle. Furthermore, the platform's suspension system offers users a high level of comfort.



Robust and reliable design

The robust chassis, with an 8 mm thick reinforced deck, protects the stacker and its components from external impacts. The steel battery cover ensures effective protection for the battery.



Side-entry battery

The side-release battery option allows for use across multiple workstations and saves time when replacing the battery. It can be replaced quickly and easily using a suitable trolley.



Ergonomic drawbar

The Rema steering column offers improved ergonomics and greater reliability of the control system. It has been combined with the standard electric power-assisted steering.

HIGH-END COMPONENTS



Rema multi-function tiller with ergonomic contactless switches
(German)



Schabmüller AC traction motor
(German)

ZF gearbox
(German)

Intorq brake
(German)



Wicke steering wheels or Rader Vogel
(German)

Curtis speed governor
(American)

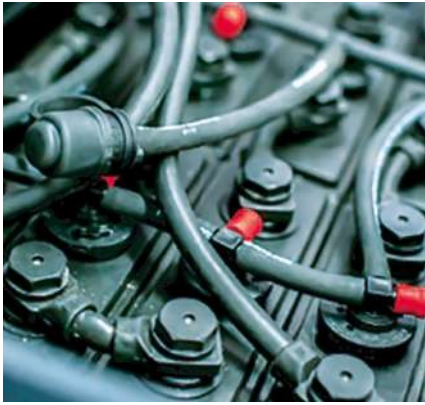


HPI hydraulic unit
(French)

SPE or ATIB loaders
(Italian)



The components used reduce maintenance costs and guarantee the performance and reliability required for the most demanding tasks.



Centralised battery charging

The stacker can be fitted with the centralised battery charging option.



Secure access control

Access via a PIN code (as standard) or optional RFID access cards considerably simplifies the process of restricting access in cases where the equipment may be used by more than one user.

The integrated charger option makes charging easier for customers who use the equipment infrequently (except where it is used across multiple workstations, which requires battery replacement).



Proportional electric lifting and lowering

The proportional lifting and lowering system, designed using solutions provided by HPI, a leading manufacturer of hydraulic systems, ensures precision when raising or lowering the forks, as well as smooth acceleration and braking of the forks for handling fragile loads.



Stockman reference	Mast	Lowered mast height h_1 (mm)	Free lift h_2 (mm)	Standard lift h_3 (mm)	Extended mast height h_4 (mm)	Mast specification
PS16N LI						
PS16N29 LI	Duplex FFL	1958	1410	2830	3380	2900
PS16N32 LI		2108	1560	3130	3680	3200
PS16N36 LI		2308	1760	3530	4080	3600
PS16N40 LI	Triplex FFL	1908	1320	3930	4480	4000
PS16N43 LI		2008	1420	4230	4780	4300
PS16N46 LI		2108	1520	4530	5080	4600

Technical specifications in accordance with VDI 2198				
Specifications	1.2	Part number - Model		PS16N LI
	1.3	Propulsion type		electric
	1.4	Type of driving		accompanying
	1.5	Rated capacity	Q (t)	1.6
	1.6	Centre of gravity	c (mm)	600
	1.8	Distance from the deck to the roller centreline	x (mm)	767
	1.9	Wheelbase	y (mm)	1480
Weight	2.1	Weight with batteries	kg	1450
	2.2	Axle load with front/rear load	kg	1180/1870
	2.3	Axle load without front/rear load	kg	1040/410
Wheels Chassis	3.1	Wheels		polyurethane (PU)
	3.2	Drive wheel dimensions	Ø x w (mm)	Ø 230 x 70
	3.3	Front roller dimensions	Ø x w (mm)	Ø 80 x 70
	3.4	Dimensions of stabiliser wheels	Ø x w (mm)	Ø 150 x 54
	3.5	Number of front/rear wheels (x = drive wheel)		1 x + 1 / 4
	3.6	Centre-to-centre distance between side members	b10 (mm)	519
	3.7	Rear wheel track	b11 (mm)	390 / 505
Dimensions	4.2	Height with mast lowered	h1 (mm)	see table opposite
	4.3	Free lift	h2 (mm)	see table opposite
	4.4	Standard stroke	h3 (mm)	see table opposite
	4.5	Extended mast height	h4 (mm)	see table opposite
	4.9	Drawbar height in minimum/maximum operating position	h14 (mm)	950/1350
	4.15	Minimum fork height	h13 (mm)	90
	4.19	Overall length	l1 (mm)	2044
	4.20	Length without forks	l2 (mm)	894
	4.21	Overall width	b1 (mm)	790
	4.22	Fork dimensions	s / e / l (mm)	60 / 180 / 1150
	4.25	Outer fork width	b5 (mm)	570 / 685
	4.32	Ground clearance	m2 (mm)	20
	4.33	Aisle width with 1000 x 1200 mm pallet across	Ast (mm)	2586
	4.34	Aisle width with 800 x 1200 mm pallet placed lengthways	Ast (mm)	2566
	4.35	Turning radius	Wa (mm)	1700
Performance	5.1	Travel speed without / with load	km/h	6 / 7
	5.2	Lifting speed without / with load	mm/s	140 / 90
	5.3	Lowering speed without / with load	mm/s	200 / 250
	5.8	Permissible gradient without / with load	%	12 / 6
	5.10	Service brake		electromagnetic
Electrical system	6.1	Traction motor, S2 power rating for 60 minutes	kW	1.4
	6.2	Lifting motor, S3 power rating 10 %	kW	3.2
	6.3	Batteries in accordance with DIN 43 531 / 35 / 36 A, B, C, No		3 VBS
	6.4	Battery voltage / rated capacity K5	V / Ah	24 / 270
	6.5	Battery weight	kg	230
	6.6	Power consumption according to VDI cycle	kWh/h	0.73
Miscellaneous	8.1	Transmission type		AC – speed control
	8.4	Noise level at the driver's ear in accordance with EN 12 053	dB (A)	< 70