

# WSA161i

## 1600kg Heavy-duty Initial Lifting Stacker



- Heavy duty initial lifting stacker designed around Li-Ion technology
- High efficiency thanks to the double decking and fast lifting and lowering speed
- Great stacking precision with the proportional lifting and lowering control
- Compact design and turtle speed to maneuver in narrow aisles
- Powerful AC vertical traction motor
- Li-ion battery and integrated charger as standard for fast and flexible charging

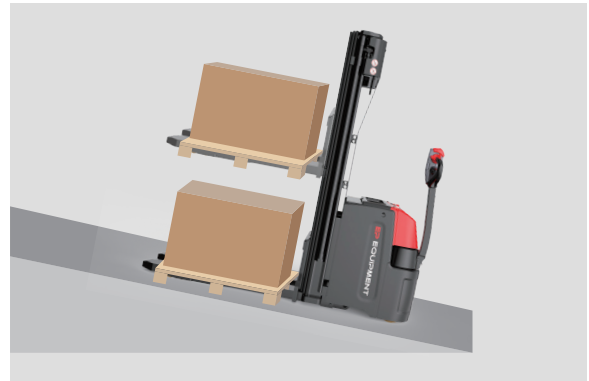


Manufacturer			EP
Model designation			WSA161i
Drive			Electric
Load capacity	Q	kg	2000
Load capacity, load with mast lift	Q1	kg	1600
Load capacity, load with support arm lift	Q2	kg	2000
Load center distance	c	mm	600
Service weight			kg
Retracted mast height	h1	mm	2015
Lift height	h3	mm	2915
Length to face of forks	l2	mm	878
Overall width	b1/b2	mm	810
Fork dimensions	s/e/l	mm	60/185/1150
Turning radius	Wa	mm	1826
Max. gradeability, laden/unladen			%
Travel speed, laden/unladen			km/h
Lifting speed, laden/unladen			m/s
Lowering speed, laden/unladen			m/s
Battery voltage/nominal capacity			V/Ah

## FEATURE

### ■ Versatile and highly available with initial lift and support arms

The initial lift and the carved frame grant high ground clearance allowing a fluent driving through uneven surfaces and loading ramps. The WSA161i support arms are sized to transport two pallets at a time, which doubles efficiency and increases throughput.



### ■ Fast stacking speeds and proportional lifting

The WSA161i has significantly improved lifting and lowering speeds, delivering outstanding performance in its class. This contributes to fast stacking at heights up to 5.5m and minimized turnover cycle in warehouses. Besides, this truck comes with the proportional lifting system as standard and enables the operator to stack and retrieve pallets more precisely and gently in multi-level racking.



### ■ Lithium technology with integrated charger

The WSA161i is fully designed around the advantages of lithium technology, with a 24V/100Ah Li-ion battery and a 24V/30A integrated charger, which allows for fast and opportunity charging, zero maintenance and zero gas emissions during charging. 24V/205Ah Li-ion battery and other lead acid batteries are optionally available for long operating period.



### ■ Improved design combined with practical features

The WSA161i demonstrates a modern appearance combining practical and aesthetic features. Design with users in mind, the strong cover provides storage space and USB outlet. The operator can take documents and stuff in the dedicated pocket, and charge the electronic device on the go without extra fuss.

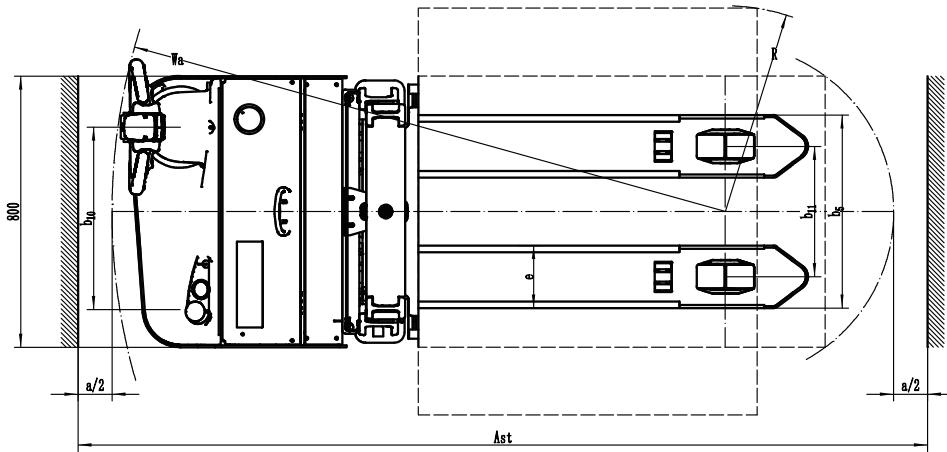
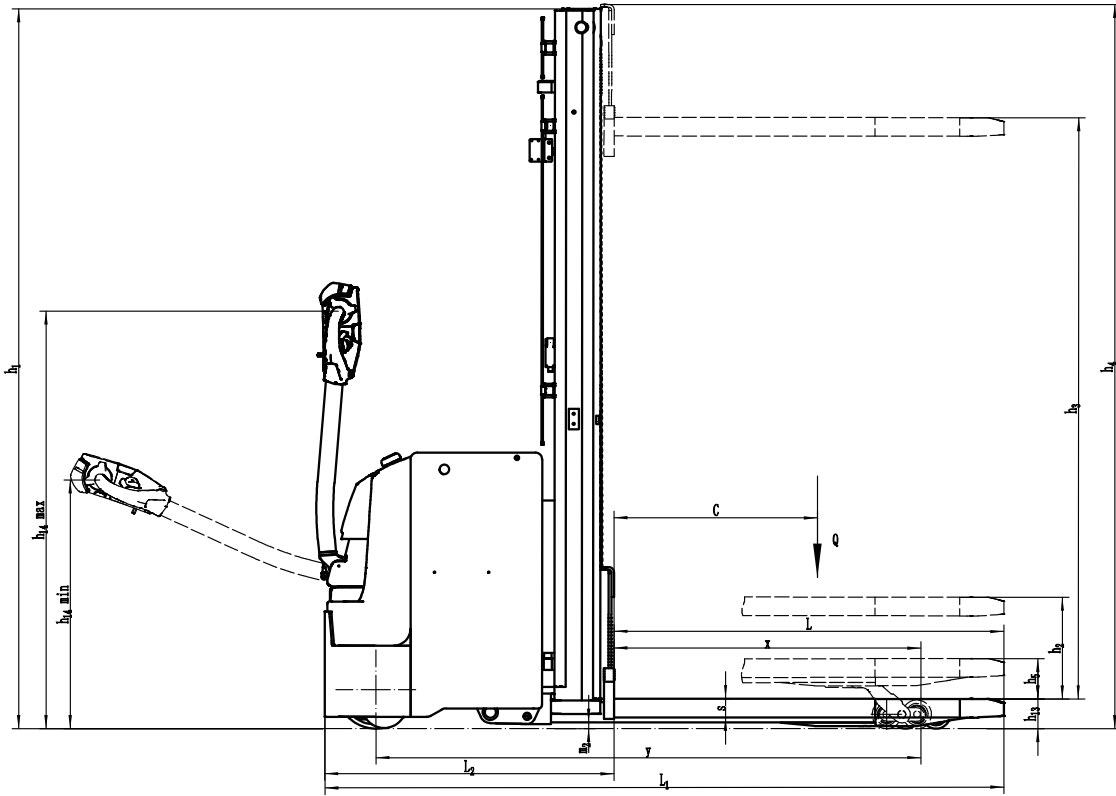


# Heavy-duty Initial Lifting Stacker 1.6T

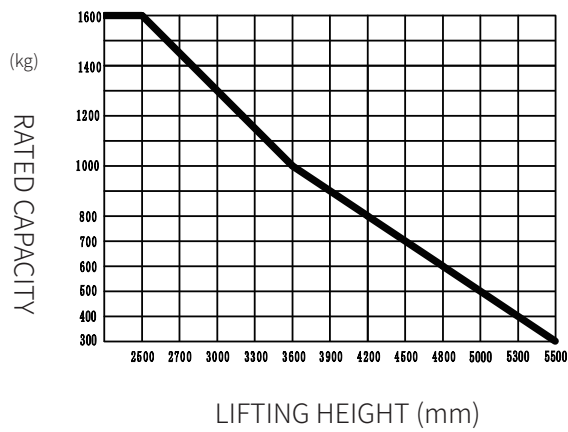
## WSA161i

Distinguishing mark	1.1	Manufacturer			EP
	1.2	Model designation			WSA161i
	1.3	Drive			Electric
	1.4	Operator type			Pedestrian
	1.5	Load capacity	Q	kg	2000
	1.5.1	Load capacity, load with mast lift	Q1	kg	1600
	1.5.2	Load capacity, load with support arm lift	Q2	kg	2000
	1.6	Load center distance	c	mm	600
	1.8	Load distance, centre of drive axle to fork	x	mm	906
Service weight	1.9	Wheelbase	y	mm	1608
	2.1	Service weight		kg	1120
	2.2	Axle loading, laden front/rear		kg	1090/2030
Tyres/chassis	2.3	Axle loading, unladen front/rear		kg	780/340
	3.1	Tyre type			Polyurethane
	3.2.1	Tyre size, front		mm	Φ230x75
	3.3.1	Tyre size, rear		mm	Φ85x70
	3.4	Additional wheels (castor wheels)		mm	Φ130x55
	3.5	Wheels, number front/rear (x=drive wheels)		mm	1x +1/4
	3.6.1	Tread width, front	b10	mm	538
Dimensions	3.7.1	Tread width, rear	b11	mm	385
	4.0	Max. Lift Height	H	mm	3000
	4.2	Retracted mast height	h1	mm	2015
	4.3	Free lift	h2	mm	—
	4.4	Lift height	h3	mm	2915
	4.5	Height, mast extended	h4	mm	3495
	4.6	Initial lift	h5	mm	120
	4.9	Height of tiller handle in drive position min./max.	h14	mm	715/1200
	4.10	Height of wheel arms	h8	mm	—
	4.15	Lowered height	h13	mm	92
	4.19	Overall length	l1	mm	2028
	4.20	Length to face of forks	l2	mm	878
	4.21	Overall width	b1/b2	mm	810
	4.22	Fork dimensions	s/e/l	mm	60×185×1150
	4.24	Fork carriage width	b3	mm	750
	4.25	Distance between fork-arms	b5	mm	570
	4.26	Distance between wheel arms/loading surfaces	b4	mm	—
Performance data	4.31	Ground clearance, laden, below mast	m1	mm	14
	4.32	Ground clearance, center of wheelbase	m2	mm	14
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	2646
	4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	mm	2560
	4.35	Turning radius	Wa	mm	1826
	5.1	Travel speed, laden/unladen		km/h	5/5.5
	5.2	Lifting speed, laden/unladen		m/s	0.23/0.3
	5.3	Lowering speed, laden/unladen		m/s	0.4/0.36
	5.8	Max. gradeability, laden/unladen		%	8/16
	5.10	Service brake			Electromagnetic
Electric-engine	6.1	Drive motor rating S2 60 min		kW	1.6
	6.2	Lift motor rating at S3 15%		kW	4.5
	6.4	Battery voltage/nominal capacity		V/Ah	24V/100AH
	6.5	Battery weight		kg	40
Addition data	8.1	Type of drive control			AC
	10.5	Steering design			Mechanical
	10.7	Sound pressure level at the driver's ear		dB(A)	74

If there are improvements of technical parameters or configurations, no further notice will be given.  
The diagram shown may contain non-standard configurations.



RATED CAPACITIES GRAPH



# Mast Option

Mast types	Lift height h3+h13 (mm)	Height, mast lowered h1 (mm)	Free lift h2 (mm)	Height, mast extended h4 (mm)
2-Wide Mast	2600	1815	—	3095
	3000	2015	—	3495
	3300	2185	—	3835
	3600	2312	—	4089
	3900	2462	—	4389
	4150	2592	—	4649
2-Free Mast	2650	1815	1320	3118
	2950	1962	1470	3412
	3250	2115	1620	3718
3-Free Mast	4000	1820	1345	4445
	4500	2020	1545	4945
	4800	2115	1645	5245
	5000	2185	1715	5445
	5500	2385	1915	5945

# Option

No.	Optional items	WSA161i
1.1	Fork dimension	●1150*570○1150*685
1.3	Fork lowered height	●92
1.4	Fork carriage width	●750
1.5	backrest height	●388
2.1	Load wheel type	●Double
2.2	Load wheel material	●PU
2.3	Drive wheel material	●PU○Trace PU○Rubber
2.7	Battery capacity	●100Ah Li-ion○205AH Li-ion○210AH Lead-acid○240AH Lead-acid
2.8	Charger	●24V-30A internal (Li-ion)○24V-100A external (Li-ion)○24V-30A external (Lead-acid)
2.9	Battery indicator	●With time( bluetooth)
3.3	Castor wheels	●Yes and not customized
3.4	Water auto-filling system	●No○Yes and not customized (only for Lead-acid battery)
3.7	Warning lamp	●No○Yes and not customized
3.9	Blue lamp	●No○Yes and not customized
3.10	Area warning lamp	●No○Yes and not customized
3.11	Rearview mirror	●No○Yes and not customized
3.12	Buzzer	●No○Yes and not customized
3.16	Turtle speed	●Yes and not customized
3.23	Telematics	●No○Yes and not customized
3.26	The British standard cannot walk when charged	●No○Yes and not customized
3.27	USB outlet	●Yes and not customized
4.1	Battery side pull function	●No
4.2	Cold storage	●No
4.5	Proportional lift system	●Yes and not customized
5.3	Keypad option	●No○Yes and not customized

Note: ●Standard ○Optional - Inconformity