

WSA161

1600kg Heavy-duty Stacker



FORX



- Heavy duty stacker designed around Li-Ion battery
- High efficiency thanks to the fast lifting and lowering fork speed
- Great stacking precision with the proportional lifting and lowering fork control
- Compact design (l2 = 731mm) allow to work in very narrow aisles
- Powerful AC vertical traction motor
- Turtle button to operate in narrow spaces
- Fast charging trough integrated charger



Manufacturer			FORX
Model designation			WSA161
Drive			Electric
Load capacity	Q	kg	1600
Load center distance	c	mm	600
Service weight		kg	740
Retracted mast height	h1	mm	1970
Lift height	h3	mm	3000
Length to face of forks	l2	mm	731
Overall width	b1/b2	mm	800
Fork dimensions	s/e/l	mm	65/170/1150
Turning radius	Wa	mm	1507
Max. gradeability, laden/unladen		%	8/16
Travel speed, laden/unladen		km/h	5/5.5
Lifting speed, laden/unladen		m/s	0.2/0.26
Lowering speed, laden/unladen		m/s	0.4/0.3
Battery voltage/nominal capacity		V/Ah	24/100

ENERGY ADVANCE CO., LTD
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FEATURE

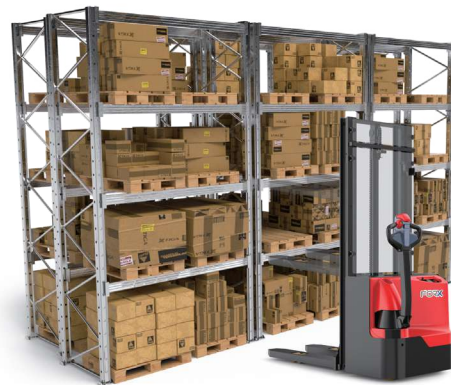
■ Fast lifting and lowering speeds to maximize efficiency

Compared to the ES-WA series, the WSA161 doubles up the lifting and lowering speeds. This contributes to fast stacking and maximized turnover efficiency in warehouses.



■ Proportional lifting system for utmost precision

The WSA161 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.



■ Compact design offering maneuverability

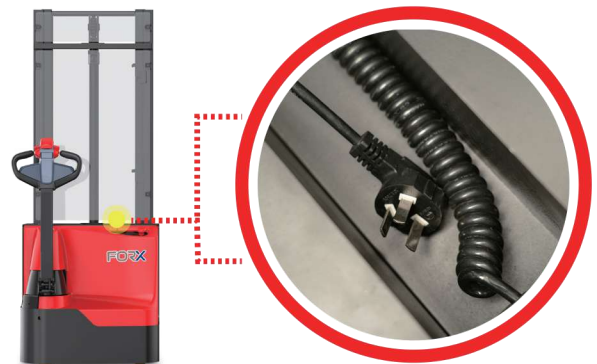
The WSA161 demonstrates a compact design with 85mm reduction in mast thickness than the ES-WA series and naturally brings a smaller turning radius 1507mm. This makes it particularly suitable for moving loads in narrow spaces.



Turning radius
1507mm

■ Lithium technology with integrated charger

The WSA161 is fully designed around the advantages of lithium technology, with 24V/100Ah Li-ion battery and an integrated charger, which allows for flexible and rapid charging and zero maintenance. 24V/205Ah Li-ion battery is optionally available for long operating period.

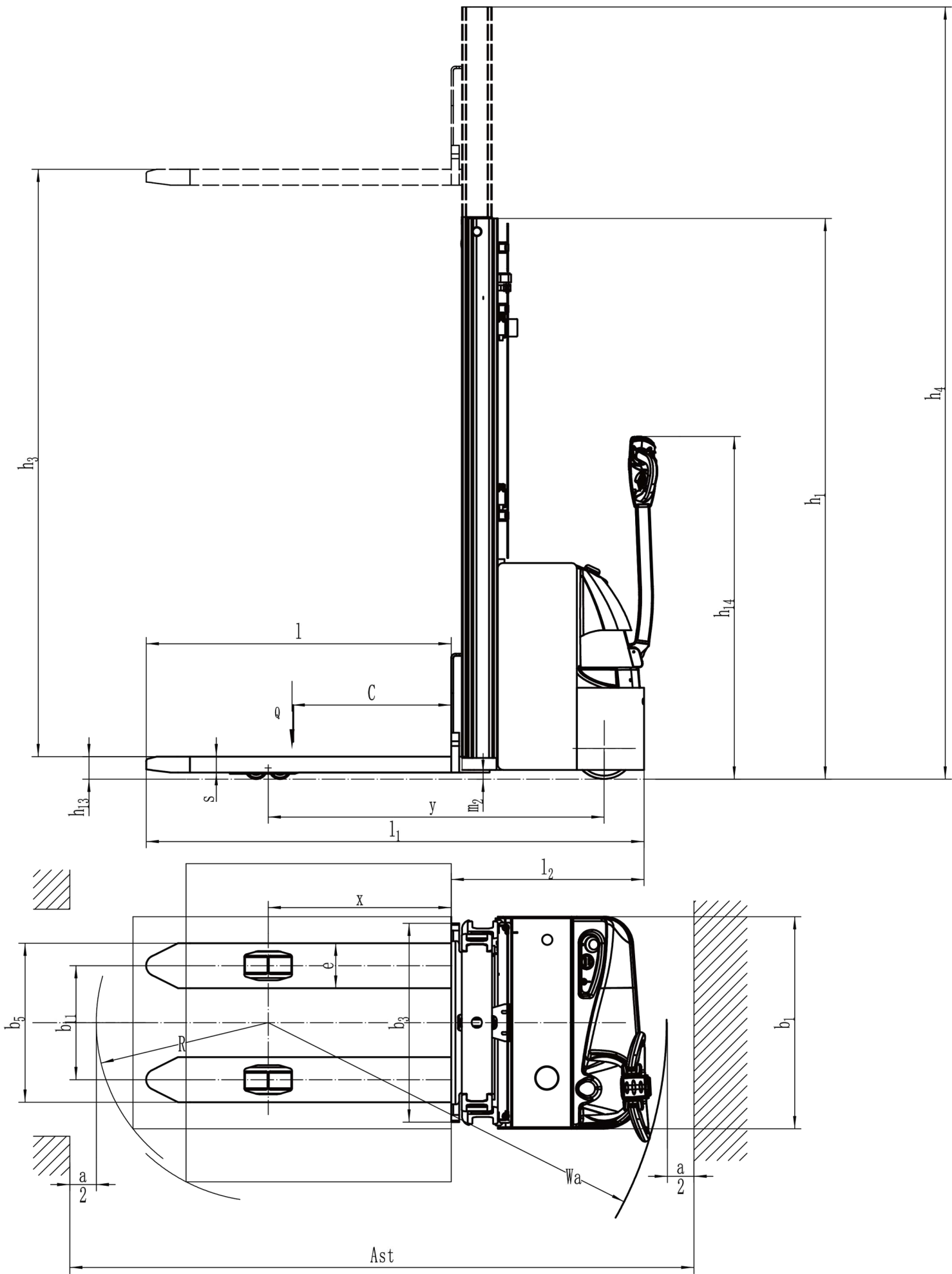


Li-ion pedestrian stacker 1.6T

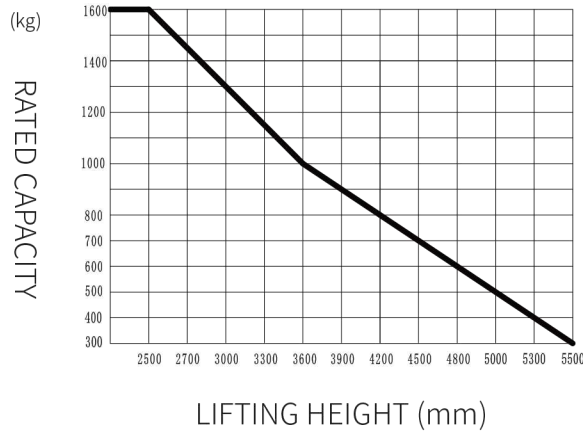
WSA161

	Distinguishing mark				
	Code	Description	Unit	Value	
Distinguishing mark	1.1	Manufacturer		FORX	
	1.2	Model designation		WSA161	
	1.3	Drive		Electric	
	1.4	Operator type		Pedestrian	
	1.5	Load capacity	Q	kg	1600
	1.6	Load center distance	c	mm	600
	1.8	Load distance, centre of drive axle to fork	x	mm	690
	1.9	Wheelbase	y	mm	1272
	Service weight	2.1	Service weight		kg
2.2		Axle loading, laden front/rear		kg	—
2.3		Axle loading, unladen front/rear		kg	—
Tyres/chassis	3.1	Tyre type			Polyurethane
	3.2.1	Tyre size, front		mm	Φ230×75
	3.3.1	Tyre size, rear		mm	Φ85×70
	3.4	Additional wheels (castor wheels)		mm	Φ130×55
	3.5	Wheels, number front/rear (x=drive wheels)		mm	1x +1/4
	3.6.1	Tread width, front	b10	mm	538
	3.7.1	Tread width, rear	b11	mm	406
Dimensions	4.0	Max. Lift Height	H	mm	3000
	4.2	Retracted mast height	h1	mm	1970
	4.3	Free lift	h2	mm	—
	4.4	Lift height	h3	mm	2915
	4.5	Height, mast extended	h4	mm	3425
	4.6	Initial lift	h5	mm	—
	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	90
	4.19	Overall length	l1	mm	1881
	4.20	Length to face of forks	l2	mm	731
	4.21	Overall width	b1/b2	mm	800
	4.22	Fork dimensions	s/e/l	mm	65×170×1150
	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
4.32		Ground clearance, center of wheelbase	m2	mm	25
4.34.1		Aisle width for pallets 1000×1200 crossways	Ast	mm	2383
4.34.2		Aisle width for pallets 800×1200 lengthways	Ast	mm	2355
4.35		Turning radius	Wa	mm	1507
5.1		Travel speed, laden/unladen		km/h	5/5.5
5.2		Lifting speed, laden/unladen		m/s	0.2/0.26
5.3		Lowering speed, laden/unladen		m/s	0.4/0.3
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		
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-Stage Single Cylinder Mast	2500	1720	—	2935
	2700	1820	—	3135
	3000	1970	—	3435
	3300	2120	—	3735
	3600	2270	—	4035
	3900	2420	—	4335
3-Free Mast	4000	1820	1430	4445
	4500	2020	1630	4945
	4800	2115	1730	5245
	5000	2185	1800	5445
	5500	2385	2000	5945

Option

No.	Optional items	WSA161
1.1	Fork dimension	●1150*570○1150*685○1220*570○1220*685
1.3	Fork lowered height	●≤90
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
2.7	Battery capacity	●100Ah Li-ion○205AH Li-ion ○210AH Lead-acid○240AH Lead-acid○270AH Lead-acid
2.8	Charger	●24V-30A internal (100AH Li-ion) ○24V-100A external (205AH Li-ion) ○24V-30A external (Lead-acid)
2.9	Battery indicator	●With time(bluetooth)
2.16	handle head type	●Proportional lifting switch on both sides, with turtle speed
3.3	Castor wheels	●Yes
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
3.11	Rearview mirror	●No○Yes and not customized
3.12	Hummer	●No○Yes and not customized
3.16	Vertical handler working	●Yes
4.5	Proportional lift system	●Yes

Note: ●Standard ○ Optional - Inconformity