



WS15H

Electric Pedestrian Stacker

Lifting height: 2000-4000 mm / Load capacity: 1500 kg



**Variable Speed
Control**



Intelligent & Efficient



Rugged & Durable



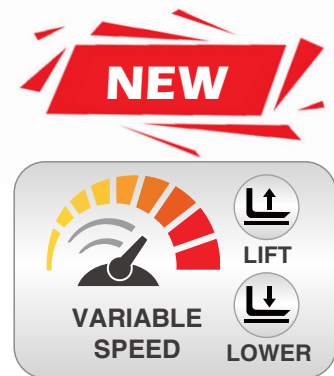
Easy & Comfortable

Variable Speed Control on Lifting & Lowering

Comfortable and efficient thanks to ARROW patented intelligent handle and control system, ideal for replacing manual & semi-electric stackers, for light use in narrow warehouse environments with efficient and easy pallet stacking.

The proportional lowering brings high efficiency for exact pallet placement and more precise control when compared to the normal fixed speed of lifting & lowering.

Variable speed control by proportional control knob, keeps lifting and lowering smooth, stable, safe and energy saving.



Precise Control

■ Proportional lifting & lowering

The variable speed control ensures the stacker goes up and down smoothly, minimizing the mechanical shock and vibration, ensuring fragile loads are gently placed on racking or the floor, and reducing the impact of noise and vibration on operators.

■ Lowering buffering

Automatic lowering speed descent with soft buffering when the fork height is lowered to around 10cm from the ground, effectively protects the safety of the cargo, low noise and small vibration.

■ High efficiency

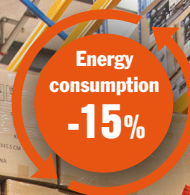
The variable speed control brings accurate response for adjusting the lifting & lowering speed according to the actual situation, the operator can easily complete the task and improve the working efficiency.

■ Energy saving

Compared to the traditional fixed lifting & lowering speed, variable speed can be adjusted according to the load and height by operator, reducing energy waste and improving energy utilization rate.

■ Longer service life

Variable speed control can reduce the mechanical impact and friction during lifting & lowering, reduce the wear and tear on the chassis, mast, bearings, and enable a longer service life.



Intelligent & Efficient

ARROW patented multifunctional intelligent tiller handle is unique design for quick fault diagnosis, enabling an easier service, shorter service time and lowered labor



Multifunctional intelligent tiller handle



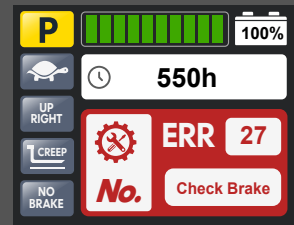
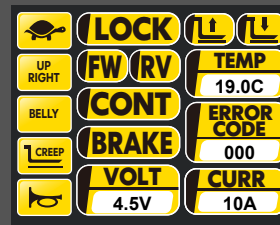
Easy Maintenance

Serial communication technology

Single wiring harness communication from tiller handle to controller system. Simple, Durable and Stable.

UART

- ✓ Low after-sales service cost
- ✓ Quick & easy fault diagnosis
- ✓ Everyone can be an expert



Operation status & fault diagnosis are integrated onto the tiller handle display for easy troubleshooting.

Operator Preferred

Turtle Speed

01



Enable operator to choose different speed modes based on their experience and the specific work environment.

Up-Right Drive

02



Easily maneuvered with the handle in the vertical position by pressing the turtle-speed button.

Engineering Mode (Brake Release)

03



When truck is down, release the brake to move the unit manually.

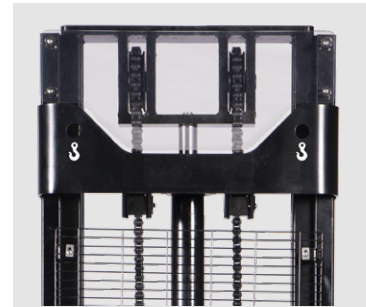
Rugged & Durable

Due to a high-strength frame and mast design and solid materials used, the deformation of the frame, mast, and forks is small.



Longer service life

Mast: Standard C+H channel steel
Frame: Steel plate thickness of 5mm
Frame bottom plate: 30mm integrated steel plate



Double-chain design

Compared with single-chain design, it has higher strength, safer and more stable.

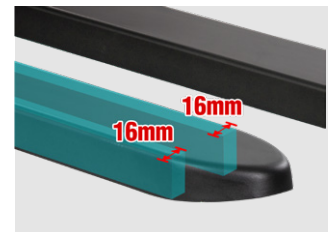
Small deformation of forks and masts, stable and durable

More stable when lifting & lowering with loads.

Full coverage protection on mast

Standard equipped with cylinder explosion-proof valve

It can prevent accidents such as uncontrolled descent caused by unexpected rupture of oil pipes, ensuring stable descent of the load and personal safety, and preventing damage to equipment.



High-strength forks

16mm flat iron on both sides of fork. High strength and small deformation even under heavy loads.

The battery is fixed at the bottom of the frame

Improved stability.

Battery low voltage protection

Effectively avoid battery over-discharge, ensuring a longer battery life.

Safe operation

Emergency reverse switch

In case of an emergency, it protects the operator and the surrounding personnel from harm.

Safety travel speed limit

When the fork is lifted to above 500mm, the driving speed automatically reduces to 2km/h to ensure the safety of operating at a high position in case of any misoperation.



Built-in charger

Hidden charging plug, high safety, the whole vehicle is powered off during charging, reducing safety hazards.

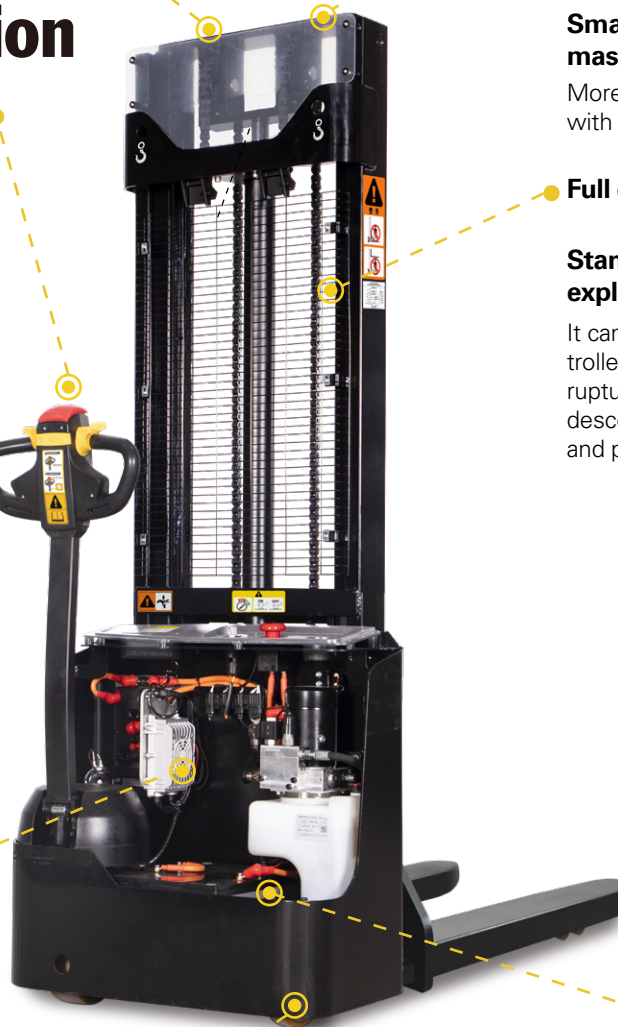
High lateral and longitudinal stability

Wider wheelbase and longer axle distance.

Adjustable balance wheel

Improved stability and maneuverability, suitable for different working scenarios.

The low ground clearance of 30 mm helps to reduce the risk of foot injuries



Easy & Comfortable



- **Effortless, easy to operate**
Low-mounted longer tiller reduces steering force required.

- **Low mast static height**
Easy to operate in containers and elevators with less than 3.3m lifting height.

- **The steering angle is designed to be above 180 degrees**
Small turning radius.

- **Excellent maneuverability**
Precise and maneuverable operating, high safety and efficiency.

- **Reasonable design of the balancing wheel eccentric distance.**
Flexible direction commutation

- **Easy to recharge**
Built-in charger and an external charging cable storage box for convenient charging.

- **Longer operating time**
Standard 24V/71Ah maintenance-free lead-acid battery, with the option of a larger capacity maintenance-free battery or a lithium battery.



Optional Configuration

● Intelligent control

Unique in the market and very suitable for sorting operations on trucks.

With a dedicated remote control device, the operator can control the forks to lift to the appropriate working height and carry out sorting operations, thus avoiding the need to use the handle buttons and bend over to pick up goods, improving operational efficiency and comfort.



On/Off (for Intelligent control)

Lifting button

Lowering button

Max speed setting button

Horn button



With the remote control device, you can easily set the speed suitable for the work, from level 1 speed to level 5 speed.

Such speed transitions allow you to move the truck with controlled operation at ease.

SPEED LEVEL	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
Speed(laden) (km/h)	0.68	1.32	2.4	3.48	4
Speed(unladen) (km/h)	0.77	1.49	2.7	3.92	4.5



● **Rubber drive wheel**

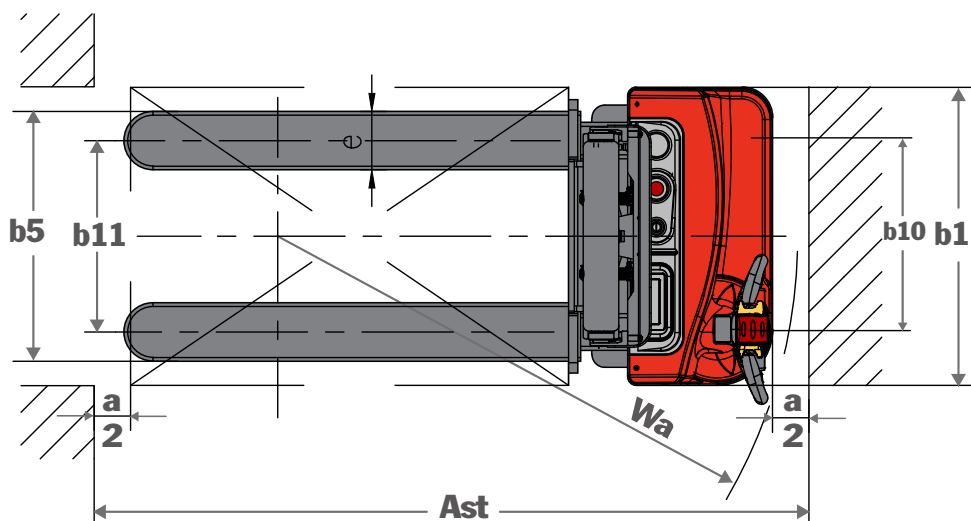
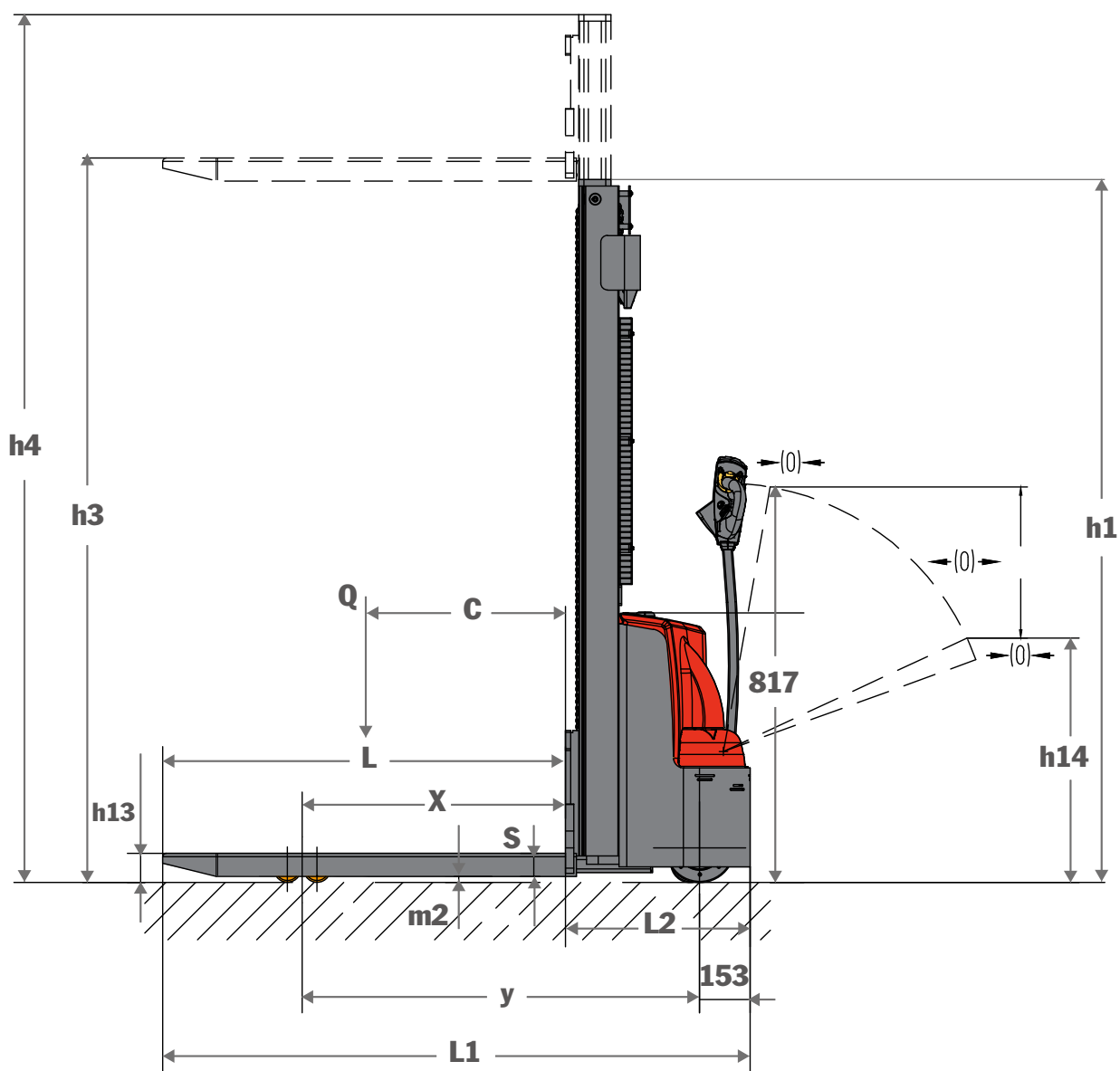
● **Reversing buzzer**

● **24V 60Ah(100Ah) LiFePO₄ Lithium battery**

● **24V/30A chargers**
Lithium Battery Charger
Charging time: 2~4 hours



Dimensions



Specifications

MODEL				WS15H					
DISTINGUISHING MARKS									
1.3	Drive							Battery	
1.4	Operator type							Pedestrian	
1.5	Load capacity/rated load	Q	kg					1500	
1.6	Load centre distance	c	mm					500	
1.8	Load distance, centre of drive axle to fork	x	mm					800	
1.9	Wheelbase	y	mm					1210	
WEIGHT									
2.1	Service weight (without battery)		kg	520.4	540.4	567.4	576.4	586.4	623.4
2.2	Service weight (with 71Ah battery)		kg	567	587	614	623	633	670
2.3	Service weight (with 89Ah battery)		kg	572	592	619	628	638	675
2.4	Axle loading, laden front/rear		kg	626/1461					
2.5	Axle loading, unladen front/rear		kg	440/147					
TYRES/ CHASSIS									
3.1	Wheels							Polyurethane	
3.2	Wheel size, front	Ø x width	mm	Ø210x70					
3.3	Wheel size, rear	Ø x width	mm	Ø80X70					
3.4	Additional wheels (dimensions)	Ø x width	mm	Ø115X55					
3.5	Wheels, number front/rear (x = driven wheels)			1x + 1 / 4					
3.6	Tread, front	b10	mm	550					
3.7	Tread, rear	b11	mm	390(560 fork width)/525(680 fork width)					
DIMENSIONS									
4.2	Lowered mast height	h1	mm	1480	1730	1980	2130	2230	2550
4.4	Lift height	h3	mm	2000	2500	3000	3300	3500	4000
4.5	Extended mast height	h4	mm	2435	2935	3435	3735	3935	4370
4.9	Height of tiller in driving position, min./max.	h14	mm	910/1270					
4.15	Height, lowered	h13	mm	85±2					
4.19	Overall length	l1	mm	1730/1800					
4.20	Length to face of forks	l2	mm	580					
4.21	Overall width	b1	mm	820					
4.22	Fork dimensions	s/e/l	mm	70x160x1150					
4.25	Width over forks	b5	b5(mm)	560/680					
4.32	Ground clearance, centre of wheelbase	m2	m2(mm)	30					
4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast	Ast(mm)	2268					
4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast	Ast(mm)	2194					
4.35	Turning radius	Wa	Wa(mm)	1425					
PERFORMANCE DATA									
5.1	Travel speed, with/without load		km/h	4/4.5					
5.2	Lift speed, with/without load		mm/s	0-102 / 0-190					
5.3	Lowering speed, with/without load		mm/s	30-135 / 20-200					
5.8	Max. gradeability, with/without load		%	5/10					
5.10	Service brake			Electromagnetic					
ELECTRIC-ENGINE									
6.1	Drive motor rating S2 60 min		kW	0.75					
6.2	Lift motor rating at S3 15%		kW	2.5					
6.4	Battery voltage/nominal capacity (C5)		V/Ah	● 12/71 x 2 ○ (12/89) x 2					
6.5	Battery weight +/- 5%		kg	● 23.2 x 2(71Ah)/ ○ 25.8 x 2(89Ah)					
6.6	Energy consumption according to EN 16796		kWh	0.42					
ADDITION DATA									
8.1	Type of drive control			DC speed control					
8.4	Sound level at the driver's ear according to EN 12053		dB(A)	<75					
	Controller			ARROW P1201					

Note: 1kgs=2.2lbs, 25.4mm=1inch

● standard ○ option

MAST DIMENSIONS								
WS15H			Duplex Mast					
h1	Lowered mast height	mm	1480	1730	1980	2130	2230	2550
h3	Lift height	mm	2000	2500	3000	3300	3500	4000
h4	Extended mast height	mm	2435	2935	3435	3735	3935	4370

LOAD CHART

