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ISO45001:2018

ISO14001:2015

ISO9001:2015

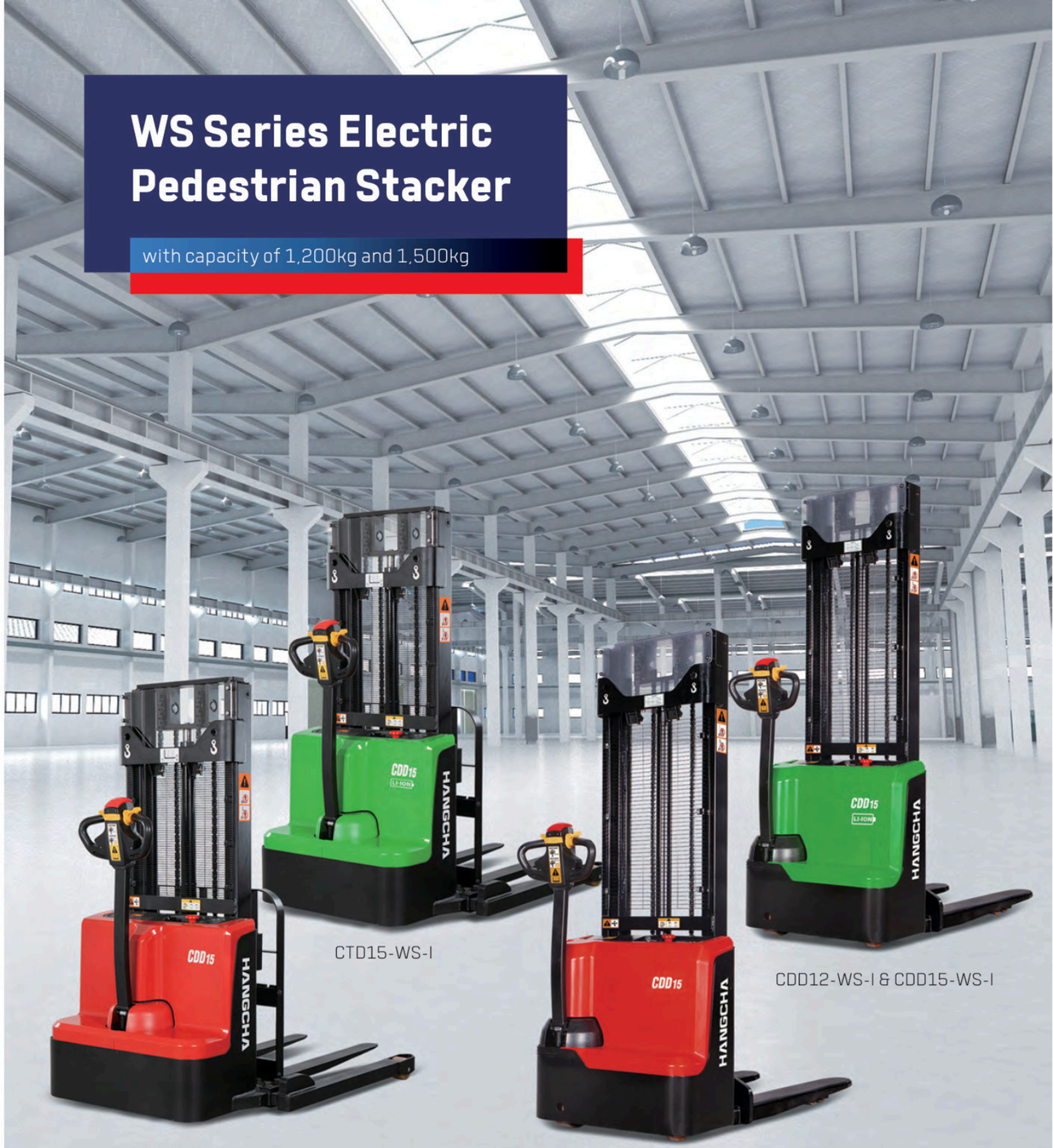
HANGCHA trucks conform to the European Safety Requirements.

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WS Series Electric Pedestrian Stacker

with capacity of 1,200kg and 1,500kg



CTD15-WS

CTD15-WS-I

CDD12-WS & CDD15-WS

CDD12-WS-I & CDD15-WS-I

The World of Hangcha

WS Series

Electric Pedestrian Stacker

Variable Speed Control | Intelligent & Efficient | Rugged & Durable | Easy & Comfortable

CDD12-WS & CDD15-WS



Capacity:
1200/1500kg
Lift Height:
2000-4000mm
Fork size:
560/680 x 1150mm
Battery:
24V 71Ah/89Ah (C5)

CDD12-WS-I & CDD15-WS-I



Capacity:
1200/1500kg
Lift Height:
2000-4000mm
Fork size:
560/680 x 1150mm
Li-Battery:
24V 60Ah/100Ah

CTD15-WS



Capacity:
1500kg
Lift Height:
2000-3500mm
Fork size:
560/680 x 1150mm
Battery:
24V 71Ah/89Ah (C5)

CTD15-WS-I

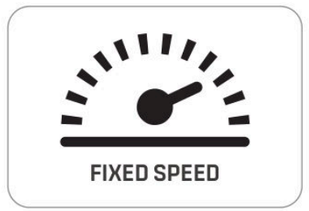


Capacity:
1500kg
Lift Height:
2000-3500mm
Fork size:
560/680 x 1150mm
Li-Battery:
24V 60Ah/100Ah

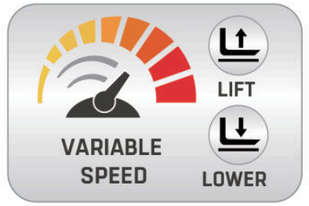
Variable Speed Control on Lifting & Lowering

- Comfortable and efficient thanks to Hangcha 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 engergy saving.

BEFORE



NEW



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.





(FOR CDD12-WS & CDD12-WS-I)

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.

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.

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.

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.

Intelligent & Efficient

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

Multifunctional intelligent tiller handle



1. Emergency reverse switch
2. Forward and backward control knob
3. Horn
4. Battery power
5. Recharging Alert
6. Lifting & Lowering
7. Fault code display

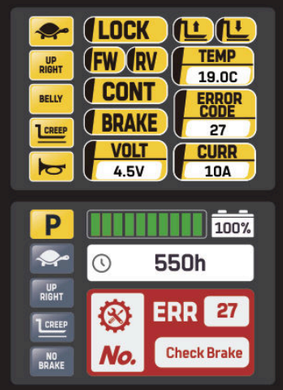
Easy Maintenance

UART

Serial communication technology

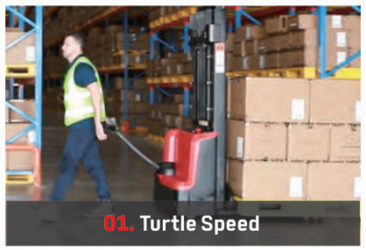
Single wiring harness communication from tiller handle to controller system.Simple, Durable and Stable.

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

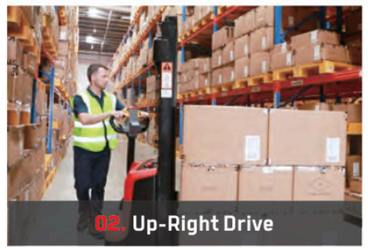


Operation status & fault diagnosis are integrated onto the tiller handle display for easy troubleshooting.

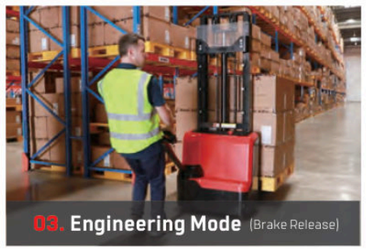
Operator Preferred



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



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



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.

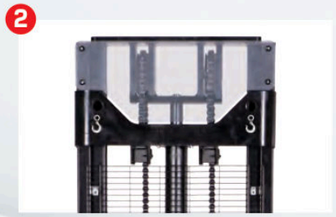
1



Longer service life

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

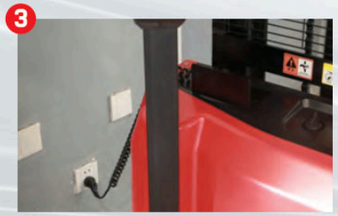
2



Double-chain design

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

3



Built-in charger

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

Safe operation

4 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.



FULL COVERAGE PROTECTION ON MAST

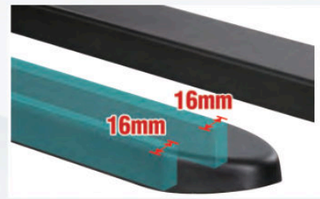
The low ground clearance of 30mm helps to reduce the risk of foot injuries

Small deformation of forks and masts, stable and durable

More stable when lifting & lowering with loads.

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.

5 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.

6 Adjustable balance wheel

Improved stability and maneuverability, suitable for different working scenarios.

High lateral and longitudinal stability

Wider wheelbase and longer axle distance.

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.



Easy to recharge

Built-in charger and an external charging cable storage box for convenient charging.



The steering angle is designed to be above 180 degrees

Small turning radius.

Excellent maneuverability

Precise and maneuverable operating, high safety and efficiency.

Adjustment of support legs and forks

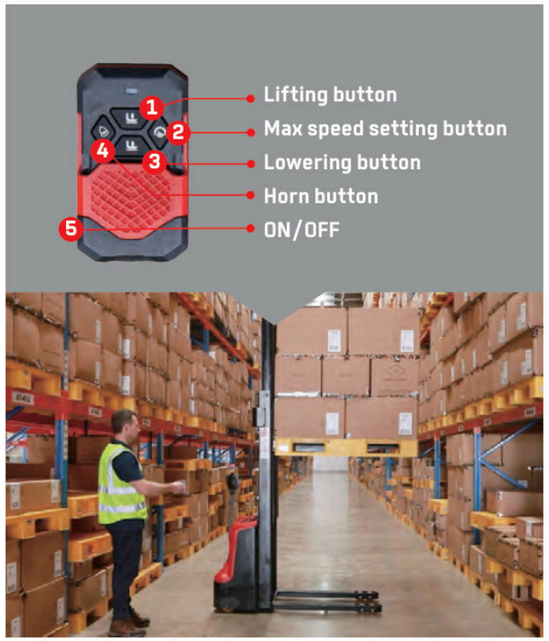
CTD15-WS support legs are fixed with three screws per side outside the truck's body, allowing for easy adjustment to achieve widths of 1150mm, 1290mm, and 1430mm.
Forged forks with adjustable widths from 200mm to 800mm, ensure durability and versatility. The truck includes a standard load backrest (LBR) for enhanced safety during material handling.



Optional Configuration

- ***Reversing buzzer***
- ***24V/100Ah Li-ion***
- ***Free Lift***
  Only CDD12-WS and CDD12-WS-I are available; Suitable for heights of 2.5M and above only
- ***Intelligent control***
- ***24V/89Ah Lead-acid***

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.



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.

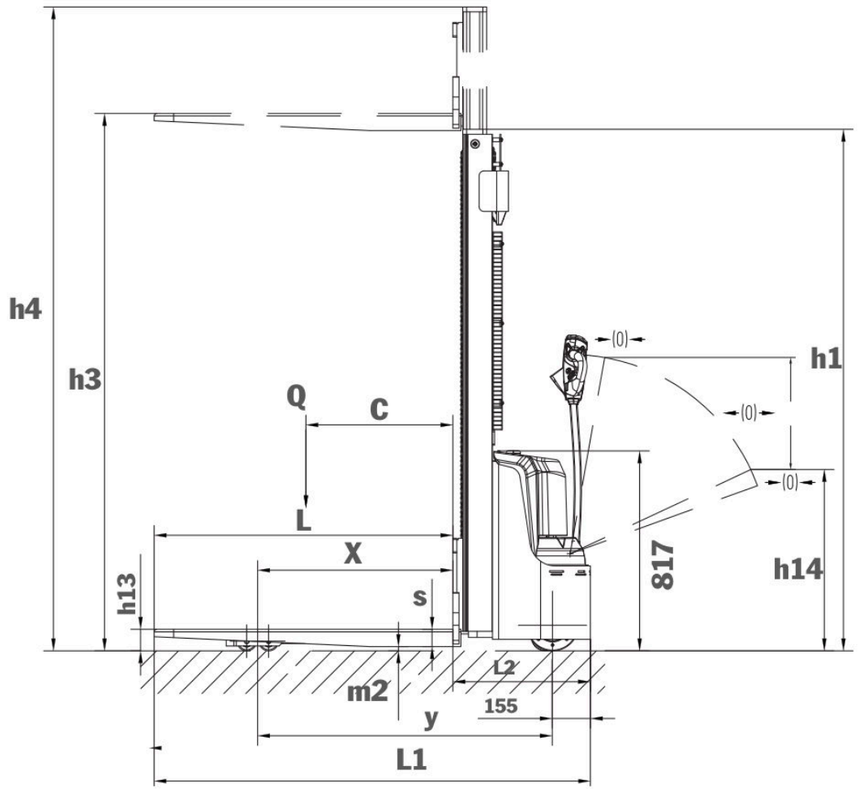


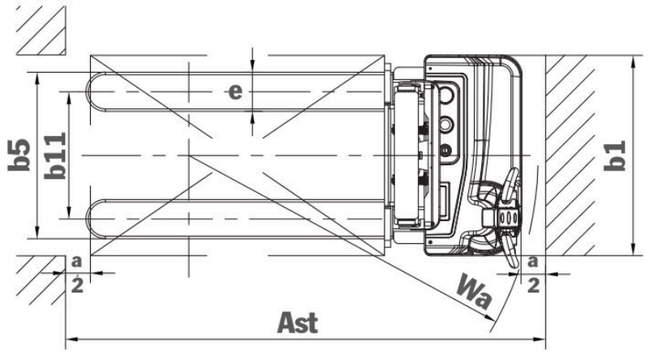


WS Electric Pedestrian Stacker Specification

Distinguishing mark	1.1	Manufacturer			HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation			CDD15-WS	CDD15-WS-I	CDD12-WS	CDD12-WS-I
	1.3	Drive			Battery		Battery	
	1.4	Operator type			Pedestrian		Pedestrian	
	1.5	Load capacity/rated load	Q	kg	1500		1200	
	1.6	Load centre distance	c	mm	600		600	
	1.8	Load distance, centre of drive axle to fork	x	mm	800		800	
	1.9	Wheelbase	y	mm	1210		1210	
Weight	2.1	Service weight (without battery) (560 Fork size)		kg	529.4	529.4	528	528
	2.2	Service weight (with 71Ah battery or 60Ah Li-battery)		kg	576.2	543.4	574.8	542
	2.3	Service weight (with 89Ah battery)		kg	581	/	579.6	/
	2.4	Axle loading, laden front/rear		kg	608.8/1420.6	613/1430.4	518.4/1209.6	522.6/1219.4
	2.5	Axle loading, unladen front/rear		kg	432.2/144	407.4/136	431/143.8	406.5/135.5
Tyres, chassis	3.1	Wheels			Polyurethane		Polyurethane	
	3.2	Wheel size, front	Ø x width	mm	Ø210x70		Ø210x70	
	3.3	Wheel size, rear	Ø x width	mm	Ø80X70		Ø80X70	
	3.4	Additional wheels (dimensions)	Ø x width	mm	Ø115X55		Ø115X55	
	3.5	Wheels, number front/rear (x = driven wheels)			1x + 1 / 4		1x + 1 / 4	
	3.6	Tread, front	b10	mm	550		550	
	3.7	Tread, rear	b11	mm	390(560 fork width)/525(680 fork width)		390(560 fork width)/525(680 fork width)	
Dimensions	4.2	Lowered mast height	h1	mm	1730		1730	
	4.4	Lift height	h3	mm	2500		2500	
	4.5	Extended mast height	h4	mm	2935		2935	
	4.9	Height of tiller in driving position, min./max.	h14	mm	910/1270		910/1270	
	4.15	Height, lowered	h13	mm	85±2		85±2	
	4.19	Overall length	l1	mm	1730(1150 fork length)/1800(1220 fork length)		1730(1150 fork length)/1800(1220 fork length)	
	4.20	Length to face of forks	l2	mm	560		560	
	4.21	Overall width	b1	mm	820		820	
	4.22	Fork dimensions	s/e/l	mm	70x160x1150(1220)		70x160x1150(1220)	
	4.25	Width over forks	b5	mm	560/680		560/680	
	4.32	Ground clearance, centre of wheelbase	m2	mm	30		30	
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast	mm	2268		2268	
	4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	2194		2194	
	4.35	Turning radius	Wa	mm	1425		1425	
Performance data	5.1	Travel speed, with/without load		km/h	4/4.5		4/4.5	
	5.2	Lift speed, with/without load		mm/s	0-102/0-190		0-123/0-230	
	5.3	Lowering speed, with/without load		mm/s	30-135/20-200		28-164/26-278	
	5.8	Max. gradeability, with/without load		%	5/10		5/10	
	5.10	Service brake			Electromagnetic		Electromagnetic	
Electric-engine	6.1	Drive motor rating S2 60 min		kW	0.75		0.75	
	6.2	Lift motor rating at S3 15%		kW	2.5		2.5	
	6.4	Battery voltage/nominal capacity (K5)		V/Ah	● 12/71x2 ○(12/89)x2	● 24V/60Ah ○24V/100Ah	● 12/71x2 ○(12/89)x2	● 24V/60Ah ○24V/100Ah
	6.5	Battery weight +/- 5%		kg	● 23.4x2(71Ah) ○ 25.8x2(89Ah)	● 17(60Ah) ○24(100Ah)	● 23.4x2(71Ah) ○ 25.8x2(89Ah)	● 17(60Ah) ○24(100Ah)
	6.6	Charger		A	10	30	10	30
Addition Data	8.1	Type of drive control			DC speed control		DC speed control	
	8.4	Sound level at the driver's ear according to EN 12053		dB(A)	<75		<75	

Note: 1kgs=2.2lbs, 25.4mm=1inch
● standard ○ option





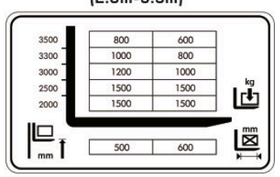
Mast Dimensions

Mast types	Lift height h3(mm)	Lowered mast height h1(mm)	Free lift height h2(mm)	Extended mast height h4(mm)
Duplex Mast	2000	1480	/	2435
	2500	1730	/	2935
	3000	1980	/	3435
	3300	2130	/	3735
	3500	2230	/	3935
	4000	2550	/	4370
2-Free Mast	2500	1710	1300	2917
	3000	1960	1550	3417
	3300	2110	1700	3717
	3500	2210	1800	3917

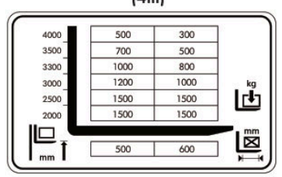
2-Free Mast: Only CDD12-WS and CDD12-WS-I are available; Suitable for heights of 2.5M and above only
4M Lift height : Only CDD15-WS and CDD15-WS-I are available

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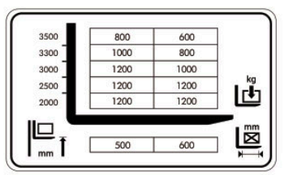
CDD15-WS/CDD15-WS-I (2.0m-3.5m)



CDD15-WS/CDD15-WS-I (4m)



CDD12-WS/CDD12-WS-I

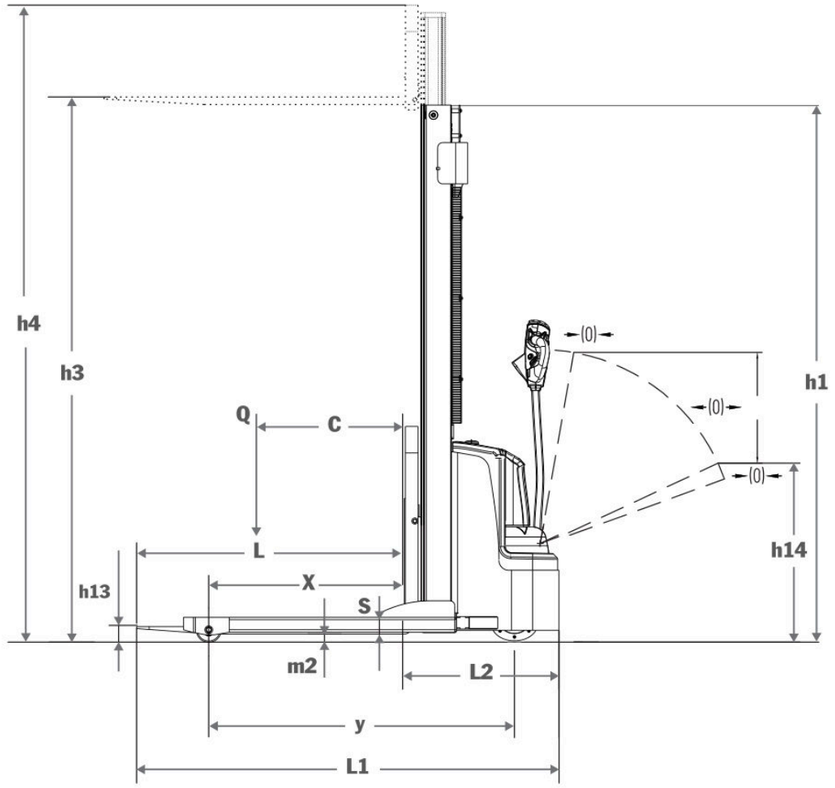


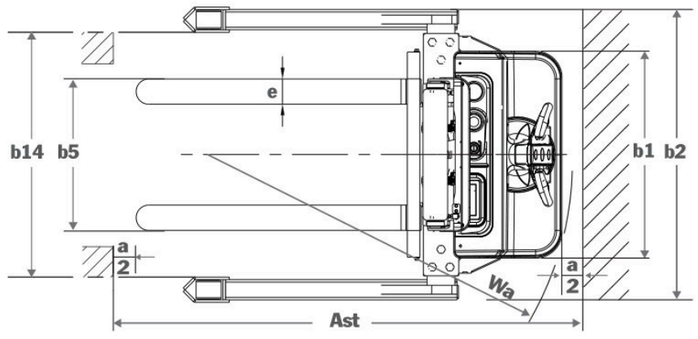
WS Electric Pedestrian Stacker Specification

Distinguishing mark	1.1	Manufacturer			HANGCHA GROUP CO.,LTD.	
	1.2	Manufacturer's type designation			CTD15-WS	CTD15-WS-I
	1.3	Drive			Battery	Battery
	1.4	Operator type			Pedestrian	Pedestrian
	1.5	Load capacity/rated load	Q	kg	1500	1500
	1.6	Load centre distance	c	mm	600	600
	1.8	Load distance, centre of drive axle to fork	x	mm	768	768
	1.9	Wheelbase	y	mm	1218	1218
Weight	2.1	Service weight (without battery)		kg	635	635
	2.2	Service weight(with 71Ah battery or 60Ah Li-battery)		kg	681	652
	2.3	Service weight (with 89Ah battery)		kg	686	659
	2.4	Axle loading, laden front/rear		kg	645/1506	645/1506
	2.5	Axle loading, unladen front/rear		kg	488/163	488/163
Tyres, chassis	3.1	Wheels			Polyurethane	Polyurethane
	3.2	Wheel size, front	Ø x width	mm	Ø210x70	Ø210x70
	3.3	Wheel size, rear	Ø x width	mm	Ø100X64	Ø100X64
	3.5	Wheels, number front/rear (x = driven wheels)			1x + 0 /2	1x + 0 /2
	3.7	Tread, rear	b11	mm	1060/1200/1340	1060/1200/1340
Dimensions	4.2	Lowered mast height	h1	mm	2020	2020
	4.4	Lift height	h3	mm	3000	3000
	4.5	Extended mast height	h4	mm	3520	3520
	4.9	Height of tiller in driving position, min./max.	h14	mm	910/1270	910/1270
	4.15	Height, lowered	h13	mm	60±2	60±2
	4.19	Overall length	l1	mm	1698	1698
	4.20	Length to face of forks	l2	mm	628	628
	4.21.1	Overall width across chassis	b1	mm	820	820
	4.21.2	Overall width across all/Outer width straddle	b2	mm	1150/1290/1430	1150/1290/1430
	4.21.5	Inner width straddle	b14	mm	970/1110/1250	970/1110/1250
	4.22	Fork dimensions	s/e/l	mm	40X100X1070(1150/1220)	40X100X1070(1150/1220)
	4.25	Width over forks	b5	mm	200-795	200-795
	4.32	Ground clearance, centre of wheelbase	m2	mm	40	40
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast	mm	2290	2290
	4.34.2	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	2217	2217
	4.35	Turning radius	Wa	mm	1455	1455
Performance data	5.1	Travel speed, with/without load		km/h	4/4.5	4/4.5
	5.2	Lift speed, without load		mm/s	0-185	0-185
		Lift speed, with load		mm/s	0-101	0-101
	5.3	Lowering speed, without load		mm/s	22-208	22-208
		Lowering speed, with load		mm/s	26-137	26-137
	5.8	Max. gradeability, with/without load		%	5/10	5/10
	5.10	Service brake			Electromagnetic	Electromagnetic
Electric-engine	6.1	Drive motor rating S2 60 min		kW	0.75	0.75
	6.2	Lift motor rating at S3 15%		kW	2.5	2.5
	6.4	Battery voltage/nominal capacity K5		V/Ah	● 12/71 x 2 ○(12/89) x 2	● 24V/60Ah ○24V/100Ah Li-battery
	6.5	Battery weight +/- 5%		kg	● 23.4 x 2(71Ah)/ ○25.8 x 2(89Ah)	●17(60Ah) ○24(100Ah)
	6.6	Charger		A	10	.30
Addition Data	8.1	Type of drive control			DC speed control	DC speed control
	8.4	Sound level at the driver's ear according to EN 12053		dB(A)	<75	<75

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

● standard ○ option





Mast Dimensions

Mast types	Lift height h3(mm)	Lowered mast height h1(mm)	Free lift height h2(mm)	Extended mast height h4(mm)
Duplex Mast	2000	1520	/	2520
	2500	1770	/	3020
	3000	2020	/	3520
	3300	2170	/	3820
	3500	2270	/	4020

LOAD CHART

CTD15-WS/CTD15-WS-I

